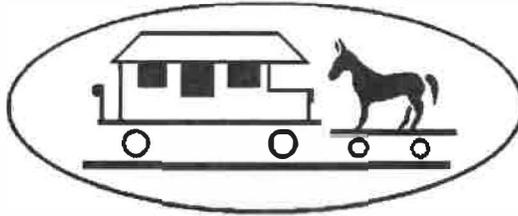


## Historic Ontario



*The "Model Colony"*

# CITY OF ONTARIO HISTORIC PRESERVATION COMMISSION HISTORIC PRESERVATION SUBCOMMITTEE

## AGENDA

**August 09, 2023**

**All documents for public review are on file in the Planning Department located in City Hall at 303 East "B" Street, Ontario, CA 91764.**

**MEETINGS WILL BE HELD AT 5:30 PM IN COMMUNITY CONFERENCE ROOMS 1 & 2  
LOCATED AT 303 East "B" Street**

### PUBLIC COMMENTS

*Citizens wishing to address the Historic Preservation Subcommittee on any matter that is not on the agenda may do so at this time. Please state your name and address clearly for the record and limit your remarks to five minutes.*

*Please note that while the Historic Preservation Subcommittee values your comments, the members cannot respond nor take action until such time as the matter may appear on the forthcoming agenda.*

### AGENDA ITEMS

*For each of the items listed below the public will be provided an opportunity to speak. After a staff report is provided, the chairperson will open the public hearing. At that time the applicant will be allowed five (5) minutes to make a presentation on the case. Members of the public will then be allowed five (5) minutes each to speak. The Historic Preservation Subcommittee may ask the speakers questions relative to the case and the testimony provided. The question period will not count against your time limit. After all persons have spoken, the applicant will be allowed three minutes to summarize or rebut any public testimony. The chairperson will then close the public hearing portion of the hearing and deliberate the matter.*

### CONSENT CALENDAR ITEMS

#### **A. MINUTES APPROVAL**

Historic Preservation Subcommittee Minutes of April 12, 2023 and May 10, 2023, approved as written.

Motion to Approve/Deny

**PUBLIC HEARING ITEMS**

- B. ENVIRONMENTAL ASSESSMENT AND CERTIFICATE OF APPROPRIATENESS REVIEW FOR FILE NO. PHP22-015**: A hearing to consider a Certificate of Appropriateness to facilitate the construction of a mixed-use development consisting of 346 apartment units and 5,400 square feet of commercial space on 9.4 acres of land located at the northwest corner of Euclid Avenue and Walnut Avenue, within the Mixed-Use – Neighborhood Hub 8e – Euclid and Walnut (MU-NH 8e) zoning district. An Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364), which was certified by the City Council on August 16, 2022, was prepared. This application introduces no new significant environmental impacts. The proposed project is located within the Airport Influence Area of Ontario International Airport and was evaluated and found to be consistent with the policies and criteria of the Ontario International Airport Land Use Compatibility Plan; (APNs: 1051-271-67, 1051-271-06, and 1051-271-66) **submitted by Legacy/Collier Residential LLC. Planning/Historic Preservation Commission action is required.**

**1. CEQA Determination**

Motion to recommend Approval/Denial of an Addendum to a previously approved EIR

**2. File No. PHP22-015 (Certificate of Appropriateness)**

Motion to recommend Approval/Denial

If you wish to appeal a decision of the **Historic Preservation Subcommittee**, you must do so within ten (10) days of the **Historic Preservation Subcommittee** action. Please contact the **Planning Department** for information regarding the appeal process.

If you challenge any action of the **Historic Preservation Subcommittee** in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the **Historic Preservation Subcommittee** at, or prior to, the public hearing.

The next **Historic Preservation Subcommittee** meets on September 13, 2023.

I, Angie Alvarez Cruz, Office Specialist of the City of Ontario, or my designee, hereby certify that a true, accurate copy of the foregoing agenda was posted on or before **August 4, 2023**, at least 72 hours prior to the meeting per Government Code Section 54954.2 at 303 East “B” Street, Ontario.



Office Specialist

**CITY OF ONTARIO HISTORIC PRESERVATION COMMISSION**

**Historic Preservation Subcommittee Special Meeting**

**Minutes**

**April 12, 2023**

**REGULAR MEETING:** Called to order by Nancy DeDiemar, at 5:35pm

**BOARD MEMBERS PRESENT**

Nancy DeDiemar, Planning Commissioner  
Ken Dean, Planning Commissioner

**BOARD MEMBERS ABSENT**

Rick Gage, Chairman

**STAFF MEMBERS PRESENT**

Diane Ayala, Senior Planner  
Elly Antuna, Associate Planner  
Kimberly Ruddins, Sustainability Program Manager

**PUBLIC COMMENTS**

No one responded from the public.

**MINUTES**

- A. **APPROVAL OF MINUTES:** Motion to approve the minutes of the March 8, 2023, meeting of the Historic Preservation Subcommittee as written were approved unanimously by those present (2-0).

**PUBLIC HEARING ITEMS**

- B. ENVIRONMENTAL ASSESSMENT AND CERTIFICATE OF APPROPRIATENESS FOR FILE NO. PHP22-010:** A hearing to consider a Certificate of Appropriateness to facilitate the construction of a mixed-use development consisting of 109 residential apartment units and approximately 4,000 square feet of ground floor retail on 2.38-acres of land within the LUA-1 (Euclid Avenue Entertainment) of the MU-1 (Downtown Mixed Use) zoning district located at the northeast corner of Euclid Avenue and D Street, bordered by E Street on the north and Lemon Avenue on the east. The project is categorically exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to Section 15331 (Class 31, Historical Resource Restoration/Rehabilitation) of the CEQA Guidelines. The proposed project is located within the Airport Influence Area of Ontario International Airport and was evaluated and found to be consistent with the policies and criteria of the Ontario International Airport Land Use Compatibility Plan; (APNs: 1048-363-05, 1048-363-04, 1048-363-03 and 1048-363-02) **submitted by Ontario Place D Block LLC. Planning/Historic Preservation Commission is required.**

Diane Ayala, Senior Planner, presented the staff report for File No. PHP22-010. Ms. Ayala stated that the Historic Preservation Subcommittee would be considering a recommendation to the Historic Preservation/Planning Commission who would be the final approving body for the Certificate of Appropriateness.

Motion to recommend the Historic Preservation/Planning Commission approve **File No. PHP22-010** was approved unanimously by those present (2-0).

## **DISCUSSION ITEMS**

1. **Model Colony Award.** Ms. Antuna shared the 5 nominations for the 23<sup>rd</sup> Annual Model Colony Awards. The Planning Commission will consider the nominations at the April 25, 2023 Planning Commission meeting and the award presentation by City Council is scheduled for the May 16, 2023 City Council meeting.

Respectfully submitted,



Eily Antuna  
Associate Planner

**CITY OF ONTARIO HISTORIC PRESERVATION COMMISSION**

**Historic Preservation Subcommittee Meeting**

**Minutes**

**May 10, 2023**

**REGULAR MEETING:** Called to order by Rick Gage, at 5:30pm

**BOARD MEMBERS PRESENT**

Rick Gage, Chairman  
Ken Dean, Planning Commissioner

**BOARD MEMBERS ABSENT**

Nancy DeDiemar, Planning Commissioner

**STAFF MEMBERS PRESENT**

Diane Ayala, Senior Planner  
Elly Antuna, Associate Planner

**PUBLIC COMMENTS**

No one responded from the public.

**MINUTES**

- A. **APPROVAL OF MINUTES:** Approval of the minutes for the April 12, 2023, was continued to the next regular meeting.

**PUBLIC HEARING ITEMS**

Gilbert Caughman, spoke regarding Agenda Item B.

- B. ENVIRONMENTAL ASSESSMENT AND CERTIFICATE OF APPROPRIATENESS REVIEW FOR FILE NO. PHP23-002:** A hearing to consider a Certificate of Appropriateness to facilitate the construction of a 26-foot 9-inch tall, 2-story, 1,136 square-foot detached accessory residential structure to accommodate a 2-car garage and one bedroom Accessory Dwelling Unit on 0.2-acre of land located at 734 East F Street, an Eligible historic resource, within the MDR-11 (Medium Density Residential-11.1 to 18.0 DU/Acre) zoning district. The Project is categorically exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to Section 15331 (Class 31, Historical Resource Restoration/Rehabilitation) of the CEQA Guidelines.; (APN: 1048-412-08) **submitted by Gilbert Caughman.**

Elly Antuna, Associate Planner, presented the staff report for File No. PHP23-002. Ms. Antuna stated that the applicant has also submitted a Conditional Use Permit (File No. PCUP23-003) and that the Certificate of Appropriateness approval is contingent upon Zoning Administrator approval of Conditional Use Permit File No. PCUP23-003.

Jose Macias, the project representative, spoke in favor of the project.

Motion to recommend the Historic Preservation/Planning Commission approve **File No. PHP23-002** was approved unanimously by those present (2-0).

### **DISCUSSION ITEMS**

1. **CPF Conference.** Diane Ayala, Senior Planner, discussed the 2023 California Preservation Conference held in San Francisco at the end of April.

Respectfully submitted,



Elly Antuna  
Associate Planner



# Historic Preservation Subcommittee

August 9, 2023

## DECISION NO:

**FILE NO:** Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report for File No. PHP22-015

**DESCRIPTION:** A hearing to consider the use of an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (“Certified SEIR”) for a Certificate of Appropriateness to facilitate the construction 346 apartment units and 5,400 square feet of commercial space on 9.4 acres of land, located at the northwest corner of Euclid Avenue and Walnut Street, within the Mixed Use – Neighborhood Hub 8e – Euclid and Walnut (MU-NH 8e) zoning district;. **Submitted by Legacy/Collier Residential LLC. Planning/Historic Preservation Commission action is required.**

## PART I: BACKGROUND & ANALYSIS

LEGACY/COLLIER RESIDENTIAL LLC, (herein after referred to as "Applicant") has filed a request to consider the use of an Addendum to The Ontario Plan 2050 (“TOP 2050”) Supplemental Environmental Impact Report (“Certified SEIR”) for the approval of a Certificate of Appropriateness, File No. PHP22-015, as described in the subject of this Decision (herein after referred to as "Application" or "Project").

**(1) Project Setting:** The Project site is comprised of 9.4 acres of land located at the northwest corner of Euclid Avenue and Walnut Street and is depicted in Figure 1: Project Location, below. Existing land uses, and Policy Plan (general plan) and zoning designations on and surrounding the Project site are as follows:

	<i>Existing Land Use</i>	<i>Policy Plan Land Use Designation</i>	<i>Zoning Designation</i>
<i>Site</i>	Commercial	Mixed Use – Neighborhood Activity Hub	MU-8E (Euclid/Walnut Mixed Use) & EA (Euclid Avenue) Overlay
<i>North</i>	Single-family and multi-family residential, and commercial	Mixed Use – Neighborhood Activity Hub	MU-8E (Euclid/Walnut Mixed Use) and EA (Euclid Avenue) Overlay
<i>South</i>	Single-family residential	Low Density Residential	LDR-5 (Low Density Residential– 2.1 to 5.0 DU/Acre)
<i>East</i>	Commercial	Neighborhood Commercial	CN (Neighborhood Commercial—0.4 Maximum FAR)
<i>West</i>	Multi-family residential	Medium Density	MDR-18 (Medium Density Residential- 11.1 to 11.0 DU/Acre)

**(2) Project Description:** The Project to be analyzed under the Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report ("Certified SEIR") consists of a Certificate of Appropriateness to determine if the construction of a commercial and residential mixed-use development comprised of 346 dwelling units and 5,400 square feet of ground-floor commercial space on 9.4 acres of land will not cause an adverse effect to the Euclid Avenue median and the related historic district.

The Application is a project pursuant to the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) ("CEQA") and an Addendum has been prepared to determine possible environmental impacts. Although the proposed project could have a significant effect on the environment, because all potentially significant effects have been analyzed adequately in an earlier Certified SEIR, and have been avoided or mitigated pursuant to that earlier Certified SEIR, including revisions or mitigation measures that are imposed on the proposed project, nothing further is required. The Project will introduce no new significant environmental impacts beyond those previously analyzed in the Certified SEIR, and all mitigation measures previously adopted by the Environmental Impact Report, are a condition of project approval and are incorporated in the Addendum (see Attachment A—Addendum).

## **PART II: RECITALS**

WHEREAS, The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364) was certified on August 16, 2022, (hereinafter referred to as "Certified SEIR"), in which development and use of the Project site was discussed; and

WHEREAS, the Planning Director of the City of Ontario prepared and approved for attachment to the Certified SEIR, an Addendum to the Certified SEIR (hereinafter referred to as "SEIR Addendum") in accordance with the requirements of the California Environmental Quality Act of 1970, together with State and local guidelines implementing said Act, all as amended to date (collectively referred to as "CEQA"); and

WHEREAS, the environmental impacts of this Project were thoroughly analyzed in the SEIR Addendum, which concluded that implementation of the Project could result in a number of significant effects on the environment that were previously analyzed in the Certified SEIR, and that the Certified SEIR identified mitigation measures that would reduce each of those significant effects to a less-than-significant level; and

WHEREAS, pursuant to State CEQA Guidelines Section 15164(a), a lead agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary to a project, but the preparation of a subsequent or supplemental EIR is not required; and

WHEREAS, the City determined that none of the conditions requiring preparation of a subsequent or supplemental EIR would occur from the Project, and that preparation of an Addendum to the Certified SEIR was appropriate; and

WHEREAS, the City of Ontario is the lead agency on the Project, and the Historic Preservation Subcommittee (hereinafter referred to as "HPSC") is the recommending authority for the requested approval to construct and otherwise undertake the Project; and

WHEREAS, the HPSC has reviewed and considered the SEIR Addendum and related documents for the Project, and intends to take actions on the Project in compliance with CEQA and state and local guidelines implementing CEQA; and

WHEREAS, the SEIR Addendum and related documents are on file in the City of Ontario Planning Department, located at 303 East B Street, Ontario, CA 91764, and are available for inspection by any interested person at that location and are, by this reference, incorporated into this Resolution as if fully set forth herein; and

WHEREAS, City of Ontario Development Code Table 2.02-1 (Review Matrix) grants the HPSC the responsibility and authority to review and act, or make recommendation to the Planning Commission on the subject Application; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which the public notification of environmental actions shall be provided and hearing procedures to be followed, and all such notifications and procedures have been accomplished pursuant to Development Code requirements; and

WHEREAS, on August 7, 2023, the HPSC of the City of Ontario conducted a hearing on the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the hearing and adoption of this Decision have occurred.

### **PART III: THE DECISION**

SECTION 1: As the recommending body for the Project, the HPSC has reviewed and considered the information contained in the Addendum, the initial study, and the administrative record for the Project, including all written and oral evidence provided during the comment period. Based upon the facts and information contained in the Addendum, the initial study, and the administrative record, including all written and oral evidence presented to the HPSC, the HPSC finds as follows:

a. The environmental impacts of the Project were reviewed in conjunction with an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364, certified by the Ontario City Council on August 16, 2022, in conjunction with File No. PGPA20-002); and

b. The EIR Addendum and administrative record have been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

c. The City's "Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed. This Application introduces no new significant environmental impacts; and

d. All previously adopted mitigation measures shall be a condition of Project approval, as they are applicable to the Project, and are incorporated herein by this reference; and

e. The SEIR Addendum contains a complete and accurate reporting of the environmental impacts associated with the Project, and reflects the independent judgment of the Historic Preservation Subcommittee; and

f. There is no substantial evidence in the administrative record supporting a fair argument that the Project may result in significant environmental impacts.

SECTION 2: Subsequent or Supplemental Environmental Review Not Required. Based on the EIR Addendum, all related information presented to the HPSC, and the specific findings set forth in Section 1, above, the HPSC finds that the preparation of a subsequent or supplemental Certified SEIR is not required for the Project, as the Project:

a. Does not constitute substantial changes to the Certified SEIR that will require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

b. Does not constitute substantial changes with respect to the circumstances under which the Certified SEIR was prepared, that will require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

c. Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified SEIR was certified/adopted, that shows any of the following:

- i. The Project will have one or more significant effects not discussed in the Certified SEIR; or
- ii. Significant effects previously examined will be substantially more severe than shown in the Certified SEIR; or
- iii. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or
- iv. Mitigation measures or alternatives considerably different from those analyzed in the Certified SEIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 4: The HPSC does hereby find that based upon the entire record of proceedings before it, and all information received, that there is no substantial evidence that the Project will constitute substantial changes to the Certified SEIR, and does hereby recommend the Planning Commission recommend the adoption of the Addendum to the Certified SEIR, included as Attachment A of this Decision.

SECTION 5: The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void or annul this approval. The City of Ontario shall promptly notify the applicant of any such claim, action or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 6: The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

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APPROVED AND ADOPTED this 9th day of August 2023.

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Historic Preservation Subcommittee

**Attachment A—Addendum to The Ontario Plan 2050 Supplemental  
Environmental Impact Report**

*(SEIR Addendum follows this page)*



City of Ontario  
Planning Department  
303 East B Street  
Ontario, California 91764  
Phone: 909.395.2036  
Fax: 909.395.2420

## California Environmental Quality Act Addendum to The Ontario Plan Environmental Impact Report

**Project Title/File No.:** Euclid/Walnut Planned Unit Development Mixed-Use Project (File Nos. PDEV22-027, PUD22-004, and PHP22-015)

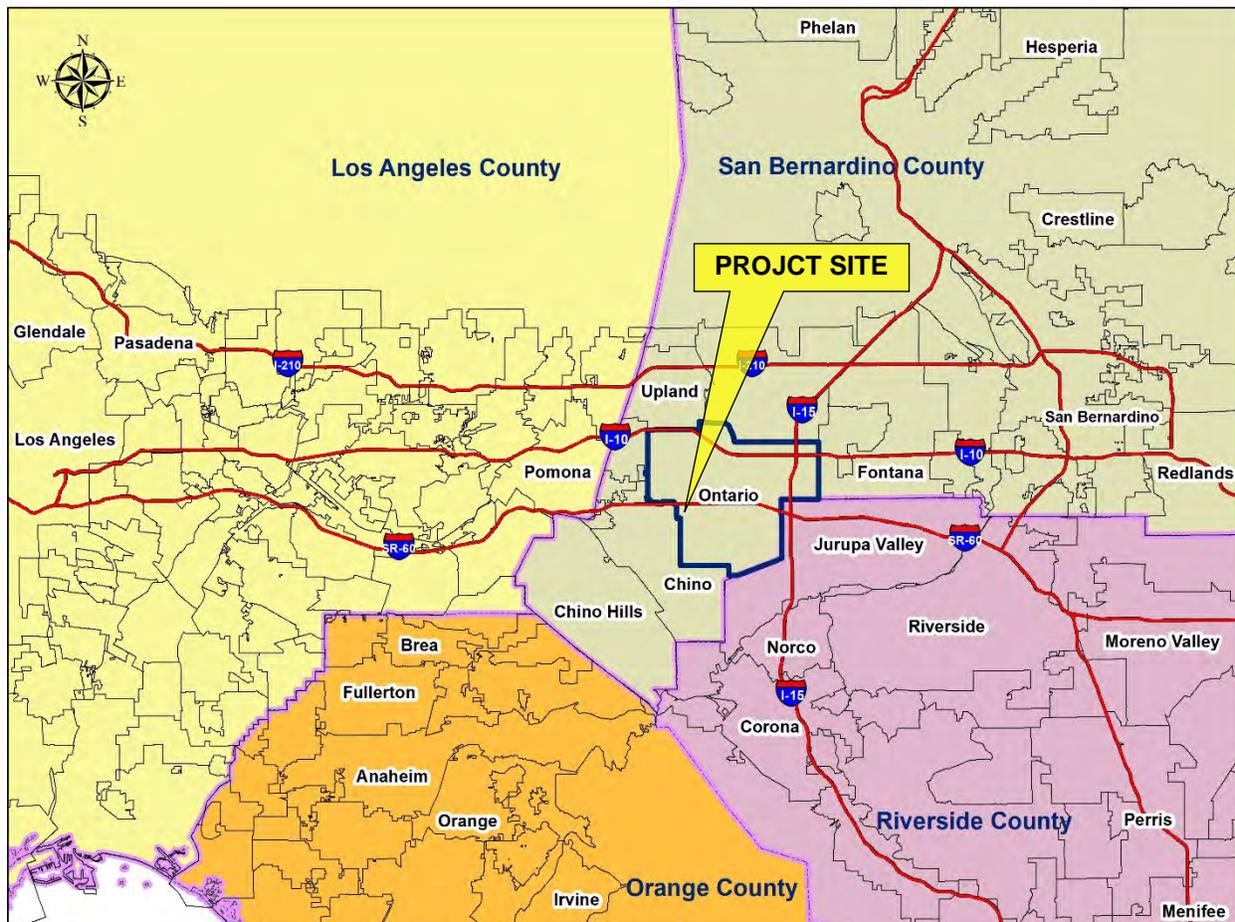
**Lead Agency:** City of Ontario, 303 East "B" Street, Ontario, California 91764, (909) 395-2036

**Contact Person:** Alexis Vaughn, Associate Planner, 909.395.2416, Email: [avaughn@ontarioca.gov](mailto:avaughn@ontarioca.gov)

**Project Sponsor:** Legacy/Colliers Residential, LLC

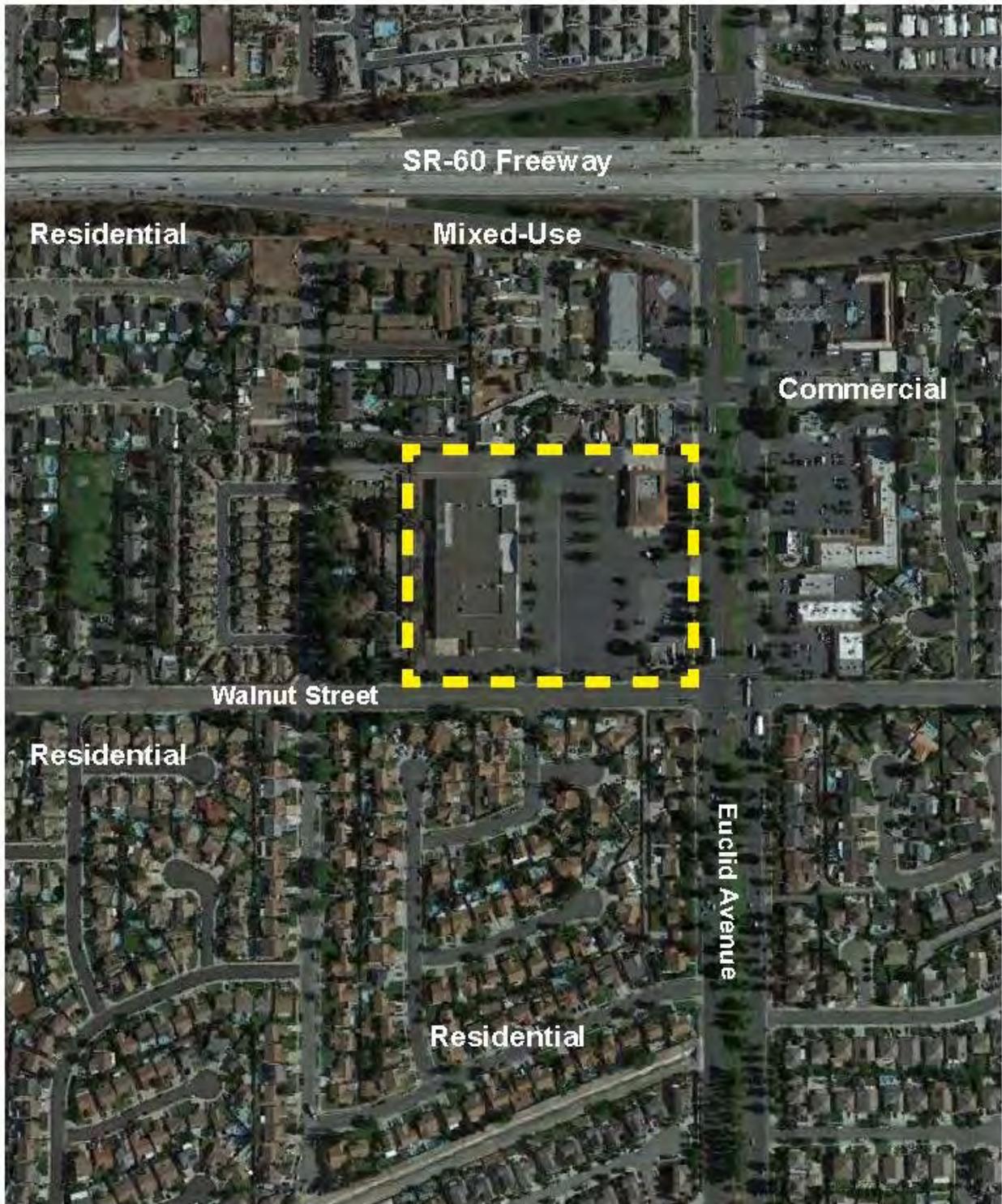
**Project Location:** The 10.6-acre project site is located in southwestern San Bernardino County, within the City of Ontario (City) as shown in **Figure 1** below. The City of Ontario is located approximately 40 miles from downtown Los Angeles, 20 miles from downtown San Bernardino, and 30 miles from Orange County. As illustrated in **Figure 2** below, the project site is almost square shaped and located north of W. Walnut Street and west of Euclid Avenue in the southwest portion of the City (just south of SR-60). The project site includes Assessors' Parcel Numbers; 1051-271-67, 1051-271-06, 1051-271-66. All full rights-of-way for public streets that are required for this project have already been dedicated and granted to the City.

**Figure 1: REGIONAL LOCATION MAP**



June 28, 2023

**Figure 2: PUD VICINITY MAP**



**General Plan/Zoning.** The Ontario Plan (TOP) is the City's comprehensive plan for the community over the next thirty years. TOP 2050 is the City's established framework for development and has three policy level components, the Vision, a Governance Manual and the Policy Plan. The most current version of TOP and its environmental impact report (EIR) are dated August 16, 2022 (State Clearinghouse No. 2021070364). Figure LU-01 of The Ontario Plan (TOP) 2050 is the City's current Land Use Plan which indicates the project site is designated as Mixed Use but is further classified as a Neighborhood Community Hub (NH). The site is currently zoned Mixed-Use (MU-8e) within the Euclid Avenue (EA) overlay corridor as shown below:

**General Plan Designation:**     Existing – Mixed Use Neighborhood Community Hub (MU-NH)

Proposed – Mixed Use Neighborhood Community Hub (MU-NH)

**Zoning:**                             Existing – Mixed-Use 8e (Euclid and Walnut)

Proposed – Planned Unit Development (PUD) with Commercial/  
Residential Mixed Use within Euclid Avenue Overlay Zoning District (EA)

The Mixed-Use Neighborhood Hub (MU-NH) designation allows low-rise buildings (3-5 stories) with a mixture of retail and residential uses that will create identity and place and serve the surrounding residents. This category allows for residential densities ranging from 20 - 75 dwelling units per acre and non-residential intensity of 1.00 Floor Area Ratio.

The TOP shows a total of five locations within the City with the MU-NH land use designation. The Future Buildout Projections Table of the Land Use Element provides further details for each of these five MU-NH sub-areas. The three parcels subject to this PUD make up 10.6 acres ("PUD site") of the overall 16 acres that comprise the "MU-NH" sub-area. The remaining 5.4 acres of the MU-NH area include approximately 28,000 square feet of existing businesses (gas station, pre-school, and 2 small businesses) and 15 single family homes between the PUD site and the SR-60 Freeway to the north. The PUD site currently contains a Carl's Jr. restaurant, former Kmart Shopping Center, and a strip retail building. The TOP indicates the projected buildout for the entire 16 acres of this sub-area will eventually have a total of 369 dwelling units and 142,840 square feet of non-residential development. Development of the proposed PUD would slightly exceed the total number of residential units for this area under the TOP (369 MF+15 SF=384 total units vs. 369 projected total units). However, development of the PUD would substantially reduce the amount of anticipated non-residential growth in this sub-area (12,000 SF in the PUD plus 28,000 existing = 40,000 SF vs. 142,840 SF). Therefore, development of the "PUD project" would result in a 4% increase in residential impacts but a 28% decrease in commercial impacts. While this Addendum only covers impacts of the new residential and commercial uses currently proposed under the PUD Project described below, the preceding analysis demonstrates the anticipated impacts of growth in this MU-NH sub-area with the PUD are considered to be equivalent or less than those identified in TOP EIR for this sub-area.

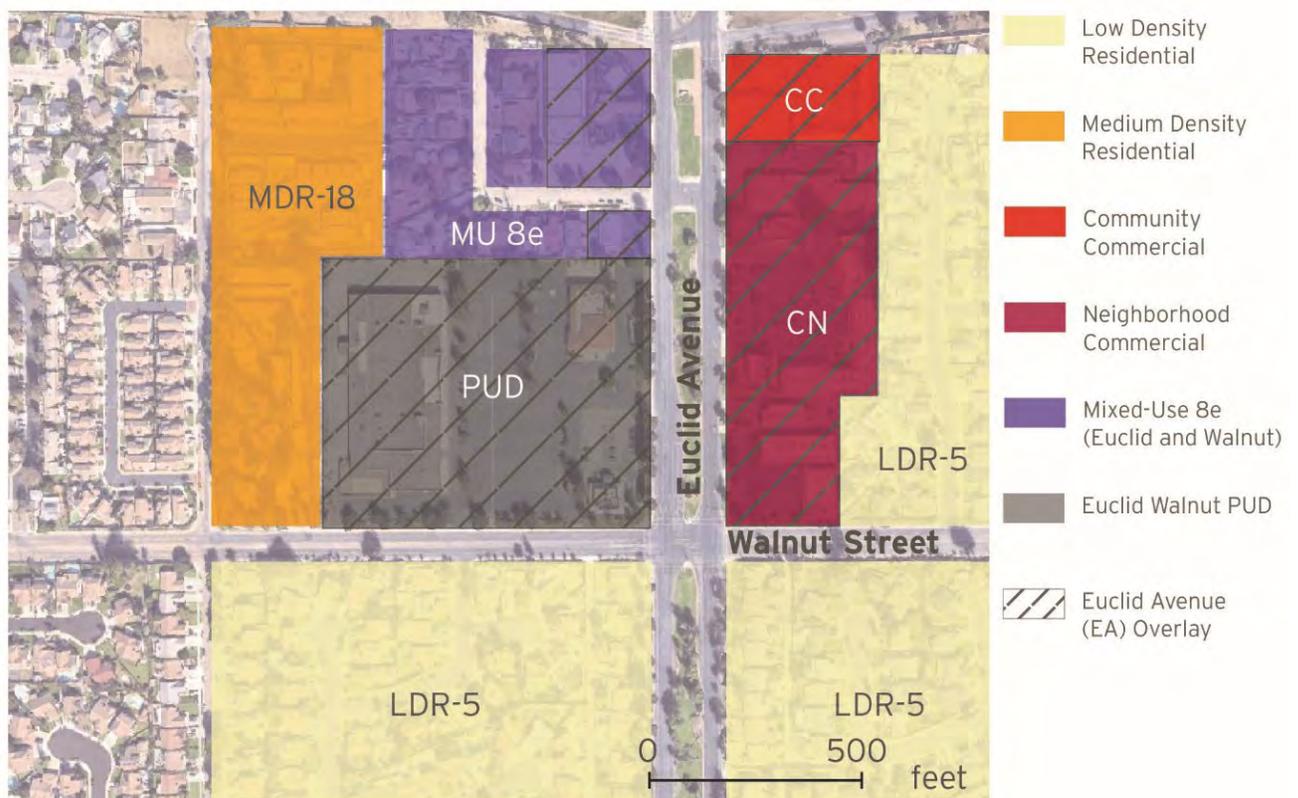
**Description of PUD Project:** The Euclid/Walnut Planned Unit Development (PUD) project proposes to demolish the existing commercial center and construct a total of 369 apartment units with 12,000 square feet (SF) of ground floor retail uses. The PUD project is expected to be completed in two phases. Phase 1 would leave the existing Carl's Jr. site in its current condition, demolish the other existing commercial structures, and develop 5,400 SF of ground floor retail space and 346 apartment units consisting of 18 studio units, 190 one-bedroom units, and 138 two-bedroom units. Phase 2 would consist of demolishing the existing Carl's Jr. and constructing an additional 23 apartment units and 6,600 SF of ground floor retail space. **Table 1** shows the building characteristics of the proposed project as part of the PUD while **Figure 3** shows the proposed zoning of the PUD project.

**Table 1: Proposed PUD Project Land Uses**

AREA/TIMING	ACRES	UNITS	SQUARE FEET
Existing Uses (to be demolished)	10.6	0	105,050
<b>Euclid/Walnut PUD</b>	<b>10.6</b>	<b>369</b>	<b>12,000</b>
Phase 1	9.4	346	5,400
Phase 2	1.2	23	6,600
Remainder of MU-NH Area	5.4	0	130,840
<b>TOTAL</b>	<b>16.0</b>	<b>369</b>	<b>142,840</b>

Source: PUD May 2023 NA = acres not applicable due to mixed use development

**Figure 3: PROPOSED PUD ZONING**



Source: PUD May 2023

**Planned Unit Development (PUD).** The PUD provides planning and design principles, development regulations, and performance standards to guide the redevelopment of an existing commercial shopping center. The PUD will facilitate mixed-use development of high-density apartments, restaurants, retail shops, and other commercial services. The PUD is intended to achieve the City’s goals to economically revitalize and aesthetically enhance an underutilized parcel located along the Euclid Avenue corridor.

The PUD is organized to meet the requirements of the Ontario Development Code (ODC) and will replace the existing zoning district designation and ODC regulations applicable to the affected properties. The PUD site also falls within the “Euclid Avenue Overlay” Zoning District (EA) and any applicable requirements of the EA will remain in effect. City staff and private developers will rely on this PUD to determine whether future precise plans for development ("Development Plans") adequately meet the City's land use and design objectives as outlined in The Ontario Plan (TOP) 2050.

The PUD establishes a singular zoning district of Commercial/Residential Mixed Use consistent with TOP 2050 MU-NH land use designation. The PUD allows both horizontal and vertical mixed-use buildings with a combination of three- and four-story buildings. Buildings with direct Euclid Avenue frontage will contain ground-floor commercial uses and residential units directly above. All other buildings will contain residential units on all floor levels. A combination of garages, tandem spaces, carports, and surface level parking spaces will be provided onsite with gated access limited to residents and residents' guests. Unrestricted access to surface level parking will serve the commercial uses and provide additional resident guest parking spaces.

It should be noted the TOP EIR addendum is required in order for the PUD project's density to exceed the TOP 2050 land use assumptions for the site (i.e., Mixed-Use – Neighborhood Activity Hub 8e - Euclid & Walnut) which designates the site at 75% of the area at 30 du/ac and 25% of the area at 0.80 FAR retail. The proposed PUD would slightly exceed the total number of residential units for this area under the TOP (384 total units with PUD vs. 369 projected total units). However, development of the PUD would substantially reduce the amount of anticipated non-residential growth in this sub-area (40,000 SF with the PUD vs. 142,840 SF under TOP growth). Therefore, development of the "PUD project" would result in a 4% increase in residential impacts but a 28% decrease in commercial impacts compared to what was analyzed in TOP EIR.

**Phasing.** The PUD project will be completed in two phases. Phase 1 comprises the entire PUD site except for the existing drive-thru restaurant site (Carl's Jr.) which is occupied by an approximately 4,100 square foot building and its related site improvements. Phase 1 will require the demolition of a combined 100,950 square feet of commercial/retail buildings (not including the Carl's Jr.) and related site improvements. Phase I will be redeveloped with two four-story buildings and six three-story buildings, providing a combined total of 346 dwelling units; 5,400 square feet of ground floor commercial space, associated on-site parking areas for both residential and non-residential land uses, and landscaping and recreational amenities for residents. **Figure 4** shows the Phase 1 Conceptual Site Plan.

Phase 2 will finish implementation of the total build-out of the area within the PUD project by demolishing the Carl's Jr. restaurant building and related site improvements and replacing them with additional vertical mixed-use development, constructing an additional four-story building. Completion of the second phase would provide up to an additional 23 dwelling units and up to an additional 6,600 square feet of ground-floor commercial space, and the associated site improvements.

The PUD is applicable to both phases of the project, which will construct a horizontal and vertical mixed-use development, with a maximum of 369 dwelling units and up to 12,000 square feet of commercial land uses occupying the ground floor of buildings with Euclid Avenue frontage.

**Construction.** All construction activities, including site demolition, regrading, building construction, paving, and the application of architectural coatings, are expected to take approximately 28 months for Phase 1. The specific timing of development of Phase 2 has not yet been determined but will include similar activities as those listed for Phase 1. The overall construction of the PUD project is consistent with the level of development outlined in TOP and its EIR and would only differ by having +4% more units but 28% less non-residential square footage with the PUD. While no additional specific information on Phase 2 construction is presented at this time, overall development and construction of the 10.6-acre MU-NH sub-area would be similar with or without the PUD in terms of land area developed.

**Figure 4: PHASE 1 CONCEPTUAL SITE PLAN**



**Development Regulations.** Development within this PUD will comply with Ontario Development Code (ODC) standards and requirements applicable to Multiple-Family Dwellings and Commercial development, as determined appropriate by the City Director of Community Development. **Table 2** provides a summary of development standards for the PUD project. The PUD project will not exceed a maximum 40 dwelling units per acre and will not exceed 369 dwelling units upon build-out of Phase 2. The overall building height of four-story buildings will not exceed 60 feet and all other buildings will not exceed 50 feet (max. 3 stories), inclusive of architectural projections. Non-residential development is subject to a maximum 0.5 floor area ratio based upon the net site area.

**Access and Improvements.** Vehicular access from the public right of way will be limited to two locations along Euclid Avenue and a maximum of three locations along Walnut Street as approved by the City Engineer. As determined by the City Engineer, design and construction of street improvements, adjacent to the property frontage of Euclid Avenue and Walnut Street will be conditioned and may include, but are not limited to concrete curb and gutter, sidewalk, LED streetlights, signing and striping, and parkway landscaping.

**Table 2: Summary of PUD Development Standards**

DEVELOPMENT STANDARD	REQUIREMENT	NOTES
Maximum Intensity – Floor Area Ratio	0.50 FAR	Gross building square footage of commercial space
Density Range – Minimum and Maximum	20.1 – 40	Up to a maximum of 369 dwelling units
Maximum Building Height by Number of Stories Four Stories Three Stories	60 feet 50 feet	Inclusive of architectural projections and equipment screening
Building Setbacks – From Right-of-Way	10 feet minimum	
Setbacks – Interior Property Line Buildings Adjacent to Residential Buildings Adjacent to Non-Residential Carport or Trash Enclosure	50 feet minimum 5 feet minimum 5 feet minimum	
Building Separation Building to Building Building to Drive Aisle or Parking Areas Building to Carport Patio to Patio	25 feet minimum 5 feet minimum 25 feet minimum 15 feet minimum	Individual driveway depth limited to 5 ft. or less, or 18 ft. or more
Minimum Number Parking Spaces Ratio for Residential Uses Ratio for Non-Residential Uses	1.2 spaces/bedroom 1 space/250 square feet	Inclusive of guest spaces
Residential Open Space and Common Amenities – Combined Minimum Ratio Minimum Private Open Space Ratio Minimum Common Amenity Ratio	250 square feet/dwelling unit 50 square feet/dwelling unit 175 square feet/dwelling unit	5 feet min. width and length 15% maximum indoor
Residential Storage Units	150 cubic feet/dwelling unit minimum	Does not include closets or cabinets interior to the unit

Source: PUD Table 4-1, Summary of Development Standards

**Grading and Drainage.** The PUD site is already developed and essentially flat so its development is not expected to require substantial grading and earthwork is generally expected to be balanced onsite (i.e., no substantial import or export of soil). Under the PUD, onsite stormwater drainage facilities will be provided consistent with the San Bernardino County Stormwater Program's Water Quality Management Plan (WQMP) requirements for new development projects. Stormwater capture and infiltration facilities may include the utilization of vegetated swales, depressed landscaped basins, pervious concrete pavement or underground stormwater retention/infiltration vaults.

**Landscaping.** The PUD site will be fully landscaped according to a detailed Landscaping Plan that will be submitted with the Development Plan. The Landscaping Plan will specify all landscape and hardscape elements of the residential open space and common amenities, as well as the perimeter yards abutting the street rights-of-way and all street trees. The Plan will provide water conservation through low water using plant materials, hydro zones, water efficient irrigation and weather-based controllers. Landscaped areas will also be used for storm water infiltration through vegetated swales, retention basins, or dry wells as needed with appropriate planting materials. The Landscaping Plan will satisfy the requirements of the City's Landscape Development Standards outlined in the ODC. Street trees shall comply with the variety, size, and spacing as directed by the City of Ontario Master Street Tree Plan.

**Open Space/Recreation.** The PUD indicates each residential unit will have 50 square feet of private open space (i.e., balcony or patio) and will have 175 square feet per residential unit of common amenities. The PUD project proposes a total of 369 units so the overall development will have a minimum of 64,575 square feet of common open space amenities. This may include a combination of passive and active, indoor and

outdoor spaces, roof top or upper floor decks, as well as landscaped and hardscaped ground surfaces providing paseos between or adjacent to buildings. Up to 15 percent of the overall common amenity square footage may consist of indoor area and be grouped into a single building that is accessible to all residents; providing opportunities for fitness, various lounge/gathering space, business/mail center and similar amenities. The remaining common amenities provided shall be in the form of outdoor common areas consisting of both programmed and unprogrammed spaces. Programmed space may provide specific amenities such as a dog park, seating/conversational area, outdoor cooking facilities with table seating areas, etc. while unprogrammed space may provide passive use, such as landscaped paseos.

**Fences and Walls.** Exhibit 5-6 in the PUD provides a comprehensive plan for walls and fences that is compatible with the proposed building architecture and will not encroach into the public right-of-way.

**Lighting.** The PUD project includes security and decorative lighting for the new proposed commercial and residential buildings, parking areas, and access routes consistent with the PUD and the City's Development Code. The lighting plan shows that all lighting is shielded and directed toward the ground to the extent necessary to minimize potential impacts on neighboring residential uses.

**Utilities.** The PUD project site is already developed so its redevelopment will be served by existing water lines and wastewater flows and/or upgraded to satisfy the required capacities as determined by the City and its service purveyors/agencies.

**Requested Approvals.** The PUD project requires approval of the PUD and subsequent approval of site plans and improvement plans consistent with the PUD. The project application includes a Development Plan (File No. PDEV22-027, a Planned Unit Development (File No. PUD22-004), and an Addendum to the EIR prepared for TOP which was certified by the City Council on August 16, 2022. The EIR Addendum will allow the PUD project to comply with the requirements of the California Environmental Quality Act (CEQA).

**PUD Objectives.** The proposed PUD will facilitate the redevelopment of the project site with structures and related improvements that support both residential and non-residential land uses within the same project site. In addition to facilitating achievement of many City TOP goals and policies, this PUD establishes the following objectives:

- ❖ Develop and provide new, high-quality rental housing combined with a mixed-use component.
- ❖ Provide transition between new mixed-use development and surrounding residential neighborhoods and commercial properties.
- ❖ Provide areas of private and passive open space for each residential unit, as well as community gathering and active open spaces.
- ❖ Promote development that is consistent with the MU-NH – Mixed Use Neighborhood Activity Hub land use designation.
- ❖ Promote revitalization of commercial uses on the project site by establishing new ground-floor retail and similar uses that serve on-site residents and those in surrounding neighborhoods.
- ❖ Provide outdoor gathering places adjacent to commercial storefronts, such as outdoor patio or bench seating with inviting/attractive landscape elements.
- ❖ Orient non-residential, ground-floor uses towards Euclid Avenue.
- ❖ Incorporate site design solutions to allow for phased development.
- ❖ Satisfy the build-out projections for residential dwelling units within the MU-NH (Euclid- Walnut) sub-area, as defined in TOP 2050.

**Project Setting:** The PUD project site consists of approximately 10.6 acres of land within western Ontario. The site is almost square in shape and is located at the northwest corner of Euclid Avenue and W. Walnut Street just south of the SR-60 Freeway. The site is currently developed with a 4,100-square foot Carl's Jr. drive-through restaurant and 100,950 square feet of commercial buildings including a former Kmart building) plus a small retail building with several tenants. The site is relatively flat with elevations ranging

from 818 feet above mean sea level (amsl) in the northeast corner down to 810 feet amsl at the southeast corner with a gentle slope of less than one percent to the southwest. Runoff from the site generally flows toward the adjacent roadways (Euclid to the east and Walnut to the south).

The site is in a built-up urbanized area with existing residential uses to the west, south, and southeast, commercial uses to the east, and mixed residential and commercial uses to the north up to the freeway. The location and extent of existing land uses are shown in the previous Figure 2.

**Project Background:** The PUD project site was developed in the later part of the 20<sup>th</sup> Century with a variety of commercial uses, many of which are now vacant. No major planning, development, or environmental work has been done in the past 10+ years on this site. However, the City's TOP and its EIR was most recently adopted in 2022 and contain current and accurate environmental information about the project site and applicable mitigation as explained below and as summarized at the end of this document.

On August 16, 2022, the Ontario City Council adopted the latest version of TOP, which serves as the City's General Plan under state law and provides a foundation for the City to operate as a municipal corporation. The TOP consists of six (6) distinct components: 1) Vision; 2) Governance Manual; 3) Policy Plan; 4) Council Priorities; 5) Implementation; and 6) Tracking and Feedback. The Policy Plan component of TOP meets the functional and legal mandate of a municipal General Plan and contains nine elements; Land Use, Housing, Parks and Recreation, Environmental Resources, Community Economics, Safety, Mobility, Community Design and Social Resources.

The City Council certified TOP EIR (SCH # 2021070364) which analyzed the direct and physical changes in the environment that would be caused by implementation of TOP; focusing on changes to land use associated with the buildout of the proposed land use plan and impacts from population and employment growth in the City. The project proposes land uses consistent with TOP 2050. The significant unavoidable adverse impacts that were identified in TOP EIR included: agriculture resources, air quality, cultural resources, greenhouse gas (GHG) emissions, noise and transportation/traffic.

CEQA requires lead agencies to use the most current and accurate environmental information in analyzing project impacts. Therefore, consistent with the requirements of CEQA, the proposed project has been analyzed relative to current technical studies and TOP EIR. These uses will be consistent with the residential uses to the west, south, and southwest, the commercial uses to the east, and the mixed residential and commercial uses to the north.

**CEQA Requirements for an Addendum:** If changes to a project or its circumstances occur or new information becomes available after adoption of an EIR or negative declaration, the lead agency may: (1) prepare a subsequent EIR if the criteria of CEQA Guidelines Section 15162(a) are met, (2) prepare a subsequent negative declaration, (3) prepare an addendum, or (4) prepare no further documentation. (CEQA Guidelines Section 15162(b)). When only minor technical changes or additions to the EIR (or negative declaration) are necessary and none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred, CEQA allows the lead agency to prepare and adopt an addendum. (CEQA Guidelines Section 15164(b).)

Under Section 15162, a subsequent EIR or negative declaration is required only when:

- 1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- 2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the EIR or negative declaration due to the involvement of any new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- 3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the EIR or negative declaration was adopted, shows any of the following:

- a) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
- b) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
- c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
- d) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Thus, if the PUD project does not result in any of the circumstances listed in Section 15162 (i.e., no new or substantially greater significant impacts), the City may adopt an addendum to TOP EIR.

**CEQA Analysis:** According to CEQA Guidelines Section 15164, an Addendum to a previously certified EIR may be used if some changes or additions are necessary, but none of the conditions described in Section 15162 requiring the preparation of a subsequent negative declaration or EIR have occurred. The CEQA Guidelines require that a brief explanation be provided to support the findings that no subsequent EIR or negative declaration are needed for further discretionary approval. These findings are described below:

- 1) *Required Finding: Substantial changes are not proposed for the project that will require major revisions of the previous EIR due to the involvement of new, significant environmental effects or a substantial increase in the severity of previously identified effects.*

Substantial changes are not proposed by the project compared to what is allowed in TOP, and project implementation will not require revisions to TOP EIR. TOP EIR analyzed the direct and physical changes in the environment that would be caused by TOP; focusing on changes to land use associated with the buildout of the proposed land use plan. The site is located within the Mixed Use – Neighborhood Community Hub (MU-NH) designation of TOP. The PUD project will provide both mixed uses and be an activity hub for the surrounding neighborhoods.

Under TOP, projected buildout of the entire 16 acres of MU-NH overlay property would have a total of 369 dwelling units and 142,840 square feet of non-residential development. The PUD project proposes 369 units and approximately 12,000 square feet of the non-residential development on 10.6 acres, leaving 130,840 square feet of non-residential development to be built in the remainder of the MU-NH area adjacent to the SR-60 Freeway.

Since the anticipated buildout resulting from the PUD project will be equivalent to or less than that originally analyzed in TOP EIR, no revisions to TOP EIR are required.

In addition, all previously adopted mitigation measures of TOP EIR are conditions of project approval or mitigation measures and are incorporated herein by reference. This document provides an analysis of the project and verification that the project will not cause any new or more significant environmental impacts.

- 2) *Required Finding: Substantial changes have not occurred with respect to the circumstances under which the project is undertaken, that would require major revisions of the previous Environmental Impact Report due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.*

Substantial changes have not occurred with respect to the circumstances under which the project was undertaken, that would require major revisions to TOP EIR. TOP EIR evaluated the site as a mixture of land uses up to 369 residential units and 142,840 square feet of non-residential development. The PUD project proposes 369 units and approximately 12,000 square feet of the non-residential development, leaving 130,840 square feet of non-residential development to be built in the remainder of the MU-NH area adjacent to the SR-60 Freeway.

Therefore, no proposed changes or revisions to TOP EIR are required. In addition, all previously adopted TOP EIR mitigation measures are incorporated herein by reference. This document provides an analysis of the project and verification that the project will not cause any new or more significant environmental impacts.

- 3) *Required Finding. No new information has been provided that would indicate that the proposed project would result in one or more significant effects not discussed in the previous EIR.*

No new information has been provided that would indicate the proposed project would result in any new significant effects not previously discussed in TOP EIR. TOP EIR evaluated the site as a mixture of land uses up to 369 residential units and 142,840 square feet of non-residential development. The PUD project proposes 369 units and approximately 12,000 square feet of the non-residential development, leaving 130,840 square feet of non-residential development to be built in the remainder of the MU-NH area adjacent to the SR-60 Freeway.

TOP Figure LU-01, Land Use Plan, and TOP EIR Figure 1-3, Proposed Land Use Plan, indicate the proposed PUD project is consistent with the surrounding residential, commercial, and mixed uses. Since adoption of the 1992 General Plan, 2022 TOP, and certification of the 2010 TOP EIR, the subject site has been planned for a mixture of residential and commercial uses.

**Conclusion:** TOP EIR, certified by the City Council on August 16, 2022 was prepared as a Program EIR in accordance with CEQA, the CEQA Guidelines section 15121(a), and the City's Rules for the Implementation of CEQA. TOP EIR considered the direct physical changes and reasonably foreseeable indirect physical changes in the environment that would be caused by TOP. Consequently, TOP EIR focused on impacts from changes to land use associated with buildout of the City and impacts from the resulting population and employment growth in the City. The proposed project is consistent and compatible with existing and planned uses in the surrounding area and would only differ by having +4% more units but 28% less non-residential square footage with the PUD. While no additional specific information on Phase 2 construction is presented at this time, overall development and construction of the 10.6-acre MU-NH sub-area would be similar with or without the PUD in terms of land area developed. The overall construction of the PUD project is generally consistent with the level of development outlined in TOP and its EIR. The amount of development anticipated at PUD project buildout as shown in the previous Table 1 and outlined in the Project Description will be equivalent to the development analyzed in TOP EIR.

The proposed PUD differs from the TOP's assumptions for this project site, so this addendum and supplemental studies are required to ensure the project introduces no new significant environmental impacts that were identified in TOP EIR. The City's "Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed. Should no new significant environmental impacts arise as a result of this project and related analyses, all previously adopted mitigation measures shall be a condition of project approval.

Accordingly, and based on the conclusions of the previously certified TOP EIR, the analysis in this document, CEQA and the CEQA Guidelines, including Sections 15164 and 15162, the PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary, nor is there a need for additional mitigation with implementation of the number of conditions of approval required by the City based on the results of the site-specific technical studies for burrowing owl and airport safety.

**Surrounding Land Uses:** The project site is in a built-up urbanized area with existing residential uses to the west, south, and southeast, commercial uses to the east, and mixed residential and commercial uses to the north up to the freeway. See **Table 3** for onsite and surrounding land uses and zoning designations. Onsite and surrounding land uses are also shown in the previous Figure 2.

**Table 3: Existing Land Uses and Zoning Designations**

Location	Existing Land Uses	TOP Designation	Zoning Designation
PUD Site	Vacant older retail commercial and fast-food restaurant	Mixed Use-Neighborhood Community Hub (MU-NH)	Mixed-Use 8e (Euclid and Walnut) within Euclid Avenue Overlay (EA)
North	Mixture of residential and commercial uses	Mixed Use-Neighborhood Community Hub (MU-NH)	Mixed-Use 8e (Euclid and Walnut) within Euclid Avenue Overlay (EA)
South	Single Family Residential	Low Density Residential (2.1-5 du/ac)	Low Density Residential (LDR-5)
East	Commercial shopping center	Neighborhood Commercial (0.4 FAR)	Neighborhood Commercial (CN) within Euclid Avenue Overlay (EA)
West	Multi-Family Residential	Medium Density Residential (11.1-25 du/ac)	Medium Density Residential (MDR-18)

Source: City Website 2022 and Google Earth 2022 du/ac = dwelling units per acre

**Other public agencies whose approval is required (e.g., permits, financing approval or participation agreement):** None

**Tribal Consultation:** Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1?  Yes  No

If “yes”, has consultation begun?  Yes  No  Completed

**NOTE:** Consultation was already conducted as part of TOP EIR and no new consultation is required for this Addendum to TOP EIR

**Additional Studies:** The following additional studies have been or are being prepared in support of the analysis in this document regarding potential environmental impacts of the proposed project. These studies are in the Appendices to this document and include:

- Euclid/Walnut Planned Unit Development (PUD) (Appendix A)
- Health Risk Assessment (Appendix B)
- Hydrology and Water Quality (Appendix C)
- Trip Generation (Appendix D)

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- |                                                    |                                                         |                                                             |
|----------------------------------------------------|---------------------------------------------------------|-------------------------------------------------------------|
| <input type="checkbox"/> Aesthetics                | <input type="checkbox"/> Agriculture/Forestry Resources | <input type="checkbox"/> Air Quality                        |
| <input type="checkbox"/> Biological Resources      | <input type="checkbox"/> Cultural Resources             | <input type="checkbox"/> Geology / Soils                    |
| <input type="checkbox"/> Greenhouse Gas Emissions  | <input type="checkbox"/> Hazards & Hazardous Materials  | <input type="checkbox"/> Hydrology / Water Quality          |
| <input type="checkbox"/> Land Use / Planning       | <input type="checkbox"/> Mineral Resources              | <input type="checkbox"/> Noise                              |
| <input type="checkbox"/> Population / Housing      | <input type="checkbox"/> Public Services                | <input type="checkbox"/> Recreation                         |
| <input type="checkbox"/> Transportation            | <input type="checkbox"/> Utilities / Service Systems    | <input type="checkbox"/> Mandatory Findings of Significance |
| <input type="checkbox"/> Tribal Cultural Resources | <input type="checkbox"/> Wildfire                       | <input type="checkbox"/> Energy                             |

**DETERMINATION (To be completed by the Lead Agency)**

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature

Alexis Vaughn, Associate Planner  
 Printed Name and Title

July 5, 2023  
 Date

City of Ontario  
 For

### **EVALUATION OF ENVIRONMENTAL IMPACTS**

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect is significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant with Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from the “Earlier Analyses” Section may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or Negative Declaration. Section 15063l(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analyses Used. Identify and state where they are available for review. For this project, reference will be made to TOP EIR as appropriate.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources. A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
  - a) The significance criteria or threshold, if any, used to evaluate each question; and
  - b) The mitigation measure identified, if any, to reduce the impact to less than significance.

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation</i>	<i>Less Than Significant Impact</i>	<i>Impacts Previously Analyzed in TOP FEIR</i>
<b>1. AESTHETICS.</b> Would the project:				
<b>a.</b> Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>b.</b> Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>c.</b> In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>d.</b> Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>2. AGRICULTURE AND FOREST RESOURCES.</b> In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest protocols adopted by the California Air Resources Board. Would the project:				
<b>a.</b> Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>b.</b> Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>c.</b> Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>d.</b> Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation</i>	<i>Less Than Significant Impact</i>	<i>Impacts Previously Analyzed in TOP FEIR</i>
<p><b>e.</b> Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>3. AIR QUALITY.</b> Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:</p>				
<p><b>a.</b> Conflict with or obstruct implementation of the applicable air quality plan?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>b.</b> Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>c.</b> Expose sensitive receptors to substantial pollutant concentrations?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>d.</b> Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>4. BIOLOGICAL RESOURCES.</b> Would the project:</p>				
<p><b>a.</b> Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>b.</b> Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>c.</b> Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>d.</b> Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>e.</b> Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>f.</b> Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation</i>	<i>Less Than Significant Impact</i>	<i>Impacts Previously Analyzed in TOP FEIR</i>
<b>5. CULTURAL RESOURCES.</b> Would the project:				
<b>a.</b> Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>b.</b> Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>c.</b> Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>6. ENERGY.</b> Would the project:				
<b>a.</b> Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>b.</b> Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>7. GEOLOGY AND SOILS.</b> Would the project:				
<b>a.</b> Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>i.</b> Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>ii.</b> Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>iii.</b> Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>iv.</b> Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>b.</b> Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>c.</b> Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>d.</b> Be located on expansive soil, as defined in Table 18 1 B of the Uniform Building Code, creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>e.</b> Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>f.</b> Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation</i>	<i>Less Than Significant Impact</i>	<i>Impacts Previously Analyzed in TOP FEIR</i>
<b>8. GREENHOUSE GAS EMISSIONS.</b> Would the project:				
<b>a.</b> Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>b.</b> Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>9. HAZARDS AND HAZARDOUS MATERIALS.</b> Would the project:				
<b>a.</b> Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>b.</b> Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>c.</b> Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>d.</b> Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>e.</b> For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>f.</b> Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>g.</b> Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>10. HYDROLOGY AND WATER QUALITY.</b> Would the project:				
<b>a.</b> Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>b.</b> Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation</i>	<i>Less Than Significant Impact</i>	<i>Impacts Previously Analyzed in TOP FEIR</i>
<b>c.</b> Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>i.</b> result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>ii.</b> substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>iii.</b> create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>iv.</b> impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>d.</b> In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>e.</b> Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>11. LAND USE AND PLANNING.</b> Would the project:				
<b>a.</b> Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>b.</b> Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>12. MINERAL RESOURCES.</b> Would the project:				
<b>a.</b> Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>b.</b> Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>13. NOISE.</b> Would the project result in:				
<b>a.</b> Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>b.</b> Generation of excessive ground-borne vibration or ground-borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>c.</b> For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation</i>	<i>Less Than Significant Impact</i>	<i>Impacts Previously Analyzed in TOP FEIR</i>
<b>14. POPULATION AND HOUSING.</b> Would the project:				
<b>a.</b> Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of road or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>b.</b> Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>15. PUBLIC SERVICES.</b> Would the project:				
<b>a.</b> Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
<b>i.</b> Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>ii.</b> Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>iii.</b> Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>iv.</b> Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>v.</b> Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>16. RECREATION.</b> Would the project:				
<b>a.</b> Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>b.</b> Does the project include recreational facilities or require the construction or expansion of recreational facilities which have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>17. TRANSPORTATION.</b> Would the project:				
<b>a.</b> Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>b.</b> Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>c.</b> Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>d.</b> Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation</i>	<i>Less Than Significant Impact</i>	<i>Impacts Previously Analyzed in TOP FEIR</i>
<b>18. TRIBAL CULTURAL RESOURCES.</b> Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is				
<b>a.</b> Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>b.</b> A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subsection(c) of Public Resources Code section 5024.1. In applying the criteria set forth in subsection (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>19. UTILITIES AND SERVICE SYSTEMS.</b> Would the project:				
<b>a.</b> Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>b.</b> Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>c.</b> Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>d.</b> Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>e.</b> Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>20. WILDFIRES.</b> If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
<b>a.</b> Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<b>Issues</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation</b>	<b>Less Than Significant Impact</b>	<b>Impacts Previously Analyzed in TOP FEIR</b>
<b>b.</b> Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>c.</b> Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>d.</b> Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>21. MANDATORY FINDINGS OF SIGNIFICANCE.</b>				
<b>a.</b> Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>b.</b> Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current project, and the effects of probable future projects.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>c.</b> Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><u>Note:</u> Authority cited: Public Resources Code sections 21083, 21083.05, 21083.09.</p> <p><u>Reference:</u> Gov. Code section 65088.4; Public Resources Code sections 21073, 21074, 21080(c), 21080.1, 21080.3, 21080.3.1, 21080.3.2, 21082.3, 21083, 21083.3, 21083.5, 21084.2, 21084.3, 21093, 21094, 21095 and 21151; <i>Sundstrom v. County of Mendocino</i> (1988) 202 Cal.App.3d 296; <i>Leonoff v. Monterey Board of Supervisors</i> (1990) 222 Cal.App.3d 1337; <i>Eureka Citizens for Responsible Govt. v. City of Eureka</i> (2007) 147 Cal.App.4th 357; <i>Protect the Historic Amador Waterways v. Amador Water Agency</i> (2004) 116 Cal.App.4th 1099, 1109; <i>San Franciscans Upholding the Downtown Plan v. City and County of San Francisco</i> (2002) 102 Cal.App.4th 656.</p>				

## EXPLANATION OF ISSUES

### 1. AESTHETICS. Would the project:

#### a. Have a substantial adverse effect on a scenic vista?

Discussion of Effects: TOP EIR concludes... “the scale and design of the City under TOP 2050 would not deter views of the San Gabriel Mountains which are the dominant scenic resource in the City of Ontario. Regulations such as the City’s Municipal Code and policies [of TOP] would ensure that increased development would not impact scenic vistas” (SEIR p. 5.1-5). TOP Policy CD1-5 requires all major north-south streets be designed and redeveloped to feature views of the San Gabriel Mountains.

The project site is located at the northwest corner of Euclid Avenue and Walnut Street just south of the SR-60 Freeway. Surrounding roadways and public areas have views of the mountains to the north. The PUD project proposes 3 and 4-story buildings with the taller buildings along the west side of Euclid to accommodate commercial uses on the ground floors. The residential uses to the south are across Walnut Street from the site so the new buildings would not block public views from this area as well. The future buildings would be consistent in terms of mass and height with what is allowed in TOP and current zoning although they would be controlled by the PUD. The new uses are already allowed under TOP and do not obstruct views of the San Gabriel Mountains from onsite or surrounding north-south streets. No adverse impacts are anticipated in relation to the project.

Therefore, the project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

#### b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway?

Discussion of Effects: TOP EIR states “...The Euclid Corridor and the Mission Boulevard Corridor are the primary scenic corridors in Ontario. These are not State-designated scenic highways, and Ontario does not have any State scenic highways through or in the vicinity of the City” (SEIR 5.1-6). The City is served by three freeways: I-10, I-15, and SR-60. I-10 and SR-60 traverse the northern and central portion of the City, respectively, in an east–west direction. I-15 traverses the northeastern portion of the City in a north–south direction. The project site is just south of SR-60 and west of the I-15 freeway. These segments of I-10, I-15, and SR-60 have not been officially designated as scenic highways by the California Department of Transportation (Caltrans) or the City.

The project site currently supports commercial buildings of various types and sizes but the largest buildings on the west side of the property (former Kmart) are vacant. The site does not contain any visual or scenic resources or historic buildings. Therefore, it will not damage any scenic resources and not result in any adverse environmental impacts.

The project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to the EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

#### c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Discussion of Effects: TOP EIR characterized this area as having existing commercial development and the area contained urban land uses including both residential and commercial development planned on and around the project site. TOP EIR concluded that future development in the City, which includes the mixed uses planned on the PUD project site, would not degrade the existing visual character or quality of the site or its surroundings and no mitigation was required (SEIR p. 5.1-7).

TOP EIR also states:

...future development under the [TOP 2050] would still be required to adhere to the City's Development Code, which includes general development requirements for development density, screening and setback, signing, landscaping, lighting, height limitations, and other aspects related to the aesthetic of the City. Finally...the Development Code is enacted to assist implementation of planning, zoning, development, subdivision, and environmental laws and the TOP and to achieve the proper arrangement of land uses envisioned in TOP. Because it is the overriding planning document for the City, and because it is intended to improve consistency with existing regulations and conditions, the...TOP 2050...would not have a significant impact with respect to being inconsistent with policies or regulations governing scenic quality. (SEIR p. 5-1-7)

The project site is located in a completely urbanized area with developed uses surrounding the site. The PUD project would introduce new buildings onto the site which would have a suburban/urban appearance consistent with newer uses and buildings along the Euclid Avenue corridor to the north. Therefore, the project is consistent with TOP land uses and zoning so it would not degrade the existing visual character or quality of the site or its surroundings.

The proposed project will be required to comply with the policies of the Community Design Element of TOP Policy Plan and zoning designations on the property, as well as the design requirements of the Euclid/Walnut PUD. Therefore, no adverse visual impacts are anticipated, and the project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?**

Discussion of Effects: TOP EIR concluded that new development throughout the City would increase ambient light levels over time as development occurred, but that compliance with Development Code lighting requirements would reduce potential impacts to less than significant levels, and no mitigation was required (SEIR p. 6.1-7).

The project proposes the development of several residential and mixed-use buildings on the site, with the mixed uses (retail commercial on the ground floor and residential above) along Euclid Avenue and the residential buildings in the central and western portions of the site.

New development will have architectural and security lighting on buildings and in parking lots, and streets will have new lighting installed or existing street lighting continue in place. Pursuant to the requirements of the Euclid/Walnut PUD and the City's Development Code, onsite lighting will be shielded, diffused or indirect, to avoid glare to onsite users, pedestrians, and motorists. In addition, lighting fixtures will be selected and located to confine the area of illumination to within each building site and minimize light spillage. Site lighting plans will be subject to review by the Planning Department and Police Department prior to issuance of building permits (pursuant to the City's Building Security Ordinance). Therefore, no adverse impacts are anticipated.

The project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**2. AGRICULTURE AND FOREST RESOURCES.** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment (LESA) Model prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

- a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency, to non-agricultural use?**

Discussion of Effects: TOP EIR states that the City is underlain by prime agricultural soils in a number of areas but that the City envisions a natural transition of these lands to suburban and urban uses over time based on market forces and the desires of property owners. The EIR concluded TOP "... would have no direct, indirect, and cumulative impacts relating to conversion of Farmland to non-agricultural use" (SEIR p. 5.2-12). The EIR concluded this because those changes had already been evaluated in the 2010 TOP which represents the baseline condition for the 2050 TOP. TOP EIR did not anticipate these changes to be a significant adverse impact and as a result did not recommend mitigation.

The project site is presently fully developed and does not contain any agricultural uses. Although the general area supported agriculture long ago, the site is identified as Urban and Built-up Land on the map prepared by the California Resources Agency as part of the Farmland Mapping and Monitoring Program (FMMP). Based on the information above, no adverse environmental impacts from the project related to prime farmland are anticipated.

Therefore, the project will have no significant impacts on agricultural resources and no mitigation is required. The project will not result in any new, increased or substantially different impacts other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

- b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?**

Discussion of Effects: TOP EIR indicates that some areas of the City were used for agriculture in the past, including the general project area. However, the City currently has no agricultural land use or zoning designations. Figure 5.2-2 of TOP EIR indicates there are a number of Williamson Act contracts in the City but they are in the southern portion of the City which also is transitioning to suburban land uses. The project area long ago transitioned from agriculture to suburban and urban land uses, and no Williamson Act contracts are active in this area at present. In this regard, no significant impacts were anticipated in TOP EIR and no mitigation was recommended.

The PUD project site is not zoned for agricultural use and the site is designated for mixed residential and commercial uses which are permitted under TOP. Future development will be consistent with the development standards and land uses allowed under TOP and the proposed Euclid/Walnut PUD.

Therefore, no impacts to agricultural uses are anticipated, nor will there be any conflict with Williamson Act contracts. The project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

- c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?**

Discussion of Effects: TOP EIR indicated there were no forest resources in the City, so development of planned land uses in the City, including the mixed uses of the PUD project site, would not result in any impacts related to rezoning of forest or timberland to non-forest use.

The PUD project proposes residential and commercial buildings consistent with the mixed-use land use designation in TOP and the Euclid/Walnut PUD. The PUD project would not result in the rezoning of forest land, timberland, or land zoned Timberland Production because such land use designations do not exist within the City.

Therefore, no impacts to forest or timberland are anticipated and the PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**d. Result in the loss of forest land or conversion of forest land to non-forest use?**

Discussion of Effects: TOP EIR indicated there were no forest resources in the City, so development of planned land uses, including the mixed uses of the PUD project site, would not result in any impacts related to the conversion of forest land to non-forest use (SEIR p. 5.2-13).

There is currently no land in the City that qualifies as forest land as defined in Public Resources Code section 12220(g), including the project site. Neither TOP nor the City's Zoning Code provide designations for forest land anywhere in the City.

Therefore, the proposed project would not result in the loss or conversion of forest land. The project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**e. Involve other changes in the existing environment, which, due to their location or nature, could individually or cumulatively result in loss of farmland to non-agricultural use or conversion of forest land to non-forest use?**

Discussion of Effects: TOP EIR indicated future development would not conflict with agricultural uses and would not result in conversion of farmland to non-agricultural use. It also concluded there is no forest land in Ontario, and therefore the project would not result in conversion of forest land to non-forest use (SEIR p. 5.2-14). TOP envisions a natural transition of these lands to suburban and urban uses over time based on market forces and the desires of property owners. TOP EIR indicated there were no forest resources in the City, so development of planned land uses, including the mixed uses of the PUD project site, would not result in any cumulative impacts related to loss of forest land.

Implementation of the PUD project would not result in changes to the existing environment other than those previously addressed in TOP EIR. While conversion of farmland increases the potential for adjacent areas to also be converted from farmland to urban uses, there are no agricultural uses occurring onsite or in the vicinity and the project will not directly or indirectly result in conversion of farmland. No new cumulative impacts beyond those identified in TOP EIR would result from project implementation. As a result, the project will not result in loss of farmland to non-agricultural use.

Additionally, there is currently no land in the City that qualifies as forest land as defined in Public Resources Code Section 12220(g). Neither TOP nor the City's Zoning Code provide designations for forest land.

Based on available data, the proposed PUD project would not result in changes to the existing environment that would affect forest land. There will be no impacts and no mitigation is required. The project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**3. AIR QUALITY.** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

**a. Conflict with or obstruct implementation of the applicable air quality plan?**

Discussion of Effects: The project site was analyzed in the current (2022) and previous (2010) TOP EIR as a mixture of residential and commercial uses, consistent with the surrounding mixture of similar land uses. TOP EIR concluded future land uses, including the proposed project, may conflict with or obstruct implementation of the 2016 Air Quality Management Plan (AQMP) of the South Coast Air Quality Management District (SCAQMD). TOP EIR concluded that future development and the cumulative air pollutant emissions would exceed the SCAQMD daily thresholds. As noted in the previous TOP EIR (Section 5.3) from 2010, pollutant levels in the City already exceeded Federal and State standards at that time. To reduce pollutant levels, the City is actively participating in efforts to enhance air quality by implementing control measures in the AQMP for local jurisdictions within the South Coast Air Basin (SCAB).

TOP EIR in 2022 evaluated the development of a maximum of 369 residential units and approximately 142,840 square feet of non-residential development on the Overlay Planning Area. The PUD project proposes 369 units and approximately 12,000 square feet of non-residential development in Phases 1 and 2, leaving 130,840 square feet of non-residential development to be built in the remainder of the MU-NH area adjacent to the SR-60 Freeway.

The TOP indicates the projected buildout for the entire 16 acres of this sub-area will eventually have a total of 369 dwelling units and 142,840 square feet of non-residential development. Development of the proposed PUD would slightly exceed the total number of residential units for this area under the TOP (369 MF+15 SF=384 total units vs. 369 projected total units). However, development of the PUD would substantially reduce the amount of anticipated non-residential growth in this sub-area (12,000 SF in the PUD plus 28,000 existing = 40,000 SF vs. 142,840 SF). Therefore, development of the "PUD project" would result in a 4% increase in residential impacts but a 28% decrease in commercial impacts. While this Addendum only covers impacts of the new residential and commercial uses currently proposed under the PUD Project, the anticipated impacts of growth in this MU-NH sub-area with the PUD are considered to be equivalent or less than those identified in TOP EIR for this sub-area. The proposed project is therefore generally consistent with TOP land use designations upon which the AQMP is based. Furthermore, the project is consistent with the City's participation in the AQMP and will not conflict with or obstruct implementation of the plan. The project will be required to implement TOP EIR Mitigation Measures AQ 3-1, 3-2, and 3-3 which include fugitive dust control measures pursuant to SCAQMD's Rule 403, use of Tier 3 construction equipment, proper service and maintenance of construction equipment, limiting nonessential idling of construction equipment, use of Super-Compliant volatile organic compounds (VOC) paints for coating and architectural surfaces, providing non-vehicular access options, and calculate and reduce any significant health risks from future development on nearby sensitive receptors (MM 3-1 through 3-3, respectively).

At the request of City staff, a health risk assessment (HRA) was prepared for the project to determine if air pollutant emissions from the nearby freeway would result in any significant impacts to human health including cancer and non-cancer related deaths of project residents. The HRA concluded that freeway emissions would not result in any significant human health risks for project residents. Minimum Efficiency Rating Value (MERV) 13 filters, which are required for the residential buildings by the CalGreen Code, are sufficient to reduce risks below SCAQMD thresholds. (see **Appendix B**).

Therefore, the project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required but the following measures from TOP EIR are applicable to the proposed project:

**AQ 3-1:** Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project construction-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the

potential to exceed the South Coast AQMD–adopted thresholds of significance, the City of Ontario Building Department shall require feasible mitigation measures to reduce air quality emissions. Potential measures shall be incorporated as conditions of approval for a project and may include:

- Require fugitive dust control measures that exceed South Coast Air Quality Management District's Rule 403, such as:
  - Requiring use of nontoxic soil stabilizers to reduce wind erosion.
  - Applying water every four hours to active soil disturbing activities.
  - Tarping and/or maintaining a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials.
- Using construction equipment rated by the United States Environmental Protection Agency as having Tier 4 interim or higher exhaust emission limits.
- Ensuring construction equipment is properly serviced and maintained to the manufacturer's standards
- Limiting nonessential idling of construction equipment to no more than five consecutive minutes.
- Using Super-Compliant VOC paints for coating of architectural surfaces whenever possible. A list of Super-Compliant architectural coating manufacturers can be found on the South Coast Air Quality Management District's website at: [http://www.aqmd.gov/prdas/brochures/SuperCompliant\\_AIM.pdf](http://www.aqmd.gov/prdas/brochures/SuperCompliant_AIM.pdf). These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City's Planning Department.

**AQ 3-2:** The City of Ontario shall evaluate new development proposals within the City and require all developments to include access or linkages to alternative modes of transportation, such as transit stops, bike paths, and/or pedestrian paths (e.g., sidewalks).

**AQ 3-3:** Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project operation-phase-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology in assessing air quality impacts. If operation-related air pollutants are determined to have the potential to exceed the South Coast AQMD–adopted thresholds of significance, the City of Ontario Planning Department shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during operational activities. The identified measures shall be included as part of the conditions of approval. Possible mitigation measures to reduce long-term emissions could include but are not limited to the following:

- For site-specific development that requires refrigerated vehicles, the construction documents shall demonstrate an adequate number of electrical service connections at loading docks for plug-in of the anticipated number of refrigerated trailers to reduce idling time and emissions.
- Applicants for manufacturing and light industrial uses shall consider energy storage and combined heat and power in appropriate applications to optimize renewable energy generation systems and avoid peak energy use.
- Site-specific developments with truck delivery and loading areas and truck parking spaces shall include signage as a reminder to limit idling of vehicles while parked for loading/unloading in accordance with California Air Resources Board Rule 2845 (13 CCR Chapter 10 sec. 2485).
- Provide changing/shower facilities as specified in Section A5.106.4.3 of CALGreen (Nonresidential Voluntary Measures).
- Provide bicycle parking facilities per Section A4.106.9 of CALGreen (Residential Voluntary Measures).
- Provide preferential parking spaces for low-emitting, fuel-efficient, and carpool/van vehicles per Section A5.106.5.1 of CALGreen (Nonresidential Voluntary Measures).
- Provide facilities to support electric charging stations per Section A5.106.5.3 and Section A5.106.8.2 of CALGreen (Nonresidential Voluntary Measures; Residential Voluntary Measures).

- Applicant-provided appliances shall be Energy Star–certified appliances or appliances of equivalent energy efficiency (e.g., dishwashers, refrigerators, clothes washers, and dryers). Installation of Energy Star–certified or equivalent appliances shall be verified by the City during plan check.

**b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?**

Discussion of Effects: TOP EIR in 2022 evaluated the development of a maximum of 369 residential units and approximately 142,840 square feet of non-residential development on the Overlay Planning Area. The PUD project proposes 369 units and approximately 12,000 square feet of non-residential development in Phases 1 and 2, leaving 130,840 square feet of non-residential development to be built in the remainder of the MU-NH area adjacent to the SR-60 Freeway. The remainder of the MU-NH area is currently built out with 15 single-family dwellings and approximately 28,000 square feet of commercial uses.

TOP EIR concluded that air pollutant emissions from future development within the City consistent with TOP land uses, including the proposed project, would exceed established SCAQMD thresholds. The proposed PUD project is within the amount of growth planned for the project site under TOP and would make an incremental contribution to the significant air pollutant emissions and impacts identified for TOP.

As outlined in Section 3.a above, development of the “PUD project” would result in a 4% increase in residential impacts but a 28% decrease in commercial impacts from what was analyzed in TOP EIR. While this Addendum only covers impacts of the new residential and commercial uses currently proposed under the PUD Project, the anticipated impacts of growth in this MU-NH sub-area with the addition of the PUD are considered to be generally equivalent or less than those identified in TOP EIR for this sub-area.

Mitigation Measures AQ 3-1, 3-2, and 3-3 as outlined in Section 3.a have already been adopted by the City that would facilitate continued City cooperation with the SCAQMD and Southern California Association of Governments (SCAG) to reduce short-term construction emissions, help promote regional air quality improvement goals and energy conservation design and development techniques, encourage alternative modes of transportation, and implement transportation demand strategies. However, TOP EIR concluded that air pollutant impacts would be significant even with implementation of Mitigation Measures MM AQ 3-1 through 3-3.

The proposed PUD project would implement MM AQ 3-1 through AQ 3-3 and is generally within the limits established for the site in TOP and evaluated in TOP EIR. Therefore, the PUD project itself will not result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment under an applicable federal or state ambient air quality because the project is consistent with the existing TOP land use designation for the site and the overall air quality impacts of TOP have already been evaluated in TOP EIR and a Statement of Overriding Considerations was prepared and certified along with TOP EIR.

Due to the size of the PUD project site and the amount of development proposed, construction under either Phase 1 or Phase 2 of the PUD, or the combination of both phases, will not exceed the applicable regional significance thresholds and less than significant impacts would occur. No mitigation beyond that identified in TOP EIR is required.

The PUD project will comply with Mitigation Measures AQ 3-1 through 3-3 outlined in TOP FEIR as recommended by the SCAQMD, resulting in project level impacts that are less than significant with mitigation. The project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: Implement Mitigation Measures AQ 3-1 through AQ 3-3 as described in Section 3.a above, otherwise, no project specific mitigation is required.

**c. Expose sensitive receptors to substantial pollutant concentrations?**

Discussion of Effects: TOP EIR concluded that development and operation of new land uses accommodated under TOP 2050 proposed land use plan could generate new sources of localized criteria air pollutant and Toxic Air Contaminants (TACs) in the City from area/stationary sources and mobile sources.

The Overlay Planning Area was previously analyzed by TOP EIR as a mixture of residential and commercial uses under the MU-MH land use designation. Certain land uses contain persons especially susceptible to air pollutants (children, the elderly, sick persons, etc.). These types of "sensitive" land uses include residences, day care centers, hospitals, etc. and are referred to as sensitive receptors. The SCAQMD recommends that the nearest sensitive receptor be considered when determining the project's potential to cause an individual or cumulatively significant impact. The PUD project does have sensitive receptors west and north of the site. However, the size of the site and anticipated amount of new development is not expected to result in significant short- or long-term air quality impacts to nearby sensitive receptors.

With implementation of TOP EIR Mitigation Measures AQ 3-1 through AQ 3-3, the proposed PUD project would not result in any new impacts beyond those identified in TOP EIR and no project specific mitigation is required for sensitive receptors. The project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

Discussion of Effects: TOP EIR concluded TOP would have a less than significant direct, indirect, and cumulative impacts relating to other emissions, such as those leading to odors (SEIR p. 5.3-47). The subject site was previously analyzed by TOP EIR as a mixture of residential and commercial uses which is consistent with the existing land uses surrounding the site. The mixed uses proposed on the project site will not create objectionable odors. Further, the project shall comply with the policies of the Ontario Municipal Code and TOP regarding solid waste storage and disposal which will prevent potential odor impacts. Therefore, no adverse impacts are anticipated.

The project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**4. BIOLOGICAL RESOURCES.** Would the project:

**a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

Discussion of Effects: TOP EIR concluded that "no sensitive plant species have been observed in Ontario, and the only such species that are considered potentially present in the City have a low potential due to lack of suitable habitat. Therefore, implementation of TOP 2050 would not have substantial adverse impacts on sensitive plant species" (SEIR p. 5.4-30). The project site was previously analyzed by TOP EIR as a mixture of residential and commercial uses.

According to TOP EIR, the Overlay Planning Area (including the PUD project site) is located within an area that has been identified as having the potential to contain species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS). These species include: the Delhi Sands flower-loving fly (DSFLF), coast horned lizard, burrowing owl, and various species of nesting birds protected under the Migratory Bird Treaty Act. The proposed project is consistent with TOP land use designation and zoning classification for the site of mixed use (MU) as a Neighborhood Community Hub (NH). The project does have a potential to impact nesting birds by removal of landscaping during redevelopment. However, governmental database information and TOP EIR indicate there is little or no potential for any listed or otherwise sensitive species to be present on the project site. With regulatory compliance (e.g., Migratory Bird Treaty Act, Fish and Game codes), TOP EIR concluded that future development in the City would not have significant impacts on listed or sensitive species and no mitigation was recommended.

The PUD project site is currently developed with several commercial buildings. Due to its developed condition and surrounding urban land uses, the project site does not contain or support any listed or otherwise sensitive species of plants or animals. With regulatory compliance, the PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

Discussion of Effects: TOP EIR indicated development “of new, previously undeveloped areas of the City even though it would result in an increase in land use intensity. Individual projects undergoing environmental review under CEQA would be required to determine whether there is potential habitat on-site for sensitive species. If sensitive species were found on-site, the project proponent would be required to consult with the CDFW regarding impacts to sensitive species and ensuing mitigation” (SEIR p. 5.4-31). The EIR concluded TOP would have a less than significant direct, indirect, and cumulative impacts relating to riparian habitat or sensitive natural community. In TOP EIR, the Overlay Planning Area, including the PUD project site, was previously analyzed as mixed use. TOP EIR does not identify any natural drainage features in this portion of the City due to its urbanized condition. With regulatory compliance, the EIR did not recommend any specific mitigation for future development relative to jurisdictional features.

Based on a review of aerial photographs, the site is totally developed and does not contain any riparian habitat or other sensitive natural community identified by CDFW or USFWS (GoogleEarth). Therefore, no adverse environmental impacts are anticipated. In addition, the project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

Discussion of Effects: TOP EIR did not identify any wetland habitat or resources on the project site or in the immediate surrounding area due to its urban condition. The EIR stated TOP “would have a less than significant direct, indirect, and cumulative impacts relating to state or federally protected wetlands. Accordingly, no changes or alterations to the *TOP [2050]* were required to avoid or substantially lessen any significant environmental impacts under those thresholds” (SEIR p. 5.4-33).

According to aerial photographs, the site is developed and no drainage areas or wetland habitat are present on the project site (GoogleEarth). Therefore, project implementation would have no impact on these resources. In addition, the project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

Discussion of Effects: TOP EIR did not identify any drainages or wetland habitat that could support fish on the project site, and the site is not located within an identified wildlife movement corridor due to its physical condition and development of the surrounding area.

TOP EIR found that no regional wildlife movement corridors have been identified in the City, so it did not result in substantial adverse effects to wildlife movement (SEIR p. 5.4-33).

According to aerial photographs, the site is developed with no drainages or native vegetation present (GoogleEarth). As a result, there are no wildlife corridors connecting this site to other areas. The project site and area may support nesting birds but regulatory compliance (e.g., Migratory Bird Treaty Act, Fish

and Game codes) will help assure there will be no impacts to migratory birds. With regulatory compliance, the project will not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife. The project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

Discussion of Effects: TOP EIR indicates the City includes the Ontario Recovery Unit for the DSFLF with 21.7 square miles mainly in the eastern and southwestern portions of the City (i.e., not on or adjacent to the project site), The EIR concluded TOP would not conflict with the requirements of the DSFLF Ontario Recovery Unit (SEIR p. 5.4-34).

The City does not currently have any specific policies or ordinances protecting biological resources. The City's Development Code requires replacement of trees removed. With implementation of the ODC requirements for tree replacement, and its proposed Landscaping Plan, no adverse environmental impacts are anticipated.

The project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**f. Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan?**

Discussion of Effects: TOP EIR only acknowledges a small portion of the City that contains an HCP for DSFLF but this plan does not apply to the proposed Project, and there are no HCPs or NCCPs to protect biological resources that affect the proposed Project site.

The site is not part of an adopted HCP, NCCP, or other approved habitat conservation plan. As a result, no adverse environmental impacts are anticipated. The project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation required.

**5. CULTURAL RESOURCES.** Would the project:

**a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?**

Discussion of Effects: TOP EIR concluded that buildout of TOP could result in significant impacts to historical resources or paleontological resources but Mitigation Measure 5-1 would reduce impacts to less than significant levels (SEIR p. 5.5-23). The project site was previously analyzed by TOP EIR as a mixture of residential and commercial uses.

The PUD project site is developed with a number of commercial buildings the largest of which is vacant. The site does not contain any buildings or structures constructed more than 50 years ago and cannot be considered for eligibility for listing in the California Register of Historic Resources.

The Euclid Avenue (EA) Overlay District was established to recognize, protect, and enhance the visual character and quality of Euclid Avenue as a major scenic and historic resource of the City as well as its position on the National Register of Historic Places. Properties located within the EA require approval of a Certificate of Appropriateness to ensure no adverse impacts to designated historic resources occur as a result of new development and buildings. This PUD includes design criteria within Chapter 5 for site and building design that is consistent with the overall character of Euclid Avenue.

The public right-of-way of Euclid Avenue from Philadelphia Street north to the I-10 Freeway was designated as Local Landmark No. 67 on January 16, 2001 by the Ontario City Council. On August 10, 2005, the public right-of-way of Euclid Avenue from Philadelphia Street in Ontario north to 24th Street in Upland was listed on the National Register of Historic Places as a significant cultural landscape. One contributing character-defining feature of the public right-of way is the 60-foot-wide median separating the north/south bound vehicular lanes of Euclid Avenue. The Euclid/Walnut PUD project does not alter or affect this feature.

Several buildings within the proposed PUD project have frontage on Euclid Avenue. However, the PUD site is 0.4 mile south of the southern boundary (Philadelphia Street) of this Local Landmark/National Register of Historic Places designation. The extended view of the Euclid Avenue corridor, whether viewed northward from the parcels or southward towards the parcels of the PUD, is also visually disrupted within the immediate foreground view as a result of the Pomona Freeway (SR-60), which is elevated above Euclid Avenue. Additionally, the proposed PUD is approximately three miles south of the City's Downtown Historic District. Based upon the City's Historic Preservation records, there are no potential or proposed historic resources within the immediate surrounding area of the parcels within the PUD project. Therefore, the PUD will not alter or affect any designated historical districts or resources in the City.

In addition, the project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?**

Discussion of Effects: TOP EIR (Section 5.5) indicates no archeological sites or resources have been recorded in the City with the Archeological Information Center at San Bernardino County Museum. The CRAs prepared for the project site included a pedestrian survey, a record search, a Sacred Lands File (SLF) search, and a review of existing documentation for the project site and surrounding area. The Native American Heritage Commission (NAHC) was contacted for a SLF search as part of TOP EIR preparation which indicated the project site contained no identified archaeological or tribal resources.

The NAHC SLF search also did not indicate any archaeological resources or artifacts associated with Tribal Cultural Resources (TCRs) were located within the project site. The project site has been highly disturbed by modern human activities including agricultural use in the distant past and development for commercial uses more recently. It is likely these activities could have displaced potential surface and subsurface archaeological resources if any were present. Therefore, it is not anticipated the proposed project will impact archaeological or identified TCRs.

While no adverse impacts to archeological resources are anticipated at this site due to its disturbed nature, the project will implement TOP MM CUL 5-2 to ensure that, in the event of unanticipated archeological discoveries, construction activities will not continue or will be moved to other parts of the project site and a qualified archaeologist shall be contacted to determine significance of these resources. If the find is discovered to be historical or unique archaeological resources, as defined in Section 15064.5 of the CEQA Guidelines, avoidance or other appropriate measures shall be implemented. The project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required. However, the following mitigation measure from TOP EIR is applicable to the project:

**CUL 5-2:** In areas of documented or inferred archaeological and/or paleontological resource presence, City staff shall require applicants for development permits to provide studies to document the presence/absence of such resources. On properties where resources are identified, such studies shall provide a detailed mitigation plan, including a monitoring program and recovery and/or in situ preservation plan, based on the recommendations of a qualified cultural preservation expert. The mitigation plan shall include the following requirements:

a) Archaeologists and/or paleontologist shall be retained for the project and will be on call during grading and other significant ground-disturbing activities.

b) Should any cultural resources be discovered, no further grading shall occur in the area of the discovery until the Planning Director or designee is satisfied that adequate provisions are in place to protect these resources.

c) Unanticipated discoveries shall be evaluated for significance by a San Bernardino County Certified Professional Archaeologist/Paleontologist. If significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon dates, and other special studies; submit materials to a museum for permanent curation; and provide a comprehensive final report including catalog with museum numbers.

**c. Disturb any human remains, including those interred outside of formal cemeteries?**

Discussion of Effects: TOP EIR states there are known Native American gravesites and cemeteries in the City, but none on or adjacent to the project site. Future development and grading of sensitive areas may disturb human remains, including those outside of formal cemeteries (SEIR p. 5.5-20).

The proposed PUD project site is developed and the area has been previously and extensively disturbed by human activity. No known religious or sacred sites exist within the project area. Thus, human remains are not expected to be encountered during any construction activities. However, in the unlikely event that human remains are discovered, existing regulations, including Public Resources Code Section 5097.98, would afford protection for human remains discovered during development activities. Per state law, in the event unanticipated discoveries of human remains are identified during excavation, the area shall not be disturbed until any required investigation is completed by the County Coroner and/or Native American consultation has been completed, if deemed applicable.

The project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required. However, the PUD project shall implement TOP EIR Mitigation Measure 5-2 as outlined above.

**6. ENERGY** Would the project:

**a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

Discussion of Effects: Energy was analyzed at a programmatic level in TOP EIR based on the 2019 revisions to the CEQA Guidelines. TOP EIR concluded TOP would not result in wasteful, inefficient, or unnecessary consumption of fuel use during construction or result in new or a substantial increase in magnitude of impacts (SEIR p. 5.6-13).

Implementation of the project would increase the demand for electricity and natural gas at the project site and gasoline consumption in the region during construction and operation, as described below:

***Electricity***

*Construction.* Temporary electric power would be required for lighting and electronic equipment (e.g., computers) located in trailers used by the construction crew. However, the electricity used for such activities would be temporary and would have a negligible contribution to the project's overall energy consumption.

*Operation/Occupancy.* The proposed PUD project entails the construction of 369 new apartment units and 12,000 square feet of new commercial uses which are consistent with TOP land use and zoning designations for the property. These commercial and residential buildings will be similar in design and operation to existing and planned uses in the surrounding area and will have similar energy use during operation to existing commercial businesses and apartments in the City. Operation of the PUD project would require electricity for multiple purposes, such as: building heating and cooling, lighting, appliances, and electronics.

The PUD project will be required to comply with the CALGreen Building Code (CBC) commercial and residential requirements in effect at the time of development. Typical CBC requirements that would reduce electricity consumption include but are not limited to enhanced window insulation, cool-roofing, improved efficiency heating, ventilation, and air conditioning (HVAC) systems, enhanced duct insulation, Energy Star commercial appliances, water efficient landscaping and irrigation systems, and water-efficient toilets and

faucets. Although electricity consumption would increase at the site with implementation of the project, the building envelope, HVAC, lighting, and other systems, would be designed to maximize energy performance.

With implementation of these various measures, the electricity that would be consumed by the project is not considered to be inefficient or wasteful, and impacts would be less than significant.

### **Natural Gas**

*Construction.* Natural gas consumption is not anticipated during construction of the PUD project. Fuels used for construction would generally consist of diesel and gasoline, which are discussed in the next subsection.

*Operation/Occupancy.* The proposed PUD project is consistent with TOP and zoning designations for the site. Planned commercial and residential uses will be similar in size and appearance to existing and planned uses in the surrounding area and will have similar natural gas use during operation or occupancy. During operation and occupancy, the PUD project would require natural gas consumption for various purposes, such as building heating and cooling.

All future structures developed on the site would be built to the Title 24 CALGreen efficiency requirements in effect at the time of development. These requirements include but are not limited to wall, attic, and window insulation; high efficiency water heaters, and optimized building orientation. Although natural gas consumption would increase at the site under implementation of the project, the building envelope, HVAC, lighting, and other systems, would be designed to maximize energy performance. The project would be subject to statewide mandatory energy requirements as outlined in the CALGreen Code. For these reasons, the natural gas that would be consumed by the project is not considered to be inefficient or wasteful, and impacts would be less than significant.

### **Diesel and Gasoline Fuel**

*Construction.* Diesel and gasoline fuels, also referred to as petroleum in this subsection, would be consumed throughout construction of the PUD project. Fuel consumed by construction equipment would be the primary energy resource consumed over the course of construction, and vehicle miles traveled (VMT) associated with the transportation of construction materials (e.g., deliveries to the site) and worker trips to and from the site would also result in petroleum consumption. Whereas on-site, heavy-duty construction equipment and delivery trucks would predominantly use diesel fuel, construction workers would generally rely on gasoline-powered vehicles.

The project will be required to comply with the California Air Resources Board (CARB) Airborne Toxic Control Measures, which restrict heavy-duty diesel vehicle idling to five minutes. Since petroleum use during construction would be temporary and required to conduct development activities, it would not be wasteful or inefficient, and impacts would be less than significant.

*Operation/Occupancy.* Fuel consumption associated with operation of the PUD project's commercial uses and occupancy of the project's residential uses. As regulatory requirements increase (i.e., become more stringent), the amount of petroleum consumed as a result of vehicular trips to and from the project site during operation and occupancy is anticipated to decrease over time.

There are numerous regulations in place that require and encourage fuel efficiency. For example, CARB has adopted an approach to passenger vehicles by combining the control of smog-causing pollutants and GHG emissions into a single, coordinated package of standards. The approach also includes efforts to support and accelerate the number of plug-in hybrids and zero emission vehicles (ZEVs) in California. In addition, CARB adopted a regional goal for the SCAG region of reducing per-capita GHG emissions from 2005 levels by 8% in 2020 and 19% in 2035 for light-duty passenger vehicles. Accordingly, operation of the project is expected to decrease the amount of petroleum it consumes in the future due to improvements in state-wide fuel economy over time. Although the project would increase petroleum use in the region during construction and operation, the use would be a small incremental fraction of the statewide use and due to efficiency increases would diminish over time. As such, petroleum consumption associated with the project would not be considered to be inefficient or wasteful so its energy-related impacts would be less than significant. The project will comply with Title 24 and other applicable state energy conservation regulations as recommended in TOP EIR. In November 2014, the City adopted the most current version of the Community Climate Action Plan (CCAP) which includes energy conservation that results from implementation of the recommended GHG reduction measures. The PUD project will be required to comply with applicable portions of the City's CCAP. Compliance with the CCAP and Title 24 will result in the project not having any new, increased or substantially different impacts not considered and addressed in TOP EIR.

No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project-specific mitigation is required.

**b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

Discussion of Effects: Energy was analyzed at a programmatic level in TOP EIR based on the 2019 revisions to the CEQA Guidelines. The EIR determined TOP would have a less than significant direct, indirect, and cumulative impacts relating to conflict with or obstruction of a state or local plan for renewable energy or energy efficiency (SEIR p. 5.6-14).

The PUD project would not conflict with or obstruct a state or local plan adopted for the purposes of increasing the amount of renewable energy or energy efficiency. The California Title 24 energy efficiency standards for residential and non-residential buildings address electricity and natural gas efficiency in lighting, water, heating, and air conditioning, as well as the effects of the building envelope (e.g., windows, doors, walls and roofs, etc.) on energy consumption. As described above, the project would be required to comply with the appropriate Title 24 CALGreen standards current at that time. Since each new building will comply with applicable State standards and adhere to the City's CCAP, which includes energy reductions measures, the PUD project would not conflict with nor obstruct a state or local plan for renewable energy or energy efficiency.

This impact would be less than significant and the project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**7. GEOLOGY & SOILS.** Would the project:

**a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:**

**i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

Discussion of Effects: According to TOP EIR, there are no active faults known on the site and the project site is located outside the Fault Rapture Hazard Zone (formerly Alquist-Priolo Zone). TOP EIR (Section 5.7/Figure 5.7-2) identifies eight active or potentially active fault zones near the City. The EIR determined TOP would have a less than significant direct, indirect, and cumulative impacts relating to seismic-related hazards (SEIR p. 5.7-19).

Given that the closest active fault zone is located over ten miles from the PUD project site, fault rupture within the project area is not likely. All development will comply with the CBC seismic design standards to reduce geologic hazard susceptibility. Therefore, no adverse impacts are anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**ii. Strong seismic ground shaking?**

Discussion of Effects: TOP EIR indicates there are no active faults known on the site and the project site is located outside the Fault Rapture Hazard Zone (formerly Alquist-Priolo Zone). TOP EIR (Section 5.7/Figure 5.7-2) identifies eight active or potentially active fault zones near the City. The closest fault zone is located more than eight miles from the Project site.

The proximity of the PUD project site to the active faults will result in ground shaking during moderate to severe seismic events. All construction will comply with the CBC, the Ontario Municipal Code (OMC), TOP and all other ordinances adopted by the City related to construction and safety. Therefore, no adverse impacts are anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**iii. Seismic-related ground failure, including liquefaction?**

Discussion of Effects: As identified in TOP EIR (Section 5.7), groundwater saturation of sediments is required for earthquake induced liquefaction. In general, groundwater depths shallower than 10 feet to the surface can cause the highest liquefaction susceptibility. TOP EIR indicates that depths to groundwater in the project site vicinity during the winter months is estimated to be over 200 feet below ground surface. Therefore, the liquefaction potential within the project area is minimal. Implementation of TOP strategies in the Safety Element regarding seismic building design, the CBC, and the OMC would reduce impacts to a less than significant level.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**iv. Landslides?**

Discussion of Effects: TOP EIR did not identify any significant slopes in the City or the project area, so there were no impacts related to landslides and no mitigation is needed.

The project would not expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving landslides because the relatively flat topography of the project site (less than one percent slope) and the chance of a landslide onsite would be remote. The PUD project proposes 369 new apartments and 12,000 square feet of new commercial uses onsite which are consistent with TOP land use and zoning designations.

Therefore, the project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**b. Result in substantial soil erosion or the loss of topsoil?**

Discussion of Effects: TOP EIR concluded that TOP policies and state regulations would ensure that potential impacts from erosion or the loss of topsoil would be less than significant (SEIR p. 5.7-20).

The project site will not result in significant soil erosion or loss of topsoil because of the previously disturbed nature of the project site, its current developed condition (i.e., site is covered by mainly impervious surfaces), and implementation of the project-specific Water Quality Management Plan (WQMP)(see Appendix C) for water quality control (including erosion). Grading increases the potential for erosion by removing protective vegetation, changing natural drainage patterns, and constructing slopes. However, compliance with the CBC and review of grading plans by the City Engineer will ensure no significant impacts will occur. In addition, the City requires an erosion/dust control plan for projects located within this area. Implementation of a WQMP and Best Management Practices (BMPs), consistent with the federal water quality permitting requirements of the National Pollution Discharge Elimination Program (NPDES) program, the Environmental Resource Element of TOP Policy Plan strategies, the CBC, and the OMC, would reduce potential impacts to a less than significant level.

The project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?**

Discussion of Effects: TOP EIR (Section 5.7) indicates that subsidence is generally associated with large decreases or withdrawals of water from an aquifer. The project would use domestic water supplies and would not withdraw water from the existing aquifer. The EIR states that future projects under TOP could

expose structures or persons to potentially significant hazards from lateral spreading, ground subsidence, liquefaction, and compressible soils, However, compliance with the CBC and review of grading plans for individual projects by the City Engineer would ensure no significant impacts would occur (SEIR p. 5.7-21). The City is relatively flat, including the project site, so the risk of landslides is negligible.

The new commercial and residential buildings would not result in the location of development on a geologic unit or soil that is unstable, or that would become unstable because as previously discussed, the potential for liquefaction and landslides associated with the project is less than significant. Further, implementation of TOP strategies, the CBC and the OMC would reduce impacts to a less than significant level. Therefore, the project would not create greater landslide potential impacts than were identified in TOP EIR.

The project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?**

Discussion of Effects: TOP EIR identified limited soil stability impacts of future development if expansive or other soil constraints were present beneath structures. TOP EIR recommended compliance with the CBC and OMC to assure impacts will be less than significant (SEIR p. 5.7-21).

The majority of Ontario, including the project site, is located on alluvial, and in some areas, aeolian (i.e., sandy) soil deposits. These types of soils are not generally considered to be expansive. In addition, specific soil conditions beneath each proposed building will be verified and addressed by specific foundation design to be confirmed by the City Engineering Department as part of the City's development permitting process. With this regulatory compliance, no adverse impacts will occur.

Through the City's development and design review process, the project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

Discussion of Effects: TOP EIR states that TOP policies and state regulations would ensure that the potential impacts from geology and soils hazards would be less than significant. Wastewater from Ontario is treated at wastewater treatment facilities owned and operated by the Inland Empire Utilities Agency (IEUA). Use of septic tanks would be limited to existing septic tanks, and new septic tanks would be constricted to areas not in practical proximity to existing sewer mains, dependent on approval by the Santa Ana Regional Water Quality Control Board (RWQCB) on a case-by-case basis (SEIR p. 5.7-22).

The PUD project area is served by the local sewer system and the use of alternative systems is not necessary. Future sewer service is based on planned land uses and sizing of pipes and treatment facilities to accommodate planned growth. Since the project is consistent with TOP land use and zoning designations on the site, there will be no significant impacts to the sewage system.

The project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

Discussion of Effects: TOP EIR indicates the City is underlain by deposits of Quaternary and Upper-Pleistocene sediments deposited during the Pliocene and early Pleistocene time, Quaternary Older Alluvial sediments may contain significant, nonrenewable, paleontological resources and are, therefore, considered to have high sensitivity at depths of 10 feet or more below ground surface. In addition, TOP EIR (Section 5.5) indicates that only one paleontological resource has been discovered in the City. The project site has surficial sediments composed of younger Quaternary Alluvium, derived as alluvial fan deposits from the

San Gabriel Mountains to the north or as dune sands. These deposits typically do not contain significant vertebrate fossils, at least in the uppermost layers, but they may be underlain by older sedimentary materials at estimated depths greater than 10 feet which could contain paleontological resources.

Project grading may exceed 10 feet in depth in some areas so the project will implement TOP EIR Mitigation Measure 5-2, which is included in Section 5, Cultural Resources, as this measure addresses paleontological resources. The measure requires that, in the event unanticipated paleontological resources are identified during excavation, construction activities will not continue or will be moved to other parts of the project site and a qualified paleontologist shall be contacted to determine the significance of these resources. If the find is determined to be significant, avoidance or other appropriate resource protection actions will be taken.

The project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: The project will be required to implement TOP EIR Mitigation Measure 5-2. No additional project specific mitigation is required.

**8. GREENHOUSE GAS EMISSIONS.** Would the project:

**a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Discussion of Effects: TOP EIR determined TOP would have a significant direct, indirect, and cumulative impacts relating to the generation of GHG emissions (SEIR p. 5.7-26). The subject site was previously analyzed by TOP EIR as a mixture of residential and commercial uses (i.e., mixed use). The impact of buildout of the TOP on the environment due to the emission of GHGs was analyzed in the EIR for the Policy Plan of TOP. According to TOP EIR, this impact would be significant and unavoidable and a statement of overriding considerations was adopted for this impact. Developing the site with mixed residential and commercial uses will not create significantly greater impacts than were identified in TOP EIR.

The analysis, methodology, and significance determination (thresholds) are based upon the City's CCAP which includes GHG emission inventories (2008 and 2020 forecasts), a year 2020 emission reduction target, the goals and policies to reach the target, and TOP EIR Addendum prepared for the CCAP. The City will require the PUD project to be consistent and comply with the CCAP. Pursuant to Public Resources Code Section 21083.3, this impact need not be analyzed further because: (1) the proposed project would result in an impact that was previously analyzed in TOP EIR, which was certified by the City; (2) the proposed project would not result in any GHG impacts that were not addressed in TOP EIR; and (3) the proposed PUD project is consistent with TOP. The proposed impacts of the PUD project were already analyzed in TOP EIR and the project will be built to current energy efficient standards. Potential impacts of project implementation will be less than significant and will be supported by compliance with current Title 24 energy efficiency standards of the California Code of Regulations. No changes or additions to TOP EIR analyses are necessary.

The project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary. Regulatory compliance adequately addresses any GHG impacts and there is no need for any project specific mitigation measures.

Mitigation: No project specific mitigation is required.

**b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

Discussion of Effects: The EIR determined TOP was consistent with statewide strategies adopted for the purpose of reducing GHG emissions including CARB's Scoping Plan and SCAG's Connect SoCal (SEIR p. 5.8-27). The subject site was previously analyzed by TOP EIR as mixed use (residential and commercial). By implementing TOP EIR Mitigation Measures AQ 3-1 through 3-3 regarding air pollutant emissions, the proposed project is consistent with TOP Goal ER 4 of improving air quality by, among other things, implementation of Policy ER 4-3, regarding the reduction of GHG emissions in accordance with regional, state and federal regulations. In addition, the proposed project is consistent with the policies outlined in Section 5.6.4 of the EIR for TOP, which aims to reduce the City's contribution of GHG emissions at build-out by implementing energy efficient design, energy efficient irrigation systems, electric vehicle charging

stations, and compliance with Title 24 of the California Code of Regulations. The PUD project will be required to comply with the City's CCAP. Therefore, the proposed PUD project does not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing emissions of GHGs.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: Project will implement TOP EIR Mitigation Measures AQ 3-1 through 3-3 but no project specific mitigation is required.

**9. HAZARDS & HAZARDOUS MATERIALS.** Would the project:

**a. Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?**

Discussion of Effects: TOP EIR determined that implementation of the policies in the Safety Element, in addition to existing regulations, would ensure less than significant impacts from transport, use, and/or disposal of hazardous materials. It further concluded TOP would have less than significant direct, indirect, and cumulative impacts relating to transport, use, and disposal of hazardous materials, release of hazardous materials, and emission and handling of hazardous materials, substances, or waste (SEIR p. 5.9-37).

The subject site was previously analyzed by TOP EIR as a mixture of residential and commercial uses (i.e., mixed use). As a residential and commercial project, the PUD will not involve the transport, use or disposal of hazardous materials during either construction or project implementation based on the land use restrictions for mixed use in TOP. Therefore, no adverse impacts are anticipated. However, in the unlikely event of an accident, implementation of the strategies included in TOP regarding emergency services such as police and fire protection will decrease the potential for health and safety risks from hazardous materials to less than significant levels.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

Discussion of Effects: TOP EIR concluded that implementation of the policies in the Safety Element, in addition to existing regulations, would ensure that development under TOP would not exacerbate hazards associated with existing hazardous materials sites (SEIR p. 5.9-39).

The subject site was previously analyzed by TOP EIR as mixed use (e.g., residential and commercial uses). Since it is not an industrial use, the proposed PUD project would not involve the use of hazardous materials or volatile fuels. In addition, there are no known stationary commercial or industrial land uses within close proximity to the PUD project site which use or store hazardous materials to the extent that they would pose a significant hazard to visitors/occupants to the subject site. Therefore, upset conditions resulting in the release of hazardous materials are not anticipated.

The project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP FEIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?**

Discussion of Effects: TOP EIR concluded that several hazardous material facilities were within a quarter mile of various schools in the City and impacts were potentially significant, such that mitigation was recommended. However, the project site is not within a quarter mile of any school sites so there will be no impacts and no mitigation is required relative to TOP EIR analysis.

The PUD involves residential and commercial uses, so it does not involve the use, emissions or handling of hazardous or acutely hazardous materials, substances or waste that would typically be associated with industrial uses. Therefore, no impacts are anticipated. The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

Discussion of Effects: TOP EIR identified that implementation of the policies in the Safety Element in addition to existing regulations ensured that development of TOP would not exacerbate existing hazards associated with existing hazardous materials sites. The EIR concluded TOP would have a less than significant direct, indirect, and cumulative impacts relating to location on a site which is included on a list of hazard materials. Accordingly, no changes or alterations to the Proposed Project were required to avoid or substantially lessen any significant environmental impacts under those thresholds. (Draft SEIR pg. 5.9-39)

The PUD project site is not listed on the hazardous materials site compiled pursuant to Government Code Section 65962.5. Therefore, the project would not create a hazard to the public or the environment and no impact is anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**e. For a project located within the safety zone of the airport land use compatibility plan for ONT or Chino Airports, would the project result in a safety hazard for people residing or working in the project area?**

Discussion of Effects: Sections 5.9 (Hazards and Hazardous Materials) and 5.11 (Land Use and Planning) of TOP EIR indicated that with proper land-use planning, aircraft safety risks could be reduced, primarily by avoiding incompatible land uses. The FAA and Caltrans Division of Aeronautics provide guidance for land use safety near airports. However, the proposed PUD project is not within the hazard or influence zones of either the Ontario International Airport to the northeast or the Chino Airport to the south. The PUD project will therefore have no impacts relative to airport safety or land use compatibility.

The PUD project will not result in any new, increased or substantially different impacts that were not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary, and there is no need for any project specific mitigation measures.

Mitigation: No project specific mitigation is required.

**f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

Discussion of Effects: TOP EIR concluded TOP would not interfere with an emergency evacuation plan. According to the Vulnerability Analysis conducted as part of TOP, the threat of flood is the City's greatest hazard as large portions of the City are within the flood zone (i.e., the project site is within the 500-year flood zone). Figure S-10 of TOP indicates that Haven Avenue to the west, Airport Drive to the north, and Jurupa Street to the south are designated evacuation routes in the City. The City's Safety Element, as contained within TOP, includes policies and procedures to be administered in the event of a disaster. TOP seeks interdepartmental and inter-jurisdictional coordination and collaboration to be prepared for, respond to and recover from disasters or emergencies. The EIR concluded TOP would have a less than significant direct, indirect, and cumulative impacts relating to impairment of or interference with adopted emergency response plans or emergency evacuation plans (SEIR p. 5.9-41).

The project will comply with the requirements of the Ontario Fire Department and all City requirements for fire and other emergency access. Because the project is required to comply with all applicable City codes, any impacts would be reduced to less than significant levels.

The project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?**

Discussion of Effects: TOP EIR indicates the City would result in less than significant risks from wildfire hazards. The City is outside of the state responsibility area, and California Department of Forestry and Fire Protection (CAL FIRE) has determined that the City contains no areas subject to very high wildfire risk. The EIR concluded TOP would have a less than significant direct, indirect, and cumulative impacts relating to wildland fires (SEIR p. 5.9-42). Figure S-04 from TOP indicates the project site is not within any designated wildfire area. Therefore, no impacts are anticipated.

The PUD project is residential and commercial in nature and not industrial so it will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**10. HYDROLOGY & WATER QUALITY.** Would the project:

**a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?**

Discussion of Effects: TOP EIR concluded there would be less than significant impacts related to water quality from development activities associated with future development under TOP. Nearly the entire City is developed, and implementation of TOP would not substantially alter the amount of developed land in the City. TOP EIR would have a less than significant direct, indirect, and cumulative impacts relating to surface or groundwater quality (SEIR p. 5.10-21).

The PUD project site is already developed and served by City water and sewer service and will not affect water quality standards or waste discharge requirements. Discharge of storm water pollutants from areas of materials storage, vehicle or equipment fueling, vehicle or equipment maintenance could result in a temporary increase in the amount of suspended solids, trash and debris, oil and grease, organic compounds, pesticides, nutrients, heavy metals and bacteria pathogens in surface flows during a concurrent storm event, thus resulting in surface water quality impacts. The site is required to comply with the statewide National Pollutant Discharge Elimination System (NPDES) General Construction Activities Stormwater Permit, the San Bernardino County Area-Wide Urban Runoff Permit (MS4 permit) and the Ontario Municipal Code (OMC) Title 6, Chapter 6 (Stormwater Drainage System). This compliance would reduce any impacts to below a level of significance.

A Preliminary Water Quality Management Plan (PWQMP) is required to be prepared for the PUD project prior to issuance of grading or building permits. The PWQMP will identify how the site will comply with storm water discharge and water quality management requirements of the City and the Regional Water Quality Control Board. The PWQMP includes site design measures that capture runoff and pollutant transport by minimizing impervious surfaces and maximizes low impact development (LID) best management practices (BMPs), such as infiltration, biotreatment and evapotranspiration. The PWQMP would include the use of underground stormwater infiltration systems for both of the PUD project phases of development.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?**

Discussion of Effects: TOP EIR identified less than significant impacts related to groundwater recharge and supply for TOP. At buildout, TOP is forecast to increase residential units by 25,399 and increase nonresidential square footage by 1,092,508 square feet; future development would increase the amount of impermeable surfaces in the City and reduce the amount of permeable surfaces available for groundwater

recharge. TOP would have a less than significant direct, indirect, and cumulative impacts relating to impediment of sustainable groundwater management of the basin (SEIR p. 5.10-23).

The PUD Project site was previously analyzed by TOP EIR as mixed use (i.e., residential and commercial uses). No increases in the current amount of water flow to the project site are anticipated, and the proposed project will not deplete groundwater supplies, nor will it interfere with recharge. The water use associated with the proposed use of the property was included in TOP EIR analysis. For development of the site, grading and excavation is expected to be less than 25 feet and would not reach a depth that could affect the existing aquifer, estimated to be over 200 feet below the ground surface. No adverse impacts are anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:**

**i. Result in substantial erosion or siltation on- or off-site;**

Discussion of Effects: TOP EIR concluded that implementation of BMPs outlined in SWPPPs, erosion and sediment control plans, WQMPs, and TOP policies would address anticipated erosion and siltation impacts. Therefore, development would not result in substantial erosion or siltation on- or off-site (SEIR p. 5.10-24).

The site is already developed and the project hydrology report and PWQMP demonstrate that the project will not alter the drainage pattern of the site or area in a manner that would result in erosion, siltation or flooding on-or-off site, nor will the proposed PUD project increase the erosion of the PUD project site or surrounding areas. The existing drainage pattern of the site will not be altered, and it will have no significant impact on downstream hydrology. Stormwater generated by the project will be discharged in compliance with the statewide NPDES General Construction Activities Stormwater Permit and San Bernardino County MS4 permit requirements. With the full implementation of a Storm Water Pollution Prevention Plan (SWPPP) developed in compliance with the General Construction Activities Permit requirements, the BMPs included in the SWPPP, and a stormwater monitoring program, the project's potential impact would be reduced to below a level of significance. No streams or streambeds are present on the site. No changes in erosion off-site are anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**ii. Substantially increase the rate or amount of surface runoff water in a manner which would result in flooding on- or off-site;**

Discussion of Effects: TOP EIR states that the current Flood Insurance Rate Map (FIRM) for the City only shows small portions of the City adjacent to flood control channels, detention basins, and creeks are within the 100-year floodplain. In addition to TOP policies, the OMC, Chapter 13, Flood Damage Prevention Program, requires that a development permit be obtained prior to development in a special flood hazard area to ensure that the site is reasonably safe from flooding and flood hazards. The City requires that all new structures in a special flood hazard area have elevations above the base flood elevation. Therefore, with implementation of existing policies, the potential to impede or redirect flood flows was considered less than significant (SEIR p. 5.10-25).

The project hydrology report concludes the proposed PUD project will not increase the flow velocity or volume of storm water runoff to cause environmental harm from the site and will not create a burden on existing infrastructure. Furthermore, with the implementation of an approved PWQMP developed for the site, in compliance with the San Bernardino County MS4 Permit requirements, stormwater runoff volume shall be reduced to below a level of significance.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;**

Discussion of Effects: TOP EIR indicates there are three major regional drainage channels that convey stormwater runoff from the City's storm drain system—San Antonio Channel, Cucamonga Channel, and Day Creek Channel. There are also several flood retention facilities and spreading basins in the City that are used to retain flood flows and recharge the Chino Groundwater Basin. Projects considered for approval under TOP would be required to prepare project-specific hydrology and hydraulic studies. The methodology for these studies is provided in the San Bernardino County Hydrology Manual, which describes the approach for estimating stormwater runoff and peak flow rates, for the 100-year storm event (SEIR 5.10-26). In addition, TOP EIR stated TOP would have a less than significant direct, indirect, and cumulative impacts relating to risk of release of pollutants due to project inundation (SEIR p. 5.10-27).

The site is already developed and the PUD project simply reconstructs the site with new residential and commercial land uses. The site is expected to have approximately 85% impervious surfaces (buildings, roofs, parking, sidewalks).

Pursuant to the requirements of TOP, the City's Development Code, and the San Bernardino County MS4 Permit, individual developments must provide site drainage and PWQMP plans according to guidelines established by the City's Engineering Department. The City's development review process requires a project-specific hydro report and a PWQMP to demonstrate that a new development will not have any significant drainage or water quality-related impacts. The PUD project will be required to have an approved hydro report and PWQMP prior to the issuance of a grading or building permit.

With this regulatory compliance, the PUD project will not increase offsite runoff or change the overall direction of runoff from the site.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**iv. Impede or redirect flood flows?**

Discussion of Effects: TOP EIR states that the current FIRM for the City only shows small portions of the City adjacent to flood control channels, detention basins, and creeks that are within the 100-year floodplain. In addition to TOP policies, the OMC, Chapter 13, Flood Damage Prevention Program, requires that a development permit be obtained prior to development in a special flood hazard area to ensure that the site is reasonably safe from flooding and flood hazards. However, Figure S-03 of TOP indicates most of the project site is not within the 500-year or 100-year flood plains, so there will be no flooding impacts relative to the 100-year flood zone. Impacts will be less than significant.

Urbanization in the areas surrounding the project site have resulted in increased responsiveness of the basin to rainfall. The increase in impervious surfaces such as roofs, roads, and parking lots has resulted in a decrease in groundwater infiltration and larger storm surges. The project site currently slopes gently to the southwest and the existing drainage pattern is characterized by sheet flow in that direction.

The PUD project site is not impacted by offsite flows and is not located in a Federal Emergency Management Agency (FEMA) Federal Insurance Rate Map (FIRM) Panel designated Flood Zone Risk, and according to the USFWS National Wetlands Inventory (NWI) no wetlands or other ponding features exist on the property. The project will lead to the conversion of permeable surfaces to impermeable surfaces such as parking areas, building roofs, and building foundation areas. The project site would discharge onsite flows into a combination of onsite infiltrations basins and existing storm drain facilities. As such, the PUD proposed project would not impede or redirect flood flows. With adherence to existing federal, state, and local regulation, no changes to the existing flood flows would occur.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?**

Discussion of Effects: Figure S-04 of TOP indicates the project site is not within the inundation zones of either the San Antonio Dam to the northwest or overflow of debris basins to the north. Due to its location and surrounding conditions, TOP EIR identified less than significant impacts related to flood hazards, tsunamis, seiches, or dam inundation (SEIR p. 5.10-27).

Impacts associated with flooding are primarily related to the construction or placement of structures in areas prone to flooding including within an unprotected 100-year flood zone, and in areas susceptible to high tides, tsunamis, seiches, mudflows or sea level rise. Specifically, structures placed in flood prone areas, if flooded, would be damaged, and could subject people to injury or death. The National Flood Insurance Act of 1968 requires the identification of floodplain areas and establishment of flood-risk zones within those areas. FEMA administers the programs and coordinates with communities to establish effective floodplain management standards. According to FEMA, the project site is not located in a known floodplain as shown in Figure S-04 of TOP. The project site is located within a flood hazard area identified as "Zone X", which is defined as an area of minimal flood hazard. The project site is not located within a 100-year or 500-year flood hazard zone. Furthermore, this area is not known to flood and is not typically subjected to flooding. The project site is developed and does not contain any vegetation associated with riparian features. No wetlands have been mapped on the project site according to the National Wetlands Inventory (NWI).

According to the FEMA, the project is not located in an area that is subject to flood hazard, tsunami, or seiche zones. The project site is located over 55 miles northeast of the Pacific Ocean and is not located in a mapped tsunami zone. Therefore, the PUD project would not have a significant risk of flood hazard, tsunami, seiche zones, release of pollutants due to project inundation.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

Discussion of Effects: TOP EIR identified less than significant impacts related to water quality or groundwater issues. The City's groundwater supplies are from the Chino Groundwater Basin, which is adjudicated and managed by the Chino Basin Watermaster. The Chino Basin is exempt from legislative requirements under the Sustainable Groundwater Management Act because it is an adjudicated basin and is not required to prepare a groundwater sustainability plan. TOP EIR concluded TOP would have less than significant direct, indirect, and cumulative impacts relating to a conflict with or obstruction of a water quality control plan or sustainable groundwater management plan (SEIR p. 5-10-27).

The Regional Water Quality Control Board's Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Specifically, the Basin Plan (i) designates beneficial uses for surface and ground waters, (ii) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's anti-degradation policy, and (iii) describes implementation programs to protect all waters in the region. The project would be required to adhere to requirements of the water quality control plan, including all existing regulation and permitting requirements. This would include the incorporation of BMPs to protect water quality during construction and operational periods. The PUD project would be subject to all existing water quality regulations and programs, including all applicable construction permits. Existing TOP policies related to water quality would also be applicable to the project. Implementation of these policies, in conjunction with compliance with existing regulatory programs, would ensure that water quality impacts related to the project would be less than significant.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**11. LAND USE & PLANNING.** Would the project:

**a. Physically divide an established community?**

Discussion of Effects: TOP EIR concluded TOP policies would prevent conflicting land uses and would not divide any established communities. TOP would have less than significant direct, indirect, and cumulative impacts relating to physical division of an established community (SEIR p. 5.11-2).

The project site is developed with commercial buildings but the largest one is currently vacant. Development of the PUD project will allow local residents to again circulate on and around the site in a safe and efficient manner. It will in fact reconnect the existing surrounding neighborhoods by improving the site and having regular ongoing commercial activities along with the residential uses. The project buildings will also be of compatible in size and design with surrounding development. No adverse impacts are anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP FEIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?**

Discussion of Effects: TOP EIR found that buildout of TOP would not conflict with applicable plans adopted for the purpose of avoiding or mitigating an environmental effect, including SCAG regional plans and policies and the land use compatibility plans for the Ontario International Airport (OIA) and the Chino Airport. The project site is just east of the OIA and within its safety and noise impact zones (SEIR p. 5.11-6).

TOP EIR in 2022 evaluated the development of a maximum of 369 residential units and approximately 142,840 square feet of non-residential development on the Overlay Planning Area (including the PUD project site). The PUD project proposes 369 units and approximately 12,000 square feet of non-residential development in Phases 1 and 2, leaving 130,840 square feet of non-residential development to be built in the remainder of the MU-NH area adjacent to the SR-60 Freeway. Development of the proposed PUD would slightly exceed the total number of residential units for this area under the TOP (369 proposed MF units+15 existing SF units = 384 total units vs. 369 TOP projected total units). However, development of the PUD would substantially reduce the amount of anticipated non-residential growth in this sub-area (12,000 SF in the PUD plus 28,000 existing = 40,000 SF vs. 142,840 SF). Therefore, development of the "PUD project" would result in a 4% increase in residential impacts but a 28% decrease in commercial impacts. While this Addendum only covers impacts of the new residential and commercial uses currently proposed under the PUD Project described below, the preceding analysis demonstrates the anticipated impacts of growth in this MU-NH sub-area with the PUD are considered to be equivalent or less than those identified in TOP EIR for this sub-area. Therefore, the proposed PUD project is generally consistent with the MU land use designation and level of growth estimated for the site under the 2022 TOP and the TOP EIR. TOP 2050 has three components: the Vision; a Governance Manual; and the Policy Plan (General Plan).

*The Ontario Vision* – the central theme adopted by the City Council that motivates the Vision is "A sustained, community-wide prosperity which continuously adds value and yields benefits." Value is comprehensive in this regard and is expressed in land, revenues, infrastructure, businesses, education, employment, health, community services, recreation, etc. In particular, Ontario is committed to being "A Premier Community by Design." One of the foundations to accomplish this is described in the Vision as ensuring that development is "distinctive." The Euclid/Walnut PUD helps the City in realizing specific "Points of Vision" as outlined for "Distinctive Development" as follows:

- A system of vibrant retail, town, and neighborhood centers responsive to market demands and woven into the fabric of the community.
- A demonstrated ability to attract housing in pursuit of our acknowledged responsibility to balance housing with the job growth that drives our quality of life.
- Superior quality and design of the built environment and open spaces through careful attention to

detail at every scale, including public and private spaces and structures.

*The Governance Manual* – the purpose of the Manual is to institutionalize Ontario’s approach to governance and to provide a “business plan” for the City. Ontario believes that the job of the City is to create, maintain and grow economic value. The overall purpose of the Manual is to guide the City’s leadership and to ensure that TOP 2050 is integrated into the City’s daily operations and provide for effective administration. The Euclid/Walnut PUD is established in conformance with the City’s requirements and includes an administrative section consistent with provisions contained in the Development Code for consideration of “Development Plans.”

*The Policy Plan (General Plan)* – The Land Use Element designates the subject parcels within the Euclid/Walnut PUD as “MU - Mixed Use.” Generally, these properties are developed with an intense mixture of uses that, when concentrated, create focal points for community activity and identify and facilitate walking, biking, and the use of transit. The MU – Mixed Use land use category accommodates a horizontal and/or vertical mixture of retail, service, office, restaurant, entertainment, cultural and residential uses. The densities and intensities of the MU – Mixed Use designation represent the intended level of anticipated development; however, individual projects may vary depending upon an approved master plan, such as a specific plan, or planned unit development.

Implementation of the PUD project will achieve many City goals and policies outlined in The Policy Plan (General Plan). Those specific goals and polices are evaluated in Table 4.

<b>Table 4: TOP Consistency Analysis</b>	
<b>TOP Element, Goals, and Policies</b>	<b>Consistency Analysis</b>
<b>Land Use Element</b>	
<b>Goal LU-1</b> Balance. A community that has a spectrum of housing types and price ranges that match the jobs in the City and that make it possible for people to live and work in Ontario and maintain a quality of life.	<b>Consistent.</b> The PUD project provides both apartment units and commercial employment to allow people to live and work in the City.
<b>Policy LU-1.1</b> Strategic Growth. We concentrate growth in strategic locations that help create place and identity, maximize available and planned infrastructure, foster the development of transit, and support the expansion of the active and multimodal transportation networks throughout the City.	<b>Consistent.</b> The PUD project site has underutilized commercial uses and will be redeveloped with both housing and retail uses. It is adjacent to Euclid Ave. and SR-60 which facilitates transit.
<b>Policy LU-1.6</b> Complete Community. We incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop and recreate within Ontario.	<b>Consistent.</b> The PUD project provides both apartment units and commercial employment to allow people to live and work in the City which is one aspect of a complete community.
<b>Goal LU-2</b> Compatibility. Compatibility between a wide range of uses and resultant urban patterns and forms.	<b>Consistent.</b> The PUD provides compatibility for residential uses to the west and south, commercial uses to the east, and mixed uses to the north.
<b>Policy LU-2.1</b> Land Use Decisions. We minimize adverse impacts on adjacent properties when considering land use and zoning requests.	
<b>Policy LU-2.2</b> Buffers. We require new uses to provide mitigation or buffers between existing uses where potential adverse impacts could occur. Additional mitigation is required when new uses could negatively impact environmental justice areas.	<b>Consistent.</b> The PUD project has a comprehensive wall and fence plan plus a landscaping plan to provide adequate buffers from adjacent land uses.
<b>Goal LU-4</b> Phased Growth. Development that provides short-term value only when the opportunity to achieve our Vision can be preserved.	<b>Consistent.</b> The PUD project divides the commercial development into two phases with most of the apartment units being built in Phase 1.

<b>Table 4: TOP Consistency Analysis</b>	
<b>TOP Element, Goals, and Policies</b>	<b>Consistency Analysis</b>
<b>Policy LU-4.2</b> Interim Development. We allow development in urban, mixed use, and transit-oriented Place Types that is not immediately reflective of our ultimate Vision for the Place Type, provided it can be modified or replaced when circumstances are right to support development aligned with the Place Type Vision. We will not allow development that impedes, precludes, or compromises our ability to achieve our Vision.	<b>Consistent.</b> The PUD project divides the commercial development into two phases with most of the apartment units being built in Phase 1.
<b>Policy LU-4.3</b> Infrastructure Timing. We require that the necessary infrastructure and services be in place prior to or concurrently with development.	<b>Consistent.</b> The PUD requires necessary utility and infrastructure to be installed prior to or during development of new land uses to minimize impacts on existing systems.
<b>Policy LU-4.4</b> Shared Infrastructure. We encourage and facilitate the use of shared infrastructure (including shared or managed parking) in urban, mixed use, and transit-oriented Place Types.	<b>Consistent.</b> The PUD project shares parking between the residential and commercial uses to maximize convenience for residents and customers.
<b><i>Housing Element</i></b>	
<b>Goal H-2</b> Housing Supply & Diversity. Diversity of types of quality housing that are affordable to a range of household income levels, accommodate changing demographics, and support and reinforce the economic sustainability of Ontario.	<b>Consistent.</b> The PUD project provides both apartment units and commercial employment to allow people to live and work in the City.
<b>Policy H-2.1</b> Corridor Housing. We revitalize transportation corridors by encouraging the production of higher density residential and mixed-uses that are architecturally, functionally, and aesthetically suited to corridors.	<b>Consistent.</b> The PUD project is within the Euclid Avenue corridor and proposes higher density apartment units consistent with TOP guidelines.
<b>Policy H-2.5</b> Housing Design. We require architectural excellence through adherence to City design guidelines, thoughtful site planning, environmentally sustainable practices, and other best practices.	<b>Consistent.</b> The PUD emphasizes high quality design and best practices consistent with Euclid Avenue corridor design standards.
<b>Policy H-2.6</b> Infill Development. We support the revitalization of neighborhoods through the construction of higher-density residential developments on underutilized residential and commercial sites.	<b>Consistent.</b> The PUD project site has underutilized commercial uses and will be redeveloped with both housing and retail uses consistent with the Euclid Avenue Overlay requirements.
<b>Goal H-3</b> Governmental Regulations. A City regulatory environment that balances the need for creativity and excellence in residential design, flexibility and predictability in the project approval process, and the provision of an adequate supply and prices of housing.	<b>Consistent.</b> The project includes a PUD to emphasize high quality design while providing 369 new apartment units adjacent to Euclid Avenue and SR-60 for transit options.
<b>Policy H-3.2</b> Flexible Standards. We allow flexibility in the application of residential and mixed-use development standards in order to gain benefits such as exceptional design quality, economic advantages, sustainability, or other benefits that would otherwise be unrealized.	<b>Consistent.</b> The project includes a PUD to best plan for mixed uses on the site (i.e., residential and commercial) within the Euclid Avenue corridor.
<b><i>Environmental Resources Element</i></b>	
<b>Goal ER-1</b> Water & Wastewater. A reliable and cost-effective system that permits the City to manage its diverse water resources and needs.	<b>Consistent.</b> The PUD project will redevelop an existing underutilized commercial site using existing utilities.
<b>Policy ER-1.4</b> Supply-Demand Balance. We require that available water supply and demands be balanced.	<b>Consistent.</b> The PUD project will utilize water conservation design and demand will be similar to that accounted for in TOP

<b>Table 4: TOP Consistency Analysis</b>	
<b>TOP Element, Goals, and Policies</b>	<b>Consistency Analysis</b>
	EIR. PUD will reuse an existing underutilized infill site.
<b>Policy ER-1.6</b> Urban Run-off Quantity. We encourage the use of low impact development strategies, including green infrastructure, to intercept run-off, slow the discharge rate, increase infiltration, and ultimately reduce discharge volumes to traditional storm drain systems.	<b>Consistent.</b> The PUD will encourage low impact development through best management practices (BMPs) for runoff and water conservation as part of its Water Quality Management Plan.
<b>Policy ER-1.7</b> Urban Run-off Quality. We require the control and management of urban run-off, consistent with Regional Water Quality Control Board regulations.	
<b>Policy ER-1.8</b> Wastewater Management. We require the management of wastewater discharge and collection consistent with waste discharge requirements adopted by the Regional Water Quality Control Board.	<b>Consistent.</b> The PUD will encourage low impact development through BMPs for water conservation which helps reduce wastewater generation.
<b>Goal ER-3</b> Energy. Cost-effective and reliable energy system sustained through a combination of low impact buildings, site and neighborhood energy conservation, and diverse sources of energy generation that collectively helps to minimize the region’s carbon footprint.	<b>Consistent.</b> The PUD will encourage low impact development through energy conservation strategies as outlined in the City’s TOP and Community Climate Action Plan (CCAP).
<b>Policy ER-3.3</b> Building and Site Design. We require new construction to incorporate energy efficient building and site design strategies, which could include appropriate solar orientation, maximum use of natural daylight, passive solar, and natural ventilation.	
<b>Goal ER-4</b> Air Quality. Improved indoor and outdoor air quality and reduced locally generated pollutant emissions.	<b>Consistent.</b> The PUD project will implement the latest Green Building Code guidelines which reduces energy use and related air pollutants. It has both residential and commercial uses and it is next to Euclid Ave. and SR-60 which are transit corridors – both conditions will help reduce vehicular traffic and associated air pollutant and GHG emissions.
<b>Policy ER-4.1</b> Land Use. We reduce GHG and other local pollutant emissions through compact, mixed use, and transit-oriented development and development that improves the regional jobs-housing balance.	
<b>Community Economics Element</b>	
<b>Goal CE-1</b> Complete Community. A complete community that provides for all incomes and stages of life.	<b>Consistent.</b> The PUD project provides apartment units of various sizes and commercial uses/employment to allow people to live and work in the City at various stages of life.
<b>Policy CE-1.6</b> Diversity of Housing. We collaborate with residents, housing providers, and the development community to provide housing opportunities for every stage of life; we plan for a variety of housing types and price points to encourage the development of housing supportive of our efforts to attract business in growing sectors of the community while being respectful of existing viable uses.	
<b>Policy CE-1.7</b> Retail Goods and Services. We seek to ensure a mix of retail businesses that provide the full continuum of goods and services for the community.	<b>Consistent.</b> The PUD project provides space for various kinds of commercial uses and employment.
<b>Goal CE-2</b> Placemaking. A City of distinctive neighborhoods, districts, corridors, and centers where people choose to be.	<b>Consistent.</b> The PUD project is intended to provide a high-quality community hub for the surrounding neighborhoods along the Euclid Avenue corridor.
<b>Policy CE-2.1</b> Development Projects. We require new development and redevelopment to create unique, high-quality places that add value to the community.	

<b>Table 4: TOP Consistency Analysis</b>	
<b>TOP Element, Goals, and Policies</b>	<b>Consistency Analysis</b>
<b>Policy CE-2.2</b> Development Review. We require those proposing new development and redevelopment to demonstrate how their projects will create appropriately unique, functional, and sustainable places that will compete well with their competition within the region.	<b>Consistent.</b> The PUD demonstrates how the project will provide a high-quality community hub for the surrounding neighborhoods along the Euclid Avenue corridor.
<b>Safety Element</b>	
<b>Goal S-1</b> Seismic & Geologic Hazards. Minimized risk of injury, loss of life, property damage, and economic and social disruption caused by earthquake-induced and other geologic hazards.	<b>Consistent.</b> This TOP EIR Addendum demonstrates how the PUD project will not have significant seismic or geologic risks for future residents and workers.
<b>Policy S-1.1</b> Implementation of Regulations and Standards. We require that all new habitable structures be designed in accordance with the most recent California Building Code adopted by the City, including provisions regarding lateral forces and grading.	<b>Consistent.</b> This TOP EIR Addendum demonstrates how the PUD requires CBC and OMC compliance which will minimize seismic and geologic risks for future residents and workers.
<b>Policy S-1.2</b> Entitlement and Permitting Process. We follow state guidelines and the California Building Code to determine when development proposals must conduct geotechnical and geological investigations.	<b>Consistent.</b> TOP EIR already included these investigations and PUD project will provide a confirmatory project-specific analysis prior to the issuance of permits.
<b>Goal S-2</b> Flood Hazards. Minimized risk of injury, loss of life, property damage and economic and social disruption caused by flooding and inundation hazards.	<b>Consistent.</b> This TOP EIR Addendum, and supporting technical reports, demonstrate how the PUD is not in a flood zone which will minimize flood risks for future residents and workers.
<b>Policy S-2.5</b> Stormwater Management. We maintain the storm drain system to convey a 100-year storm, when feasible, and encourage environmental site design practices to minimize flooding and increase groundwater recharge, including natural drainage, green infrastructure, and permeable ground surfaces.	<b>Consistent.</b> TOP EIR already included these investigations and the PUD project will have a hydrology report and WQMP to confirm it will not increase offsite runoff and be a low impact development. Consistent with TOP.
<b>Goal S-3</b> Fire & Rescue Hazards. Reduced risk of death, injury, property damage and economic loss due to fires, accidents and normal everyday occurrences through prompt and capable emergency response.	<b>Consistent.</b> The PUD project reutilizes an existing commercial property in a fully developed portion of the City which already has adequate services available.
<b>Policy S-3.1</b> Prevention Services. We proactively mitigate or reduce the negative effects of fire, hazardous materials release, and structural collapse by implementing the regularly adopted California Fire Code and California Building Code.	<b>Consistent.</b> The City's development review process requires compliance with the CFC and CBC prior to the issuance of building permits.
<b>Policy S-3.8</b> Fire Prevention through Environmental Design. We require new development to incorporate fire prevention consideration in the design of streetscapes, sites, open spaces, and buildings.	<b>Consistent.</b> The PUD demonstrates the project has a number of buildings with landscaping and open space that will provide adequate fire safety.
<b>Goal S-4</b> Noise Hazards. An environment where noise does not adversely affect the public's health, safety, and welfare.	<b>Consistent.</b> TOP EIR already included these investigations and required subsequent site-specific interior noise studies to confirm TOP EIR conclusion. PUD will provide the required study prior to issuance of building permits to demonstrate noise along Euclid Avenue will not impact residents.
<b>Policy S-4.1</b> Noise Mitigation. We utilize the City's Noise Ordinance, building codes, and subdivision and	<b>Consistent.</b> The City's development review process requires compliance with

<b>Table 4: TOP Consistency Analysis</b>	
<b>TOP Element, Goals, and Policies</b>	<b>Consistency Analysis</b>
development codes to mitigate noise impacts.	the CBC and City Noise Ordinance to minimize noise impacts along the Euclid Avenue corridor.
<b>Goal S-5</b> Wind-Related Hazards. Minimize the risk of injury, property damage, and economic loss resulting from windstorms and wind-related hazards.	<b>Consistent.</b> The PUD project will implement CBC requirements regarding wind design for new buildings.
<b>Policy S-5.1</b> Dust Control Measures. We require the implementation of Best Management Practices for dust control at all excavation and grading projects.	<b>Consistent.</b> The PUD project will implement TOP EIR Mitigation Measures AQ 3-1 through 3-3 which includes dust control measures.
<b>Goal S-7</b> Law Enforcement. Residential neighborhoods, commercial areas, and industrial districts that are kept safe through a multi-faceted approach of prevention, suppression, and community involvement in public safety.	<b>Consistent.</b> The City's development review process includes an evaluation by the Police Department regarding defensible space, crime prevention, and police patrol services (i.e., CPTED).
<b>Policy S-7.4</b> Crime Prevention through Environmental Design (CPTED). We require new development to incorporate CPTED in the design of streetscapes, sites, open spaces, and buildings.	
<b>Community Design Element</b>	
<b>Goal CD-1</b> Image & Identity. A dynamic, progressive city containing distinct and complete places that foster a positive sense of identity and belonging among residents, visitors, and businesses.	<b>Consistent.</b> The PUD project provides both apartment units and commercial employment to allow people to live and work in the City which enhances the feeling of community.
<b>Policy CD-1.2</b> Place Types. We establish Place Types in urban, mixed use, and transit-oriented areas to foster the City's identity as a premier community and require new development within each Place Type to incorporate prescribed urban patterns, forms, and placemaking priorities.	<b>Consistent.</b> This mixed-use project is intended to provide an attractive, high quality community hub for the surrounding neighborhoods along the Euclid Avenue corridor which is demonstrated by the PUD document.
<b>Goal CD-2</b> Design Quality. A high level of design quality resulting in neighborhoods, commercial areas, public spaces, parks, and streetscapes that are attractive, safe, functional, human- scale, and distinct.	
<b>Policy CD-2.1</b> Quality Building Design and Architecture. We encourage all development projects to convey visual interest and character through: 1. Building volume, massing, and height to provide context-appropriate scale and proportion; 2. A true architectural style which is carried out in plan, section, and elevation through all aspects of the building and site design and appropriate for its setting; and 3. Exterior building materials that are articulated, high quality, durable, and appropriate for the architectural style.	
<b>Policy CD-2.4</b> Urban, Mixed Use, and Transit-oriented Areas. We establish Place Types to require mixed use, urban, and transit-oriented areas to be designed and developed as pedestrian oriented areas that are integrated with adjacent neighborhoods and promote a vibrant, comfortable, and functional environment, as	

<b>Table 4: TOP Consistency Analysis</b>	
<b>TOP Element, Goals, and Policies</b>	<b>Consistency Analysis</b>
defined for each Place Type.	
<b>Policy CD-2.7</b> Sustainability. We collaborate with the development community to design and build neighborhoods, streetscapes, sites, outdoor spaces, landscaping, and buildings to reduce energy demand through solar orientation, maximum use of natural daylight, passive solar and natural ventilation, building form, mechanical and structural systems, building materials, and construction techniques.	<b>Consistent.</b> The PUD will encourage low impact development through energy conservation strategies as outlined in the City's TOP and Community Climate Action Plan (CCAP).
<b>Policy CD-2.8</b> Safe Design. We incorporate defensible space design into new and existing developments to ensure the maximum safe travel and visibility on pathways, corridors, and open space and at building entrances and parking areas by avoiding physically and visually isolated spaces, maintaining visibility and accessibility, and using lighting.	<b>Consistent.</b> The City's development review process includes an evaluation by the Police Department regarding defensible space, crime prevention, and police patrol services (i.e., CPTED). The PUD outlines how the project will provide or foster these conditions.
<b>Policy CD-2.9</b> Landscape Design. We encourage durable, sustainable, and drought-tolerant landscaping materials and designs that enhance the aesthetics of structures, create and define public and private spaces, and provide shade and environmental benefits.	<b>Consistent.</b> The PUD project has a comprehensive Landscaping Plan which will utilize native plants, minimize water use, and be attractive for project residents, workers, and customers.
<b>Policy CD-2.13</b> Entitlement Process. We work collaboratively with all stakeholders to ensure a high degree of certainty in the efficient review and timely processing of all development plans and permits.	<b>Consistent.</b> The PUD will help expedite the development processing for the project by providing comprehensive development-related information about the mixed-use project to be completed in two phases.
<b>Goal CD-3</b> Urban, Mixed Use, and Transit-Oriented Place Types. Vibrant urban environments that are organized around intense buildings, pedestrian and transit areas, public plazas, and linkages between and within developments that are conveniently located, visually appealing and safe during all hours.	<b>Consistent.</b> This mixed use project is intended to provide an attractive, high quality community hub with public spaces for the project residents, workers, as well as surrounding neighborhoods along the Euclid Avenue corridor, all of which is demonstrated by the PUD document including architecture, urban design and layout, landscaping and hardscape areas with public spaces, and articulation with surrounding uses and the Euclid Avenue corridor.
<b>Policy CD-3.1</b> Unique Identity. We promote development that heightens the unique character and identity of each Place Type by requiring compatible land uses and land planning, site design, and building design that promotes an active public realm.	
<b>Policy CD-3.4</b> Context-Aware and Appropriate Design. We require appropriate building and site design that complements existing development, respects the intent and identity of the Place Type, and provides appropriate transitions and connections between adjacent uses to ensure compatibility of scale, maintain an appropriate level of privacy for each use, and minimize potential conflicts.	
<b>Policy CD-3.5</b> Active Frontages. We create lively pedestrian streetscapes by requiring primary building, business, and residential entrances, outdoor dining, and storefronts be located on ground floors adjacent to sidewalks or public spaces and designed to maximize safety, comfort, aesthetics, and the intended functionality (as defined by the Place Type).	

<b>Table 4: TOP Consistency Analysis</b>	
<b>TOP Element, Goals, and Policies</b>	<b>Consistency Analysis</b>
<p><b>Policy CD-3.6</b> Managed Infrastructure. We collaborate with developers and property owners to facilitate development that realizes the envisioned character and functionality of the Place Type through the use of green and shared infrastructure within each Place Type.</p>	<p><b>Consistent.</b> The PUD project has integrated mixed uses with open space and landscaping that provides low impact development through energy and water conservation strategies, as outlined in the City's TOP and Community Climate Action Plan (CCAP).</p>

Source: PUD, September 2022

PUD = Planned Unit Development

Table 4 demonstrates the proposed PUD project is consistent with the various applicable TOP goals and policies. Therefore, the PUD project will not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. There will be no impacts and no project specific mitigation is required.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**12. MINERAL RESOURCES.** Would the project:

**a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

Discussion of Effects: TOP EIR indicates there are two areas in Ontario that are designated Mineral Resource Zone 2 (MRZ-2) where significant mineral resources are known or are likely. The remainder of the City is designated Mineral Resource Zone 3 (MRZ-3), where the significance of mineral deposits is unknown. Development in an MRZ-3 area would not result in significant impacts because mineral resources of statewide or local importance are not identified on the California Geological Survey's Production-Consumption maps (SEIR p. 5.12-6). The project site is not within the portions of the City designated as MRZ-2.

The PUD project site is developed and surrounded by urban land uses in all directions. There are no known mineral resources so no impacts are anticipated and no mitigation required.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP FEIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?**

Discussion of Effects: TOP EIR indicates there are two areas in Ontario that are designated Mineral Resource Zone 2 (MRZ-2) where significant mineral resources are known or are likely. The remainder of the City is designated Mineral Resource Zone 3 (MRZ-3), where the significance of mineral deposits is unknown. Development in an MRZ-3 area would not result in significant impacts because mineral resources of statewide or local importance are not identified on the California Geological Survey's Production-Consumption maps (SEIR p. 5.12-6).

The PUD project site is not within the portions of the City designated as MRZ-2. There are no known mineral resources in the area so no impacts are anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**13. NOISE.** Would the project result in:

**a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Discussion of Effects: TOP EIR found stationary and transportation noise impacts of future development under TOP to be less than significant with implementation of Safety Element Policy S-4.1, Noise Mitigation, which utilizes the City's Noise Ordinance, building codes, and subdivision and development code regulations to reduce noise from future development projects (SEIR p. 5.13-32).

The project site was previously analyzed by TOP EIR as mixed use (with residential and commercial uses). Due to the nature of the project, it is not expected to expose people to or generate noise levels in excess of the standards established in TOP EIR (Section 5.12). The project site is surrounded on all sides by urban development with multi-family residential uses to the west, single family residential uses to the south, and mixed uses to the north. The SR-60 Freeway is north of the existing mixed-use area.

The PUD project proposes residential and commercial development which is consistent with existing surrounding land uses. The PUD specifies that a parking management plan will organize loading and unloading in proximity to both the residential and non-residential uses to help minimize noise impacts on adjacent uses. In addition, noise shall be addressed as part of the parking management plan submitted to the Planning Director and trash receptacles/recyclable container storage areas will be provided for all residential and commercial uses. Such receptacle/storage area may receive trash from commercial and residential sources. The PUD project must also demonstrate compliance with the City's Noise Ordinance through the development review process.

TOP EIR evaluated potential noise impacts in the City as the result of future development and recommended implementation of Mitigation Measure MM NOI 12-1 to address potential site-specific noise impacts along major roadways in the City. With implementation of TOP EIR MM NOI 12-1, potential noise impacts of the proposed PUD land uses will be less than significant and no project-specific mitigation is required.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: The PUD project site is adjacent to Euclid Avenue, a major roadway, and a portion of the site falls within the roadway's 65 dBA CNEL contour. TOP EIR contains Mitigation Measure MM NOI 12-1 to address site specific noise impacts along major roadways:

**NOI 12-1:** Prior to the issuance of building permits for any project that involves a noise-sensitive use within the 65 dBA CNEL contour along major roadways, freeways, railroads, or the Ontario International Airport, the project property owner/developers shall retain an acoustical engineer to conduct an acoustic analysis and identify, where appropriate, site design features (e.g., setbacks, berms, or sound walls) and/or required building acoustical improvements (e.g., sound transmission class rated windows, doors, and attic baffling), to ensure compliance with the City's Noise Compatibility Criteria and the California State Building Code and California Noise Insulation Standards (Title 24 and 21 of the California Code of Regulations).

**b. Generation of excessive ground-borne vibration or ground-borne noise levels?**

Discussion of Effects: The project proposes commercial and residential uses consistent with TOP Policy Plan. The site was previously analyzed by the TOP EIR as supporting both residential and commercial uses (i.e., mixed use). TOP EIR indicates these types of uses do not normally induce significant ground-borne vibrations because they do not typically involve equipment or activities which result in large vibrations (e.g., blasting, impact compaction, handling of large boulders, etc.). Therefore, less than significant impacts are anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**c. For a project located within the vicinity of a private airstrip or the noise impact zones of the airport land use compatibility plan for ONT and Chino Airports, would the project expose people residing or working in the project area to excessive noise levels?**

Discussion of Effects: The Land Use Element of TOP states that all new developments surrounding airports should be consistent with the adopted ALUCP and should meet standards and recommendations of Part 77 of the FAA, adopted through Ordinance 2758 in the Ontario Municipal Code. Section 9.3.e. *Hazards and Hazardous Materials*, indicates the site is not within the hazard or influence area of either the Ontario International Airport or the Chino Airport. Therefore, there are no impacts and no mitigation required.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP FEIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**14. POPULATION & HOUSING.** Would the project:

**a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of road or other infrastructure)?**

Discussion of Effects: TOP EIR identified less than significant impacts associated with population and housing increases. TOP allows the City to accommodate population growth through land use designations, goals, and policies that provide a vision and guide growth in the City (SEIR p. 5.14-11).

The proposed PUD project is consistent with the Mixed-Use TOP land use designation. The project site was previously analyzed by TOP EIR with both residential and commercial uses so it would generate additional housing and population which was already calculated in TOP EIR.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

Discussion of Effects: The purpose of TOP is to adequately plan and accommodate future growth through the distribution, location, balance, and extent of land uses. Implementation of TOP 2050 would accommodate population growth through land use designations, goals, and policies that provide a vision and guide growth in the City. The EIR concluded TOP would have less than significant direct, indirect, and cumulative impacts relating to displacement of people and housing (SEIR p. 5.14-12). The PUD project site is all commercial does not contain any existing housing, nor is it designated or zoned for residential uses. The PUD will result in the 10.6-acre MU-NH sub-area to exceed its residential growth projection in TOP by 4% while reducing the planned non-residential growth in the sub-area by 28%. On balance these changes are minimal and will not result in any significant housing or growth impacts.

The PUD project will therefore not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**15. PUBLIC SERVICES.** Would the project:

**a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:**

**i. Fire protection?**

Discussion of Effects: TOP EIR determined TOP would result in an increase in development and population, which would result in increased demand on fire protection services. The EIR indicated that existing facilities and services would not be adequate to meet increased demand from growth under TOP. Therefore, the Fire Department was planning on adding facilities and/or services as demand increases. With implementation of TOP policies and Fire Department review of new development, impacts will be less than significant (SEIR p. 5.15-3).

The PUD project site is in a developed area currently served by the Ontario Fire Department. The Project is consistent with TOP land use designations, and TOP EIR states the City will not require the construction of any new fire protection facilities or alteration of any existing facilities or cause a decline in the levels of service, which could cause the need to construct new facilities in this portion of the City. Therefore, no impacts are anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**ii. Police protection?**

Discussion of Effects: TOP EIR determined TOP would result in an increase in development and population, which would result in increased demand on police protection services. The EIR indicated that existing staffing would not be adequate to meet increased demand from growth under TOP. Therefore, the Police Department is planning on adding facilities and/or services as demand increases. With implementation of TOP policies and Police Department review of new development, impacts will be less than significant (SEIR p. 5.15-7).

The site was previously developed and is in a developed area currently served by the Ontario Police Department. It is not anticipated the project will contribute to the need for construction of any new police facilities or alteration of any existing facilities or cause a decline in the levels of service, which could cause the need to construct new facilities. No impacts are anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No site-specific mitigation is required.

**iii. Schools?**

Discussion of Effects: TOP EIR identified impacts to school facilities and services as less than significant upon payment of SB 50 school impact fees (SEIR p. 5.15-14).

The PUD project proposes mixed uses (i.e., residential apartments and retail commercial uses) which are expected to generate school-aged students that require educational facilities or services. The project will be required to pay school fees as prescribed by state law prior to the issuance of building permits, which is considered adequate mitigation under CEQA. No impacts are anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**iv. Parks?**

Discussion of Effects: TOP would generate additional residents, increasing the use of existing park and recreational facilities. However, TOP EIR concluded this would not result in a significant impact as long as development of park facilities keeps pace with the anticipated increase in population from buildout (SEIR p. 5-15-14).

The site is in a developed area currently served by the City in terms of parks and recreational services. The project has both a residential and commercial component and will provide onsite recreational amenities. Due to the size of the residential portion of the project (369 apartments), the PUD project will not require the construction of any new park facilities or alteration of any existing facilities or cause a decline in the

levels of service, which could cause the need to construct new facilities. Like all new development under TOP, the PUD project will be required to pay a park-related Development Impact Fee (DIF). Therefore, no impacts are anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**v. Other public facilities?**

Discussion of Effects: TOP would generate additional residents, increasing the use of existing public facilities (e.g., libraries). TOP EIR identified less than significant impacts to library services and facilities (SEIR p. 5-15-18).

The site is in a developed area currently served by the City. Typically, new public facilities are needed to serve additional population generated by new housing. The project will generate 369 new apartment units which will incrementally increase the need for other public facilities in the future. Due to its size, it is unlikely this PUD project will require the construction of any new public facilities or alteration of any existing facilities or cause a decline in the levels of service, which could cause the need to construct new facilities. Like all new development under TOP, the PUD project will be required to pay established Development Impact Fees (DIFs) to the City which factor in the future need for public facilities based on the City's overall population. Therefore, no impacts are anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**16. RECREATION.** Would the project:

**a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

Discussion of Effects: TOP would generate additional residents, increasing the use of existing park and recreational facilities. However, TOP EIR concluded this would not result in a significant impact as long as development of park facilities keeps pace with the anticipated increase in population from buildout (SEIR p. 5-16-14).

The project has both a residential and commercial component and will provide onsite recreational amenities. Due to the size of the residential portion of the project (369 apartments), the PUD project will not require the construction of any new park facilities or alteration of any existing facilities or cause a decline in the levels of service, which could cause the need to construct new facilities. Like all new development under TOP, the PUD project will be required to pay an appropriate park-related Development Impact Fee (DIF). Therefore, no impacts are anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**b. Does the project include recreational facilities or require the construction or expansion of recreational facilities that have an adverse physical effect on the environment?**

Discussion of Effects: TOP would generate additional residents, increasing the use of existing park and recreational facilities. However, TOP EIR concluded this would not result in a significant impact as long as development of park facilities keeps pace with the anticipated increase in population from buildout (SEIR p. 5-16-14).

The project is mixed use with both residential and commercial components. The PUD indicates the project will also provide onsite recreational amenities (275 square feet of common amenities per unit). Due to the size of the residential portion of the project (369 apartments), the PUD project will not require the construction of any new park facilities or alteration of any existing facilities. Like all new development under

TOP, the PUD project will be required to pay an appropriate park-related Development Impact Fee (DIF). Therefore, no impacts are anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**17. TRANSPORTATION.** Would the project:

**a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?**

Discussion of Effects: TOP EIR found that the recommended TOP circulation plan would comply with adopted policies, plans, and programs for alternative transportation, including SCAG’s Connect SoCal (SEIR p. 5.17-23) so impacts would be less than significant.

The subject site was previously analyzed by TOP EIR as supporting mixed use (i.e., 369 higher density residential units and 142,840 square feet of commercial uses). The site is bounded by residential uses to the west and south, commercial uses to the east, and mixed uses to the north adjacent to SR-60.

A trip generation study of the existing land uses on the site compared to the proposed PUD project was prepared in June 2022 by Linscott Law & Greenspan (LLG) (Appendix D). The study first identified vehicular trips that could result from full operation of the existing onsite uses which include a Kmart, Sears Appliance Repair Center (although both are currently closed), a Carl’s Junior drive-through restaurant, and a small tenant retail commercial building. Next, the study estimated future vehicular trips for the land uses proposed in Phases 1 and 2 of the PUD project. Finally, the study compared the two trip generation totals (existing vs. proposed uses) to determine if the proposed PUD project will significantly increase traffic generation compared to the existing land uses at full utilization. **Table 5** provides a summary of the LLG trip generation study results.

**Table 5: Trip Generation Comparison**

<b>Traffic Condition</b>	<b>AM Peak Hour</b>	<b>PM Peak Hour</b>	<b>Average Daily Traffic (ADT)</b>
Existing Land Uses (current conditions)	91	61	1,438
Existing Land Uses (fully utilized)	162	211	4,043
Euclid/Walnut PUD Project			
Phase 1	138	153	1,791
Phase 2	24	37	449
<b>TOTAL</b>	<b>162</b>	<b>190</b>	<b>2,240</b>
<i>Difference (Total PUD v. Fully Utilized)</i>	0	-21	-1,803
<i>Difference (Total PUD v. Current Conditions)</i>	71	131	802

Source: Table 1, Project Traffic Generation Rates and Forecast, LLG 2022

The LLG trip generation study indicates the proposed PUD project would generate more traffic than the underutilized shopping center currently generates (802 daily trips) but would actually generate approximately 1,803 less total daily vehicular trips than the shopping center generated at full operation of its existing uses (i.e., Kmart, Sears Center, Carl’s Jr, and small retail building fully occupied). The traffic analysis prepared for TOP and TOP EIR assumed full buildout of existing and proposed land uses so the PUD project would generate less traffic than was assumed and analyzed under TOP EIR. Based on this analysis, the PUD project would not result in any greater traffic-related impacts on streets and intersections than were already analyzed in TOP EIR.

**Transit.** The project area and the City are served by Omnitrans, a public transit agency serving various jurisdictions in San Bernardino County. Omnitrans currently operates Route 83 adjacent to the site on Euclid Avenue (closest stop is Walnut Street). Omnitrans also regularly reviews and periodically changes routes, stops, etc. to address ridership and community demand needs as well as budget limitations. As part

of the City's development review process, the project developer will coordinate with Omnitrans to determine if any expanded or additional bus service in the project area as needed.

In addition, TOP Figure M-03, Public Transit, shows Euclid Avenue currently serves as a Bus Rapid Transit (BRT) corridor. Metrolink also operates commuter service on the rail lines 2.3 mile north of the PUD project site on the rail line that crosses Euclid Avenue south of Holt Boulevard with an Amtrak station located on the east side of Euclid Avenue.

**Bicycles.** The project site and surrounding area support mainly residential and commercial uses but none of the streets in the area currently contain bicycle lanes. The City's TOP 2050 Trails and Bikeway Systems Map (Figure M-02) shows a Class II on-street bicycle lane planned for Walnut Street both east and west of Euclid Avenue, and Euclid Avenue (north of Riverside Drive) is indicated as needing study for a possible future Class III bike route. In addition, Euclid Avenue south of Riverside Drive (south of the PUD site) is proposed for a future Class I Multipurpose Trail. The PUD project will provide improvements or accommodations along its frontage of Walnut Street and Euclid Avenue if needed for these future improvements. However, no additional bicycle lanes are currently in place or under construction in the surrounding area at present due to its fully developed condition.

**Sidewalks/Trails.** The project site is developed but underutilized and sidewalks are in place on adjacent and area streets including Euclid Avenue. The PUD project will connect to these existing sidewalks and thus provide a complete pedestrian network in this area. The City's TOP 2050 Trails and Bikeway Systems Map shows Euclid Avenue south of Walnut Street proposed for a future Class I Multipurpose Trail. However, at present no trails or other pedestrian-oriented improvements are under construction in the immediate surrounding area.

The PUD project will be developed consistent with the City's adopted plans for non-vehicular improvements as indicated in TOP. The project will install sidewalks on perimeter streets as indicated in the standard City street cross sections and will install bus stop infrastructure if directed by Omnitrans during the development review process. Therefore, the PUD project will not conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Impacts will be less than significant.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?**

Discussion of Effects: TOP EIR concludes TOP would result in a significant transportation impact related to VMT mainly due to the increase in population accommodated by TOP. TOP includes goals and policies to offset VMT impacts by creating greater access to transit and enhanced alternative transportation modes. In addition, projects that are calculated to exceed City-wide VMT levels must develop mitigation plans.

The City has developed its own "VMT Guidelines for CEQA Assessment of VMT Impacts" dated 2021. In addition, the City uses the San Bernardino County Transportation Authority (SBCTA) VMT Screening Tool, which allows users to select an assessor's parcel number (APN) to determine if a project's location meets one or more of the screening thresholds for land use projects identified in the City Guidelines.

The City Guidelines state that certain projects that meet the following VMT screening criteria may be presumed to result in a less than significant transportation impact:

- Transit Priority Area (TPA) Screening
- Low VMT Area Screening
- Project Type Screening

A land use project needs to meet only one of these screening criteria to have a less than significant impact.

**TPA Screening.** Projects located within a TPA (i.e., within a half-mile of an existing “major transit stop”<sup>1</sup> or an existing stop along a “high-quality transit corridor”<sup>2</sup> may be presumed to have a less than significant VMT impact. The Screening Tool indicates the project site is located within a half-mile of an existing major transit stop or along a high-quality transit corridor (Euclid Avenue Bus Rapid Transit corridor). Therefore, the TPA screening criterion is met.

**Low VMT Area Screening.** The City Guidelines cite the OPR Technical Advisory in that “Residential and office projects that locate in areas with low VMT and that incorporate similar features (density, mix of uses, and transit accessibility) will tend to exhibit similarly low VMT.” The City Guidelines state that projects may be presumed to have a less than significant VMT impact if located in an already low VMT generating traffic analysis zones (TAZs) that generates a VMT per service population (SP) that is 15% below County of San Bernardino Baseline VMT per SP. The Screening Tool uses the sub-regional San Bernardino Transportation Analysis Model (SBTAM) to measure VMT performance within individual TAZ’s within the region. The Project’s physical location based on parcel number is selected in the Screening Tool to determine the TAZ in which the Project will reside (TAZ 53643101). The Project’s TAZ VMT per service population was compared to 15% below County of San Bernardino Baseline VMT per SP. The Screening Tool was run for production-attraction (PA) VMT per service population and indicates the VMT per SP for the PUD site is just under the City’s average for 2022 through 2040, but it does not exceed 15% less than that figure in the future. The Screening Tool determined the PUD project is not located within a low VMT generating zone for any baseline year from 2022 to 2040. Therefore, the low VMT area screening criterion is not met.

**Project Type Screening.** The City Guidelines indicate that local-serving retail less than 50,000 square feet or other local serving essential services (e.g., day care centers, public schools, medical/dental office buildings, etc.) are presumed to have a less than significant impact absent substantial evidence to the contrary. The PUD project proposes only 12,000 square feet of local serving uses. Therefore, the Project meets that portion of this criterion. The City Guidelines also state that small projects generating fewer than 110 daily vehicle trips or less may be presumed to have a less than significant VMT impact, subject to discretionary approval by the City. A trip generation study was prepared for the PUD project that estimated vehicle trips generated by the project’s proposed land uses based on trip generation rates collected by the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, 2021 (see Threshold 17.a above)(LLG 2022). According to the study, the PUD project will generate 2,240 daily vehicle trip-ends per day at buildout (see Table 5). Even accounting for the difference of PUD buildout vs. current conditions (i.e., operation of 28,000 square feet of existing commercial uses) would still generate 131 PM peak hour trips. Therefore, the PUD project generates daily vehicle trips exceeding the 110 daily vehicle trip threshold, so the project does not meet this portion of the project type screening criterion.

Based on this analysis, the PUD project is eligible for screening under the TPA Screening Criteria and the first portion of the Project Type Screening Criteria so a detailed VMT analysis is not required (i.e., it has a less than significant local VMT impact). Moreover, the PUD project is mixed use and generally consistent with TOP’s underlying land use assumptions and buildout projection for this sub-area, so the PUD project is also considered to have a less than significant cumulative VMT impact as well.

The VMT project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

Discussion of Effects: TOP EIR found that circulation improvements under the recommended TOP circulation plan would be designed to adequately address potentially hazardous conditions and potential conflicting uses (SEIR p. 5.17-26) so impacts would be less than significant.

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<sup>1</sup> Pub. Resources Code, § 21064.3 (“Major transit stop’ means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.”).

<sup>2</sup> Pub. Resources Code, § 21155 (“For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.”).

The PUD project is largely surrounded by existing residential and commercial development and the area is fully improved with suburban density uses. All internal streets will be improved with project construction. The roads on or adjacent to the site are linear according to the City's Circulation Element master plan of streets in terms of alignment and cross section. The site is also adjacent to Euclid Avenue, a major arterial, and the SR-60 Freeway is just north of the site with on- and off-ramps at Euclid Avenue. Therefore, the PUD project will not create a substantial increase in hazards due to a design feature. No impacts are anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**d. Result in inadequate emergency access?**

Discussion of Effects: TOP EIR found that circulation improvements under the recommended TOP circulation plan would be designed to adequately address emergency access (SEIR p. 5.17-26) so impacts would be less than significant.

As shown in Exhibit 2-4, the PUD project site and surrounding area will have standard linear street alignments and cross sections which can provide access for all emergency vehicles and will therefore not result in inadequate emergency access. No impacts are anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**18. TRIBAL CULTURAL RESOURCES.** Would the project cause a substantial adverse change in the significance of a TCR, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

**a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?**

Discussion of Effects: The subject site was previously analyzed by TOP EIR as supporting mixed use (i.e., residential and commercial uses) and is not listed in the California Register of Historic Resources or local register of historical resources. TOP EIR concluded that with recommended mitigation potential impacts to TCRs were reduced to less than significant levels. TOP EIR also included the required consultation with Native American tribal groups and representatives.

Developing a mixture of residential and commercial uses consistent with TOP and current zoning will not create greater impacts on the PUD project site than were identified in TOP EIR. In addition, the Sacred Lands File (SLF) Search commissioned through the NAHC failed to indicate known TCRs within the project boundaries or within a one-mile radius of the project area.

The PUD project site has been previously disturbed by human activities including agricultural use from the 1920's through the 1950's. The surrounding area is largely developed and supports infrastructure that would have displaced surface and subsurface archaeological resources. Therefore, it is not anticipated the proposed PUD project will impact TCRs or Native American artifacts relating to TCRs. However, to err on the side of caution, the City will apply TOP EIR Mitigation Measure CUL 5-2 and its standard conditions of approval for inadvertent discovery of archaeological resources. In addition, the City will require the developer enter into monitoring agreements with interested tribal groups. With this regulatory compliance, no significant impacts will occur.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No additional project specific mitigation is required. Mitigation Measure CUL 5-2 from TOP EIR shall be implemented.

- b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

Discussion of Effects: TOP EIR (Section 5.5) indicates no archeological sites or resources have been recorded in the City with the Archeological Information Center at San Bernardino County Museum so there were no significant impacts. The CRAs prepared for the project site included a pedestrian survey, a record search, a SLF search, and a review of existing documentation for the project site and surrounding area. The NAHC was contacted for a SLF search on April 1, 2019, and a response was received on April 15, 2019, indicating the project site contained no identified archaeological or tribal resources.

While no adverse impacts to archeological resources are anticipated at this site due to its disturbed nature, the PUD project will implement TOP MM CUL 5-2 to help assure there will be no impacts to any unknown TCRs, which may be present onsite.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required. The project will implement TOP Mitigation Measure CUL 5-2.

#### **19. UTILITIES AND SERVICE SYSTEMS.** Would the project:

- a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

Discussion of Effects: TOP EIR stated TOP would result in an overall increase in the number of residential dwelling units and non-residential square footage. To accommodate needed infrastructure expansion and improvements, the City has prepared a Water Master Plan (WMP) and Capital Improvement Program (CIP). The City also requires development impact fees and has construction requirements based on a completed evaluation of existing and projected water demands. The City and the Inland Empire Utility Authority (IEUA) have made plans for infrastructure expansion and improvement. TOP EIR concluded TOP would have less than significant direct, indirect, and cumulative impacts relating to water supply and delivery systems (SEIR p. 5.19-31). TOP EIR indicated the City concluded it could meet projected water demand through implementation of the WMP and CIP consistent with the Urban Water Management Plan requirements of the State.

There are existing water and sewer lines in Euclid Avenue and Walnut Street, as well as other utility lines or pipelines depending on the service and provider.

The PUD project is consistent with the land use designation and zoning for the site, and the project is thus consistent with the WMP. Therefore, the City has sufficient water supplies to serve the project over the 20-year life of the WMP, including during multiple dry-year scenarios.

The proposed PUD project is served by the City water system and has existing water lines available for connection in Euclid Avenue and Walnut Street and adequate water supply for the project. The proposed project is served by the City sewer system, which has existing sewer lines available for connection from Euclid Avenue and Walnut Street. The project's waste will be treated by the IEUA at the RP-1 treatment plant. RP-1 is not at capacity and future development of this project site will not cause RP-1 to exceed capacity. TOP EIR indicates increases in RP capacity in the future will be based on designated TOP land uses, and the Project is consistent with those designations. The project will therefore not require the construction of new unanticipated water or wastewater treatment facilities, or the expansion of existing facilities other than that already identified in TOP and TOP EIR. It should be noted the City does not provide will serve letters as it is both the land use authority and the water purveyor. Water and sewer service for development projects typically require the owner to complete requirements it specifies to provide adequate utility services. As the project goes through the City's development review process, the City will issue conditions of approval that will specify the developer's obligations in order to receive water and sewer service from the City. Less than significant impacts are anticipated.

TOP EIR stated TOP has the potential to increase sewer flows by 2.55 million gallons per day (mgd) within the City and by 166 mgd in the City's growth areas. TOP EIR concluded TOP would generate additional wastewater which would be adequately treated in accordance with the Santa Ana RWQCB and California Department of Public Health requirements (SEIR p. 5.19-11).

The proposed PUD project is served by the City with existing storm drains located in Euclid Avenue and Walnut Street. The project is required to meet the requirements of the Ontario Engineering Department regarding the size, location, and connectivity of storm drain facilities. Less than significant impacts are anticipated.

As discussed in Section 6 above, the PUD project will have less than significant impacts with regard to electric power and natural gas. In addition, telecommunication providers increase service and facilities as necessary as area population and land uses expand. Therefore, the PUD project will not have a significant impact on telecommunications facilities.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? In making this determination, the City shall consider whether the project is subject to the water supply assessment requirements of Water Code Section 10910, et seq. (SB 610), and the requirements of Government Code Section 664737 (SB 221).**

Discussion of Effects: TOP EIR stated TOP would result in an overall increase in the number of residential dwelling units and non-residential square footage. To accommodate needed infrastructure expansion and improvements, the City has prepared a WMP and CIP. The City also requires development impact fees and has construction requirements based on a completed evaluation of existing and projected water demands. The City and the IEUA have made plans for infrastructure expansion and improvement. TOP EIR concluded TOP would have less than significant direct, indirect, and cumulative impacts relating to water supply and delivery systems (SEIR p. 5.19-31).

The PUD project is consistent with the mixed-use land use designation and zoning for the site - it will increase the residential growth of the MU-NH area by 4% but decrease non-residential growth by 28%. No significant change in water use of this area is expected so the PUD project is thus consistent with the WMP. Therefore, the City has sufficient water supplies to serve the PUD project over the 20-year life of the WMP, including during multiple dry-year scenarios.

The project site is served by the City water system. It is estimated the project will generate approximately 926 residents and 50 employees<sup>3</sup> who would consume 97,600 gallons of water<sup>4</sup> per day (maximum 109 acre-feet per year) based on 100 gallons per person per day. Since the project site land uses are consistent with the TOP, there is currently a sufficient water supply available to the City to serve this project as per the findings of the TOP EIR. Less than significant impacts are anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**c. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

Discussion of Effects: TOP EIR stated TOP has the potential to increase sewer flows by 2.55 million gallons per day (mgd) within the City and by 1.66 mgd in the City's unincorporated Planning Area. TOP EIR concluded TOP would generate additional wastewater which would be adequately treated in accordance with the Santa Ana RWQCB and California Department of Public Health requirements (SEIR p. 5.19-11).

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<sup>3</sup> US Census and SCAG data indicates the Project could generate 926 residents (369 units X 2.51 persons/unit) and 50 employees

<sup>4</sup> 976 total persons (residents and employees) per day X 100 gallons/day = 97,600 gallons per day

It is estimated the PUD project will generate approximately 926 residents and 50 employees<sup>3</sup> who would generate 48,800 gallons of wastewater<sup>5</sup> per day (maximum 0.05 mgd based on 50 gallons per person of wastewater generated per day). The project site is served by the City sewer system, which has waste treated by the Inland Empire Utility Agency (IEUA) at the RP-1 treatment plant. RP-1 is not at capacity and future development of this project site will not cause RP-1 to exceed capacity. In addition, the project site land uses are consistent with TOP and its EIR. Therefore, less than significant impacts are anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**d. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?**

Discussion of Effects: TOP EIR indicated the City disposes of its solid waste in the Badlands Sanitary Landfill or the El Sobrante Landfill. These landfills currently have a combined excess daily capacity of 7,046 tons/day and have a remaining landfill capacity of 15,750,000 cubic yards for Badlands Sanitary Landfill and 144,000,000 cubic yards for El Sobrante Landfill. Both landfills have closure dates beyond 2050. In addition, state and local regulations and ordinances regarding the recycling of construction debris and organic wastes will further reduce the amount of solid waste transported to these landfills in the future. Therefore, TOP EIR concluded that potential impacts were less than significant with continued compliance with applicable regulations (SEIR p. 5.19-14).

It is estimated the PUD project will generate approximately 926 residents and 50 employees who would generate 3,318 pounds of waste<sup>6</sup> per day (1.7 tons per day) based on 3.4 pounds per person per day. This amount of waste represents 0.02 percent of the combined landfills' excess capacity (7,046 tons). In addition, the City currently contracts with a waste disposal company that transports trash to a landfill with sufficient capacity to handle the City's solid waste disposal. Potential impacts of the PUD project relative to waste disposal would be less than significant and consistent with the analysis presented in TOP EIR.

It should also be noted the parcel within the boundary of the PUD will be defined as a Priority Land Use (PLU) which includes residential land uses with at least ten (10) dwelling units per acre, industrial, commercial, mixed urban, and public transportation station. All PLU shall comply with the statewide Trash Provisions adopted by the State Water Resources Control Board (SWRCB) and trash requirements in the most current San Bernardino County Area-Wide MS4 Permit. Drainage from the PLU shall be designed with conveyance tributary to a Full Trash Capture System which has been approved by the SWRCB.

Therefore, the PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation required.

**e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

Discussion of Effects: TOP EIR indicated that potential impacts related to solid waste reduction would be less than significant based on compliance with state and local regulations and ordinances regarding the recycling of construction debris and organic wastes will reduce the amount of solid waste transported to the two landfills serving the City in the future. Therefore, continued compliance with the applicable regulations, would ensure future development under TOP would have less than significant impacts (SEIR p. 5.19-16).

City development review regulations will require this project comply with federal, state, and local statutes and regulations regarding solid waste. Therefore, no impacts are anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

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<sup>5</sup> 976 total persons X 50 gallons/day = 48,800 gallons per day

<sup>6</sup> 976 residents and employees X 3.4 pounds/day = 3,318 pounds/day or 1.7 tons/day

Mitigation: No project specific mitigation is required.

**20. WILDFIRE.** If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

**a. Substantially impair an adopted emergency response plan or emergency evacuation plan?**

Discussion of Effects: TOP EIR found that improvements under the recommended TOP circulation plan would be designed to adequately address emergency access. In addition, emergency access is included as part of the City's Design Review process for new development. According to the City's 2018 Local Hazard Mitigation Plan (LHMP), interstate highways would serve as major emergency response and evacuation routes. Additionally, the Fire Department reviews development applications to ensure that adequate emergency accessibility is provided based on local and state guidance. Figure S-10 of the TOP indicates that Haven Avenue to the west, Airport Drive to the north, and Jurupa Street to the south are designated evacuation routes in the City. The EIR concluded TOP would have a less than significant direct, indirect, and cumulative impacts relating to impairment of an adopted emergency response plan or emergency evacuation plan (SEIR p. 5.20-15 and p. 5.17-26).

The PUD project site is not located in or near a state responsibility area, nor is it located in or near lands classified as very high fire hazard severity zones. Therefore, no impacts are anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in the Certified TOP FEIR. No changes or additions to TOP FEIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?**

Discussion of Effects: TOP EIR indicated the City is outside of the State Responsibility Area and contains no areas subject to very high wildfire risk. Therefore, the EIR concluded TOP would result in less-than-significant risks from wildfire hazards (SEIR p. 5.20-16).

The PUD project site is not located in or near a State Responsibility Area, nor is it located in or near lands classified as very high fire hazard severity zones. Therefore, no impacts are anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**

Discussion of Effects: TOP EIR indicated the City is outside of the State Responsibility Area, and CAL FIRE and contains no areas subject to very high wildfire risk. Therefore, the EIR concluded TOP would result in less-than-significant risks from wildfire hazards (SEIR p. 5.20-16). In addition, the PUD project site is in an urbanized area surrounded by developed residential and commercial buildings so no improvements for preventing wildfires are needed either on or adjacent to the site.

The PUD project site is not located in or near a State Responsibility Area nor is it located in or near lands classified as very high fire hazard severity zones. Therefore, no impacts are anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

**d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

Discussion of Effects: TOP EIR indicated the City is outside of the State Responsibility Area, and CAL FIRE and contains no areas subject to very high wildfire risk. Therefore, the EIR concluded TOP would result in less-than-significant risks from wildfire hazards (SEIR p. 5.20-16). In addition, the project site and surrounding area are flat so there is little risk from flooding or landslides.

The PUD project site is not located in or near a State Responsibility Area, nor is it located in or near lands classified as very high fire hazard severity zones. Therefore, no impacts are anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

## 21. MANDATORY FINDINGS OF SIGNIFICANCE.

**a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat or a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

Discussion of Effects: TOP EIR evaluated the potential impacts of future development under TOP and determined impacts related to biological or cultural resources could be reduced to less than significant levels by implementing a number of mitigation measures on sites that contain such resources.

The proposed PUD project does not have the potential to reduce wildlife habitat and threaten a wildlife species with implementation of regulatory compliance relative to nesting birds if they are present onsite during grading. It will also not threaten any important examples of the major periods of California history or prehistory. Therefore, no impacts are anticipated.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project-specific mitigation is required. The project will implement TOP EIR Mitigation Measure CUL 5-2 to reduce impacts on potential archaeological resources.

**b. Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?**

Discussion of Effects: The analysis in TOP EIR, as outlined in Sections 1 through 20 of this document, indicate TOP is intended to achieve both the short- and long-term goals of the City in terms of the environment.

The PUD project does not have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals as it is consistent with TOP land use and zoning designations for the site which were analyzed in TOP EIR. The project will implement several short- and long-term goals in TOP by development of this mixed-use neighborhood community hub.

The PUD project will not result in any new, increased or substantially different impacts other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required. The project will implement TOP EIR Mitigation Measures AQ 3-1 through 3-3 to reduce potential cumulative air quality impacts.

**c. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current project, and the effects of probable future projects.)**

Discussion of Effects: TOP EIR concluded that all impacts of TOP could be reduced to less than significant levels with implementation of the recommended mitigation measures except for air quality, historical resources, noise, and transportation. The EIR further concluded TOP would not make a significant

contribution to any cumulatively considerable impacts with the recommended mitigation except for air quality.

The PUD project will make an incremental contribution to cumulatively considerable air pollutant emissions both of criteria pollutants and greenhouse gases (GHGs). This mixed-use PUD project will also make incremental impacts related to Vehicle Miles Traveled (VMT) but it meets the screening criteria of the City's VMT Guidelines for CEQA Documents so no additional analysis of VMT impacts is required. TOP EIR already examined these impacts and adopted a Statement of Overriding Considerations for the cumulative air quality impacts of future development under TOP as well as GHG and VMT impacts. Since the proposed PUD project is consistent with TOP land use designations for the site, the potential air quality impacts of the project have been previously evaluated in TOP EIR and appropriate mitigation applied (i.e., TOP EIR MM AQ 3-1 through 3-3).

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required. The project will implement TOP EIR Mitigation Measures AQ 3-1 through 3-3.

**d. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?**

Discussion of Effects: TOP EIR concluded that all impacts of TOP could be reduced to less than significant levels with implementation of the recommended mitigation measures except for air quality, historical resources, noise, and transportation. The air quality and noise impacts may have direct and/or indirect adverse effects on humans as development occurs in the City under TOP.

With implementation of the recommended TOP EIR Mitigation Measures, the PUD project does not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

The PUD project will not result in any new, increased or substantially different impacts not previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required. The project will implement TOP EIR Mitigation Measure NOI 12-1 to reduce noise impacts on project residents from Euclid Ave. traffic.

## **EARLIER ANALYSES**

*(Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or Negative Declaration. Section 15063 (c)(3)(D)):*

- a) The Ontario Plan Final EIR 2022
- b) The Ontario Plan 2022
- c) City of Ontario Zoning 2021 as amended

All documents listed above are on file with the City of Ontario Planning Department, 303 East "B" Street, Ontario, California 91764, (909) 395-2036.

## **SUMMARY OF MITIGATION MEASURES**

**The following measures are from TOP EIR for the indicated environmental issue and will be implemented by the Euclid/Walnut PUD Project:**

### **AIR QUALITY**

**AQ 3-1:** Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project construction-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the South Coast AQMD–adopted thresholds of significance, the City of Ontario Building Department shall require feasible mitigation measures to reduce air quality emissions. Potential measures shall be incorporated as conditions of approval for a project and may include:

- Require fugitive dust control measures that exceed South Coast Air Quality Management District’s Rule 403, such as:
  - Requiring use of nontoxic soil stabilizers to reduce wind erosion.
  - Applying water every four hours to active soil disturbing activities.
  - Tarping and/or maintaining a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials.
- Using construction equipment rated by the United States Environmental Protection Agency as having Tier 4 interim or higher exhaust emission limits.
- Ensuring construction equipment is properly serviced and maintained to the manufacturer’s standards
- Limiting nonessential idling of construction equipment to no more than five consecutive minutes.
- Using Super-Compliant VOC paints for coating of architectural surfaces whenever possible. A list of Super-Compliant architectural coating manufactures can be found on the South Coast Air Quality Management District’s website at: [http://www.aqmd.gov/prdas/brochures/SuperCompliant\\_AIM.pdf](http://www.aqmd.gov/prdas/brochures/SuperCompliant_AIM.pdf). These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City’s Planning Department.

**AQ 3-2:** The City of Ontario shall evaluate new development proposals within the City and require all developments to include access or linkages to alternative modes of transportation, such as transit stops, bike paths, and/or pedestrian paths (e.g., sidewalks).

**AQ 3-3:** Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project operation-phase-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology in assessing air quality impacts. If operation-related air pollutants are determined to have the potential to exceed the South Coast AQMD–adopted thresholds of significance, the City of Ontario Planning Department shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during operational activities. The identified measures shall be included as part of the conditions of approval. Possible mitigation measures to reduce long-term emissions could include but are not limited to the following:

- For site-specific development that requires refrigerated vehicles, the construction documents shall demonstrate an adequate number of electrical service connections at loading docks for plug-in of the anticipated number of refrigerated trailers to reduce idling time and emissions.

- Applicants for manufacturing and light industrial uses shall consider energy storage and combined heat and power in appropriate applications to optimize renewable energy generation systems and avoid peak energy use.
- Site-specific developments with truck delivery and loading areas and truck parking spaces shall include signage as a reminder to limit idling of vehicles while parked for loading/unloading in accordance with California Air Resources Board Rule 2845 (13 CCR Chapter 10 sec. 2485).
- Provide changing/shower facilities as specified in Section A5.106.4.3 of CALGreen (Nonresidential Voluntary Measures).
- Provide bicycle parking facilities per Section A4.106.9 of CALGreen (Residential Voluntary Measures).
- Provide preferential parking spaces for low-emitting, fuel-efficient, and carpool/van vehicles per Section A5.106.5.1 of CALGreen (Nonresidential Voluntary Measures).
- Provide facilities to support electric charging stations per Section A5.106.5.3 and Section A5.106.8.2 of CALGreen (Nonresidential Voluntary Measures; Residential Voluntary Measures).
- Applicant-provided appliances shall be Energy Star–certified appliances or appliances of equivalent energy efficiency (e.g., dishwashers, refrigerators, clothes washers, and dryers). Installation of Energy Star–certified or equivalent appliances shall be verified by the City during plan check.

## **CULTURAL RESOURCES**

**CUL 5-2:** In areas of documented or inferred archaeological and/or paleontological resource presence, City staff shall require applicants for development permits to provide studies to document the presence/absence of such resources. On properties where resources are identified, such studies shall provide a detailed mitigation plan, including a monitoring program and recovery and/or in situ preservation plan, based on the recommendations of a qualified cultural preservation expert. The mitigation plan shall include the following requirements:

- a) Archaeologists and/or paleontologist shall be retained for the project and will be on call during grading and other significant ground-disturbing activities.
- b) Should any cultural resources be discovered, no further grading shall occur in the area of the discovery until the Planning Director or designee is satisfied that adequate provisions are in place to protect these resources.
- c) Unanticipated discoveries shall be evaluated for significance by a San Bernardino County Certified Professional Archaeologist/Paleontologist. If significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon dates, and other special studies; submit materials to a museum for permanent curation; and provide a comprehensive final report including catalog with museum numbers.

## **NOISE**

**NOI 12-1:** Prior to the issuance of building permits for any project that involves a noise-sensitive use within the 65 dBA CNEL contour along major roadways, freeways, railroads, or the Ontario International Airport, the project property owner/developers shall retain an acoustical engineer to conduct an acoustic analysis and identify, where appropriate, site design features (e.g., setbacks, berms, or sound walls) and/or required building acoustical improvements (e.g., sound transmission class rated windows, doors, and attic baffling), to ensure compliance with the City's Noise Compatibility Criteria and the California State Building Code and California Noise Insulation Standards (Title 24 and 21 of the California Code of Regulations).

## REFERENCES

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*2016 Air Quality Management Plan (AQMP)*. South Coast Air Quality Management District (SCAQMD). August 2016.

*The Ontario Plan 2050, Final Supplemental Environmental Impact Report (SCH# 2021070364)*, Placeworks/City of Ontario. August 2022.

*The Ontario Plan 2050*, Placeworks/City of Ontario. August 2022.

*City of Ontario Municipal Code, Title 9, Chapter 1, Development Code, Zoning*. City of Ontario, 2022.

*City of Ontario Guidelines for the Implementation of the California Environmental Quality Act (CEQA)*. City of Ontario. 2019.

*Euclid and Walnut Planned Unit Development (PUD)*, City of Ontario, MIG Inc., June 2023 (**Appendix A**)

*Euclid and Walnut, Ontario, CA, Legacy Partners, AO Architects*.

*Euclid/Walnut Mixed Use Planned Unit Development Project, Health Risk Assessment Report Per Ontario Development Code Table 6.10-3*. MIG Inc. June 2023 (**Appendix B**)

*Hydrology Data (April 2023) and Water Quality Management Plan (June 2023)* (**Appendix C**)

*Trip Generation Assessment for the Euclid Avenue Mixed Use Apartment Project, Ontario, California*. Linscott Law & Greenspan (LLG). June 23, 2022 (**Appendix D**)

City of Ontario  
PUD 22-004

# EUCLID WALNUT

PLANNED UNIT DEVELOPMENT

A Project by Legacy Partners





# EUCLID/WALNUT

## PLANNED UNIT DEVELOPMENT

City of Ontario  
PUD 22-004  
City Council Approval Date - TBD  
City Council Ordinance No. TBD



303 E. B Street  
Ontario, CA 91764  
(909) 395-2000  
[ontarioca.gov](http://ontarioca.gov)

**Applicant:**

Legacy Partners  
5141 California Avenue  
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Irvine, CA 92617

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# 1

## INTRODUCTION

The Euclid/Walnut Planned Unit Development (PUD) functions as a set of planning and design principles, development regulations, and performance standards to guide and govern the redevelopment of a commercial shopping center into a mixed-use development. The project site comprises three parcels located on the northwest corner of Euclid Avenue and Walnut Street, as shown on Exhibit 1-1: PUD Location Map. This PUD will facilitate development of high-density apartments, restaurants, retail shops, and other commercial services that will achieve the City's goals to economically revitalize and aesthetically enhance an underutilized parcel on the Euclid Avenue corridor.

## Exhibit 1-1: PUD Location Map



This document is organized to fulfill the requirements for a PUD, as set forth in the Ontario Development Code (ODC). The Euclid/Walnut PUD replaces the existing zoning district designation and ODC regulations applicable to the affected properties. The properties also lie within the “EA - Euclid Avenue Overlay” district. Any applicable requirements of the overlay district shall remain in full force and effect. Unless otherwise defined or stated herein, definitions and interpretations contained in the ODC shall apply. City staff and private developers will rely on this PUD to determine whether precise plans for development (“Development Plans”) adequately meet the City’s land use and design objectives of The Ontario Plan (TOP) 2050.

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# 2

## OBJECTIVES

### 2.1 CONSISTENCY WITH THE ONTARIO PLAN

The Ontario Plan (TOP), the City's comprehensive plan, has undergone a significant update to shape the Ontario community through 2050. TOP 2050 has three policy level components: the Vision, a Governance Manual, and the Policy Plan (General Plan).

*The Ontario Vision* - adopted by the City Council envisioning "A sustained, community-wide prosperity which continuously adds value and yields benefits." Value is comprehensive in this regard and is expressed in land, revenues, infrastructure, businesses, education, employment, health, community services, recreation, etc. In particular, Ontario is committed to being "A Premier Community by Design." One of the foundations to accomplish this is described in the Vision as ensuring that development is "distinctive." The Euclid/Walnut PUD helps the City realize specific "Points of Vision" as outlined for "Distinctive Development" as follows:

- A system of vibrant retail, town, and neighborhood centers responsive to market demands and woven into the fabric of the community.
- A demonstrated ability to attract housing in pursuit of our acknowledged responsibility to balance housing with the job growth that drives our quality of life.
- Superior quality and design of the built environment and open spaces through careful attention to detail at every scale, including public and private spaces and structures.

*The Governance Manual* - institutionalizes Ontario's approach to governance and provides a business plan for the City. Ontario believes the City has the obligation to create, maintain, and grow economic value. The Manual guides the City's leadership and ensures that TOP 2050 is integrated into daily operations and provides for effective administration. The Euclid/Walnut PUD is established in conformance with the City's requirements and includes an administrative section consistent with provisions contained in the ODC for consideration of "Development Plans."

*The Policy Plan (General Plan)* - includes the Land Use Element, which designates the subject parcels within the Euclid/Walnut PUD as "MU - Mixed Use." Generally, these properties are developed with a mix of uses

that, when concentrated, create focal points for community activity and facilitate walking, biking, and transit use. The MU - Mixed Use land use category accommodates a horizontal and/or vertical mix of retail, service, office, restaurant, entertainment, cultural, and residential uses. The densities and intensities of the MU - Mixed Use designation represent the intended level of anticipated development; however, individual projects may vary depending upon an approved master plan, such as a specific plan or planned unit development.

Within the Land Use Element, the MU - Mixed Use designation is broken down into unique sub-categories to further refine the type of mixed-use development desired by the City. The parcels comprising the Euclid/Walnut PUD are part of a sub-area categorized as MU-NH - Mixed Use Neighborhood Activity Hub. This specific designation envisions low-rise (three to five stories) buildings, with a mix of retail and residential uses that will create identity and place, and serve surrounding residents. This category allows for residential densities ranging from 20 to 75 dwelling units per acre and non-residential intensity of 1.00 floor area ratio (FAR). Five locations within the City have the MU-NH land use designation. The Future Build-out Projections Table of the Land Use Element provides details for each of these five MU-NH sub-areas. The build-out of the 16-acre "MU-NH (Euclid & Walnut)" sub-area is projected to be 369 dwelling units and 142,840 square feet of non-residential development.

This PUD regulates the redevelopment of 10.6 acres of this sub-area to create a mixed-use project providing a total of 369 dwelling units and 12,000 non-residential square feet. The other 5.4 acres of the sub-area is located north of the PUD boundary and currently developed with 15 single family dwelling units, and approximately 28,000 square feet of non-residential development. There is a nominal increase to the total build-out projection for the number of residential dwelling units within this sub-area resulting from the combination of existing to remain and construction of new within the boundaries of this PUD. However,

it is offset by a significant reduction in the build-out of non-residential square footage should the existing uses/buildings remain unchanged on the 5.4-acre portion. Implementation of this PUD would still allow for redevelopment of the 5.4 acre portion of the sub-area of up to 130,000 of non-residential square footage, consistent with the TOP 2050 build-out projections for this sub-area.

In addition to the requirements of the Land Use Element, all mixed-use development is subject to specific "Place Types" as defined in the Community Design Element, which represent the intended outcome and character for each area. The Euclid/Walnut PUD falls within Place Type 8 (a-e). Properties with this Place Type are considered "Neighborhood Center - Infill" development where commercial and residential parcels were largely developed in an incremental manner prior to 2020. The Community Design Element acknowledges that many properties in this Place Type range in size, complexity, and relationships with surrounding streets and neighborhoods, and that redevelopment

could result in horizontal or vertical mixed use. However, all of these centers are envisioned to incorporate site design that prioritizes safe, attractive, and well-shaded pedestrian access on site, from the public rights-of-way, and from the adjacent neighborhoods.

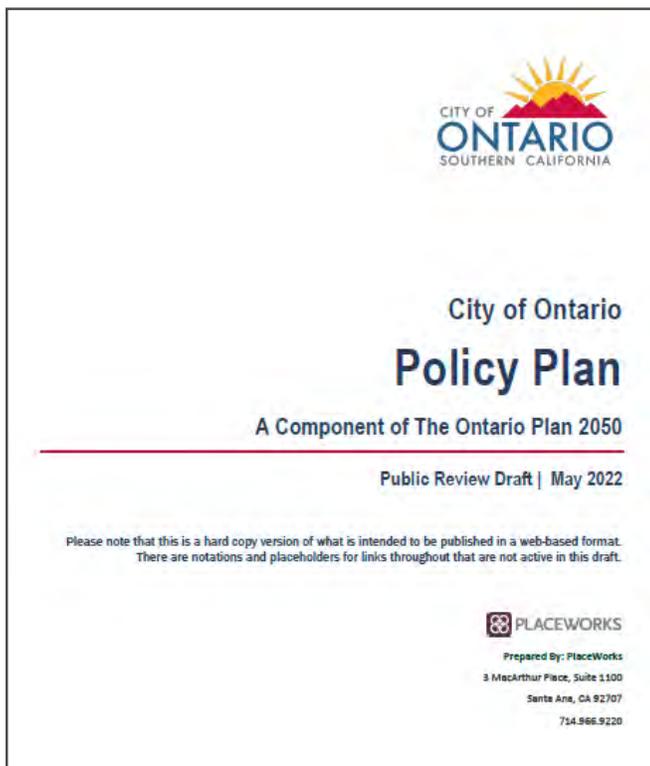
Implementation of the Euclid/Walnut PUD will achieve many City goals and policies outlined in The Policy Plan (General Plan). Those specific goals and policies are as follows.

## Land Use Element

### Goal LU-1 Balance

A community that has a spectrum of housing types and price ranges that match the jobs in the City and that make it possible for people to live and work in Ontario and maintain a quality of life.

- **LU-1.1 Strategic Growth.** We concentrate growth in strategic locations that help create place and identity, maximize available and planned infrastructure, foster the development of transit, and support the expansion of the active and multimodal transportation networks throughout the City.
- **LU-1.5 Jobs-Housing Balance.** We coordinate land use, infrastructure, and transportation planning and analysis with regional, county, and other local agencies to further regional and subregional goals for jobs-housing balance.
- **LU-1.6 Complete Community.** We incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop and recreate within Ontario.



### Goal LU-2 Compatibility

Compatibility between a wide range of uses and resultant urban patterns and forms.

- **LU-2.1 Land Use Decisions.** We minimize adverse impacts on adjacent properties when considering land use and zoning requests.
- **LU-2.2 Buffers.** We require new uses to provide mitigation or buffers between existing uses where potential adverse impacts could occur. Additional mitigation is required when new uses could negatively impact environmental justice areas.

### Goal LU-4 Phased Growth

Development that provides short-term value only when the opportunity to achieve our Vision can be preserved.

- **LU-4.2 Interim Development.** We allow development in urban, mixed use, and transit-oriented Place Types that is not immediately reflective of our ultimate Vision for the Place Type, provided it can be modified or replaced when circumstances are right to support development aligned with the Place Type Vision. We will not allow development that impedes, precludes, or compromises our ability to achieve our Vision.
- **LU-4.3 Infrastructure Timing.** We require that the necessary infrastructure and services be in place prior to or concurrently with development.
- **LU-4.4 Shared Infrastructure.** We encourage and facilitate the use of shared infrastructure (including shared or managed parking) in urban, mixed use, and transit-oriented Place Types.

## Housing Element

### Goal H-2 Housing Supply & Diversity

Diversity of types of quality housing that are affordable to a range of household income levels, accommodate changing demographics, and support and reinforce the economic sustainability of Ontario.

- **H-2.1 Corridor Housing.** We revitalize transportation corridors by encouraging the production of higher density residential and mixed-uses that are architecturally, functionally, and aesthetically suited to corridors.

- **H-2.5 Housing Design.** We require architectural excellence through adherence to City design guidelines, thoughtful site planning, environmentally sustainable practices, and other best practices.
- **H-2.6 Infill Development.** We support the revitalization of neighborhoods through the construction of higher-density residential developments on underutilized residential and commercial sites.

### Goal H-3 Governmental Regulations

A City regulatory environment that balances the need for creativity and excellence in residential design, flexibility and predictability in the project approval process, and the provision of an adequate supply and prices of housing.

- **H-3.2 Flexible Standards.** We allow flexibility in the application of residential and mixed-use development standards in order to gain benefits such as exceptional design quality, economic advantages, sustainability, or other benefits that would otherwise be unrealized.

## Environmental Resources Element

### Goal ER-1 Water & Wastewater

A reliable and cost-effective system that permits the City to manage its diverse water resources and needs.

- **ER-1.4 Supply-Demand Balance.** We require that available water supply and demands be balanced.
- **ER-1.6 Urban Run-off Quantity.** We encourage the use of low impact development strategies, including green infrastructure, to intercept run-off, slow the discharge rate, increase infiltration, and ultimately reduce discharge volumes to traditional storm drain systems.
- **ER-1.7 Urban Run-off Quality.** We require the control and management of urban run-off, consistent with Regional Water Quality Control Board regulations.
- **ER-1.8 Wastewater Management.** We require the management of wastewater discharge and collection consistent with waste discharge requirements adopted by the Regional Water

Quality Control Board.

### *Goal ER-3 Energy*

Cost-effective and reliable energy system sustained through a combination of low impact buildings, site and neighborhood energy conservation, and diverse sources of energy generation that collectively helps to minimize the region's carbon footprint.

- **ER-3.3 Building and Site Design.** We require new construction to incorporate energy efficient building and site design strategies, which could include appropriate solar orientation, maximum use of natural daylight, passive solar, and natural ventilation.

### *Goal ER-4 Air Quality*

Improved indoor and outdoor air quality and reduced locally generated pollutant emissions.

- **ER-4.1 Land Use.** We reduce GHG and other local pollutant emissions through compact, mixed use, and transit-oriented development and development that improves the regional jobs-housing balance.

## **Community Economics Element**

### *Goal CE-1 Complete Community*

A complete community that provides for all incomes and stages of life.

- **CE-1.6 Diversity of Housing.** We collaborate with residents, housing providers, and the development community to provide housing opportunities for every stage of life; we plan for a variety of housing types and price points to encourage the development of housing supportive of our efforts to attract business in growing sectors of the community while being respectful of existing viable uses.
- **CE-1.7 Retail Goods and Services.** We seek to ensure a mix of retail businesses that provide the full continuum of goods and services for the community.

### *Goal CE-2 Placemaking*

A City of distinctive neighborhoods, districts,

corridors, and centers where people choose to be.

- **CE-2.1 Development Projects.** We require new development and redevelopment to create unique, high-quality places that add value to the community.
- **CE-2.2 Development Review.** We require those proposing new development and redevelopment to demonstrate how their projects will create appropriately unique, functional, and sustainable places that will compete well with their competition within the region.

## **Safety Element**

### *Goal S-1 Seismic & Geologic Hazards*

Minimized risk of injury, loss of life, property damage, and economic and social disruption caused by earthquake-induced and other geologic hazards.

- **S-1.1 Implementation of Regulations and Standards.** We require that all new habitable structures be designed in accordance with the most recent California Building Code adopted by the City, including provisions regarding lateral forces and grading.
- **S-1.2 Entitlement and Permitting Process.** We follow state guidelines and the California Building Code to determine when development proposals must conduct geotechnical and geological investigations.

### *Goal S-2 Flood Hazards*

Minimized risk of injury, loss of life, property damage and economic and social disruption caused by flooding and inundation hazards.

- **S-2.5 Stormwater Management.** We maintain the storm drain system to convey a 100-year storm, when feasible, and encourage environmental site design practices to minimize flooding and increase groundwater recharge, including natural drainage, green infrastructure, and permeable ground surfaces.

### *Goal S-3 Fire & Rescue Hazards*

Reduced risk of death, injury, property damage and economic loss due to fires, accidents and normal everyday occurrences through prompt

and capable emergency response.

- **S-3.1 Prevention Services.** We proactively mitigate or reduce the negative effects of fire, hazardous materials release, and structural collapse by implementing the regularly adopted California Fire Code and California Building Code.
- **S-3.8 Fire Prevention through Environmental Design.** We require new development to incorporate fire prevention consideration in the design of streetscapes, sites, open spaces, and buildings.

### *Goal S-4 Noise Hazards*

An environment where noise does not adversely affect the public's health, safety, and welfare.

- **S-4.1 Noise Mitigation.** We utilize the City's Noise Ordinance, building codes, and subdivision and development codes to mitigate noise impacts.

### *Goal S-5 Wind-Related Hazards*

Minimize the risk of injury, property damage, and economic loss resulting from windstorms and wind-related hazards.

- **S-5.1 Dust Control Measures.** We require the implementation of Best Management Practices for dust control at all excavation and grading projects.

### *Goal S-7 Law Enforcement*

Residential neighborhoods, commercial areas, and industrial districts that are kept safe through a multi-faceted approach of prevention, suppression, and community involvement in public safety.

- **S-7.4 Crime Prevention through Environmental Design (CPTED).** We require new development to incorporate CPTED in the design of streetscapes, sites, open spaces, and buildings.

## **Community Design Element**

### *Goal CD-1 Image & Identity*

A dynamic, progressive city containing distinct and complete places that foster a positive sense of identity and belonging among residents, visitors, and businesses.

- **CD-1.2 Place Types.** We establish Place Types in urban, mixed use, and transit-oriented areas to foster the City's identity as a premier community and require new development within each Place Type to incorporate prescribed urban patterns, forms, and placemaking priorities.

### *Goal CD-2 Design Quality*

A high level of design quality resulting in neighborhoods, commercial areas, public spaces, parks, and streetscapes that are attractive, safe, functional, human- scale, and distinct.

- **CD-2.1 Quality Building Design and Architecture.** We encourage all development projects to convey visual interest and character through:
  1. Building volume, massing, and height to provide context-appropriate scale and proportion;
  2. A true architectural style which is carried out in plan, section, and elevation through all aspects of the building and site design and appropriate for its setting; and
  3. Exterior building materials that are articulated, high quality, durable, and appropriate for the architectural style.
- **CD-2.4 Urban, Mixed Use, and Transit-oriented Areas.** We establish Place Types to require mixed use, urban, and transit-oriented areas to be designed and developed as pedestrian oriented areas that are integrated with adjacent neighborhoods and promote a vibrant, comfortable, and functional environment, as defined for each Place Type.
- **CD-2.7 Sustainability.** We collaborate with the development community to design and build neighborhoods, streetscapes, sites, outdoor spaces, landscaping, and buildings to reduce energy demand through solar orientation, maximum use of natural daylight, passive solar and natural ventilation, building form, mechanical and structural systems, building materials, and construction techniques.

- **CD-2.8 Safe Design.** We incorporate defensible space design into new and existing developments to ensure the maximum safe travel and visibility on pathways, corridors, and open space and at building entrances and parking areas by avoiding physically and visually isolated spaces, maintaining visibility and accessibility, and using lighting.
- **CD-2.9 Landscape Design.** We encourage durable, sustainable, and drought-tolerant landscaping materials and designs that enhance the aesthetics of structures, create and define public and private spaces, and provide shade and environmental benefits.
- **CD-2.13 Entitlement Process.** We work collaboratively with all stakeholders to ensure a high degree of certainty in the efficient review and timely processing of all development plans and permits.

### *Goal CD-3 Urban, Mixed Use, and Transit-Oriented Place Types*

Vibrant urban environments that are organized around intense buildings, pedestrian and transit areas, public plazas, and linkages between and within developments that are conveniently located, visually appealing and safe during all hours.

- **CD-3.1 Unique Identity.** We promote development that heightens the unique character and identity of each Place Type by requiring compatible land uses and land planning, site design, and building design that promotes an active public realm.
- **CD-3.4 Context-Aware and Appropriate Design.** We require appropriate building and site design that complements existing development, respects the intent and identity of the Place Type, and provides appropriate transitions and connections between adjacent uses to ensure compatibility of scale, maintain an appropriate level of privacy for each use, and minimize potential conflicts.
- **CD-3.5 Active Frontages.** We create lively pedestrian streetscapes by requiring primary building, business, and residential entrances, outdoor dining, and storefronts be located on ground floors adjacent to sidewalks or public spaces and designed to maximize

#### CD-3.1 Unique Identity



#### CD-3.4 Context Aware and Appropriate Building Design



#### CD-3.5 Active Frontages



#### CD-3.6 Managed Infrastructure



## 2.2 EUCLID AVENUE (EA) OVERLAY DISTRICT AND HISTORIC RESOURCES

The EA Overlay zoning district was established to recognize, protect, and enhance the visual character and quality of Euclid Avenue as a major scenic and historic resource in Ontario as well as its position on the National Register of Historic Places. Properties located within the EA require approval of a Certificate of Appropriateness to ensure no adverse impacts to designated historic resources occur as a result of new development and buildings. This PUD includes design criteria within Chapter 5 for site and building design that strengthen the overall character of Euclid Avenue.

The public right-of-way of Euclid Avenue from Philadelphia Street northward to the Interstate 10 was designated as Local Landmark No. 67 on January 16, 2001 by the Ontario City Council. On August 10, 2005, the public right-of-way of Euclid Avenue from Philadelphia Street in Ontario northward to 24th Street in Upland was listed on the National Register of Historic Places as a significant cultural landscape. One contributing

character defining-feature of the right-of way is the 60-foot-wide median separating the north/southbound vehicular lanes of Euclid Avenue. This PUD does not propose to alter or affect this character-defining feature.

Although the parcels within this PUD have Euclid Avenue frontage, the location of this PUD is separated from the southern boundary (Philadelphia Street) of this Local Landmark/ National Register of Historic Places designation by a distance of approximately 0.4 miles. The extended view of the Euclid Avenue corridor, when viewed northward from the parcels or southward towards the parcels of this PUD, is also visually disrupted within the immediate foreground view as a result of the Pomona Freeway (SR-60), which is elevated above Euclid Avenue. Additionally, this PUD is separated from the closest boundary of an historic district, the Downtown Historic District, by a distance of approximately three miles. Based upon the City's Historic Preservation records, there are no potential or proposed historic resources within the immediate surrounding area of the parcels within this PUD.



*Historic Euclid Avenue*

### 2.3 EUCLID / WALNUT PUD OBJECTIVES

The Euclid/Walnut PUD establishes a set of planning and design principles, development regulations, and performance standards to guide and govern the development of a defined project site. This PUD will facilitate redevelopment of the project site with structures and related improvements that support residential and non-residential land uses within the same project site. In addition to facilitating achievement of many City goals and policies as outlined herein, this PUD has the following objectives:

- Develop and provide new, high-quality rental housing combined with a mixed-use component.
- Provide transition between new mixed-use development and surrounding residential neighborhoods and commercial properties.
- Provide areas of private and passive open space for each residential unit, as well as community gathering and active open spaces.
- Promote development that is consistent with the MU-NH - Mixed Use Neighborhood Activity Hub land use designation.
- Promote revitalization of commercial uses on the project site by establishing new ground-floor retail and similar uses that serve on-site residents and those in surrounding neighborhoods.
- Provide outdoor gathering places adjacent to commercial storefronts, such as outdoor patio or bench seating with inviting/attractive landscape elements.
- Orient non-residential, ground-floor uses towards Euclid Avenue.
- Incorporate site design solutions to allow for phased development.
- Satisfy the build-out projections for residential dwelling units within the MU-NH (Euclid-Walnut) sub-area, as defined in TOP 2050.





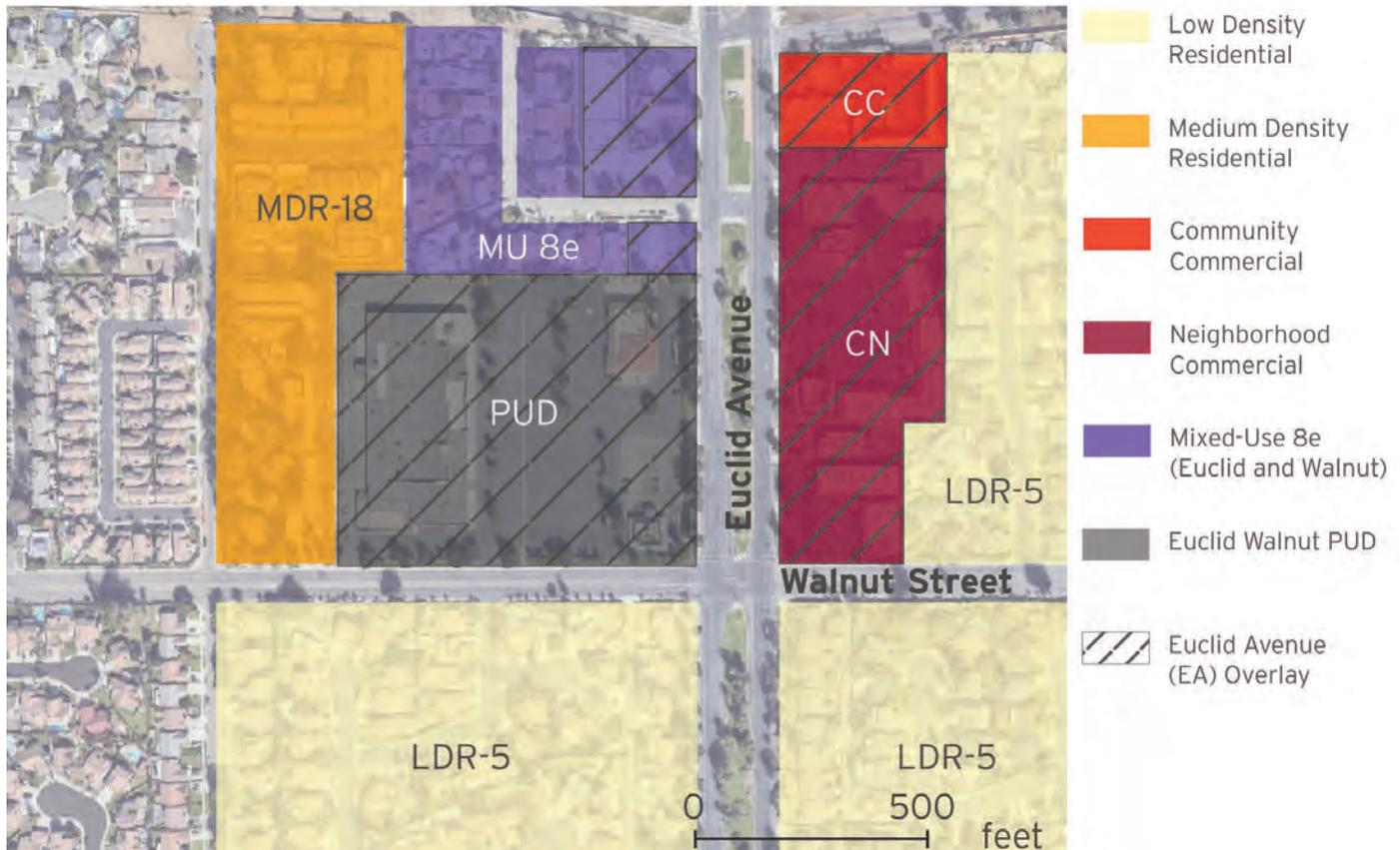
# 3

## LAND USE PLAN

### 3.1 LAND USE AND ZONING

The Euclid/Walnut PUD applies to the parcels shown on Exhibit 3-1: Land Use/Zoning Map. The map establishes a single zoning district of PUD - Planned Unit Development providing for a mix of commercial and residential uses consistent with TOP 2050 MU-NH land use designation. This PUD allows both horizontal and vertical mixed-use development in buildings of three and four stories. Buildings with direct Euclid Avenue frontage will contain ground-floor commercial uses and residential units directly above. All other buildings will contain residential units on all floor levels. A combination of garages, tandem spaces, carports, and surface parking spaces will be provided, with gated access limited to residents and residents' guests. Unrestricted access to surface-level parking will serve the commercial uses and provide additional resident guest parking spaces. Residents will enjoy a low-maintenance, urban lifestyle with conveniently located shopping, dining, and personal service businesses in combination with convenient access to established transportation routes and employment hubs.

### Exhibit 3-1: Land Use/Zoning Map



### 3.2 PHASING AND BUILDING OUT

Implementation of the land use plan and the build-out allowable under this PUD will be achieved through two redevelopment phases. Exhibit 3-2: Phase 1 Conceptual Site Plan illustrates the development plan for the initial phase.

The first phase will retain the fast-food, drive-through restaurant use, occupying an approximately 4,100-square-foot building and its related site improvements. The remaining area within the boundaries of this PUD will be developed with two four-story buildings and six three-story buildings, providing a combined total of 346 dwelling units, 5,400 square feet of ground-floor commercial space, associated on-site parking areas for both residential and non-residential land uses, and landscaping and recreational amenities for residents<sup>1</sup>.

The second phase will implement the full build-out of the PUD area with demolition of the restaurant and related site improvements; replacing them with an additional mixed-use, four-story building. Completion of the second phase will provide up to an additional 23 dwelling units and up to an additional 6,600 square feet of ground-floor commercial space, plus associated site improvements.

This PUD, inclusive of all development standards and requirements, applies to both phases. Ultimate build-out will result in a maximum of 369 dwelling units and approximately 12,000 square feet of commercial land uses.

1. Demolition of approximately 100,950 square feet of older commercial buildings will occur before project construction proceeds.

Exhibit 3-2: Phase 1 Conceptual Site Plan



### 3.3 PERMITTED USES

Table 3-1: Permitted Uses lists the allowable land use, activity, or facility permitted within this PUD. A land use that is not listed shall be considered a prohibited land use unless otherwise allowed by the Zoning Administrator in accordance with the requirements and procedures outlined in the ODC. The land uses established in this table are consistent with those listed uses and land use definitions of the ODC. The ODC relies upon the North American Industry Classification System (NAICS) for non-residential land uses, utilizing the NAICS website definitions for each business establishment classification. The “Notes or ODC Regulations” column provides reference to the location of any specific regulations, operating conditions, and/or development standards applicable to the corresponding land use, activity, or facility; as well as exception to any standards or requirement as modified within this PUD. The “Permit Type” column symbols shall have the same meaning and utilize the same permit type, process, and approvals as contained in the ODC.

TABLE 3-1: PERMITTED USES		
LAND USES, ACTIVITIES, AND FACILITIES	PERMIT TYPE “P” – PERMITTED BY RIGHT “C” – CONDITIONAL USE PERMIT “A” – ADMINISTRATIVE USE PERMIT	NOTES OR ODC REGULATIONS
RESIDENTIAL		
Accessory Dwelling Units	P	ODC Section 5.03.010
Animal Keeping (accessory) Household Pets - 4 or fewer pets	P	
Community Gardens (accessory)	A	ODC Section 5.03.410
Home Occupation (accessory)	A	ODC Section 5.03.240
Multiple-Family Dwellings	P	
MIXED USES		
Residential Mixed-Use Developments	P	ODC Section 5.03.285
NON-RESIDENTIAL USES – LIMITED TO GROUND FLOOR AND EUCLID AVENUE FRONTAGE		
Alcoholic Beverage Sales (off-premise)	C	ODC Section 5.03.025
Art Dealer	P	
Clothing, Shoes and Jewelry Store	P	
Consignment Shop	P	
Convenience Store	P	
Document Preparation Services	P	
Drycleaning and Laundry Services - Limited to Drop-off and Pick-up	P	Drive-thru prohibited
Electronics and Appliance Store	P	ODC Section 5.03.175
Finance and Insurance Services	P	Check Cashing, Advanced Payday, and Pawnshops prohibited

TABLE 3-1: PERMITTED USES

LAND USES, ACTIVITIES, AND FACILITIES	PERMIT TYPE “P” – PERMITTED BY RIGHT “C” – CONDITIONAL USE PERMIT “A” – ADMINISTRATIVE USE PERMIT	NOTES OR ODC REGULATIONS
Florist	P	
Furniture and Home Furnishings Store	P	ODC Section 5.03.210
General Merchandise Store	P	
Health and Personal Care Store	P	
Investigative and Security Services	P	
Office Administrative Support Services	P	
Office Supplies, Stationary and Gift Store	P	
Personal and Household Goods Repair	P	
Personal Care Services With Massage Services	P A	ODC Section 5.03.270
Personal Fitness Training Studio	P	Limited to 10,000 sq. ft.
Pet Supply Store	P	Animal Sales prohibited
Pharmacies and Drug Store	P	Drive-thru prohibited
Police Storefront/Community Services	P	
Private Mail Centers and Postal Supply	P	
Professional and Technical Services	P	Limited to non-medical
Real Estate, Rental, and Leasing Services	P	
Restaurants, Fast Food With Drive-Thru	P P	ODC Section 5.03.150
Restaurants, Limited Service With Alcoholic Beverage Sales With Live Entertainment	P C C	ODC Section 5.03.025 ODC Section 5.03.257
Restaurants, Snack and Nonalcoholic Beverage Bar	P	
Specialty Food and/or Beverage Store With Alcoholic Beverage Sales	P C	ODC Section 5.03.025
Sporting Goods, Hobby, Book, and Music Store	P	
Supermarket and Grocery Store	P	
Travel Arrangement Services	P	



# 4

## DEVELOPMENT REGULATIONS

This section sets forth standards that govern the placement, height, and bulk of permitted buildings and other structures; establishes locational criteria for vehicular access to development sites; establishes parking and loading requirements; and specifies minimum requirements for recreational amenities for residential uses. Unless otherwise modified herein, development within this PUD shall comply with the ODC standards and requirements as may apply generally to Multiple-Family Dwellings and Commercial development, as determined appropriate by the Director. Table 4-1: Summary of Development Standards provides an at-a-glance reference to the regulations for the various standards, and is to be used in combination with the descriptions and specific criteria listed for each of the standards.

#### 4.1 INTENSITY

The intensity of non-residential development shall not exceed a maximum 0.5 floor area ratio (FAR) based upon the net site area. The calculation shall be derived by dividing the gross square footage of the commercial space of the vertical mixed use buildings by the net site area. In determining FAR, this square footage should not include indoor common amenity space or other interior square footage serving the residential land uses.

#### 4.2 DENSITY

The density of residential development shall not exceed a maximum 40 dwelling units per acre based upon the net site area. In no case shall the total number of residential units exceed 369 units upon build-out of Phase 2.

#### 4.3 BUILDING ENVELOPE

- a. Non-residential land uses shall be on the ground-floor level of vertical mixed-use buildings.
- b. Residential dwelling units may be located on any floor level.
- c. The height of four-story buildings shall not exceed 60 feet. The height of three-story buildings shall not exceed 50 feet. Height shall be measured as specified in the ODC and is inclusive of architectural projections.
- d. Any rooftop mechanical venting or communications equipment shall be built within or otherwise screened by the roof structure so that they do not project above parapets and are not visible from any public right of way, or neighboring building.
- e. The location of vertical mixed-use buildings shall be limited to buildings with frontage along Euclid Avenue.
- f. The building edge along Euclid Avenue may vary. It may occur a minimum of 10 feet behind the public right-of-way line or at a point that allows for up to two parking bays

served by a drive aisle, up to a maximum building setback of 80 feet.

- g. The building edge along Walnut Street shall provide a minimum setback of 10 feet.
- h. Building setbacks shall be measured from the ultimate property lines or ultimate right-of-way width, whichever is greater.
- i. Placement of buildings and structures shall conform with other specifications of Table 4-1: Summary of Development Standards.
- j. Any yard areas provided between the buildings and the right-of-way may be finished with hardscape, including walls/fences, or landscape.

#### 4.4 VEHICLE ACCESS

Vehicular access from any public right-of-way shall be limited to two locations along Euclid Avenue and a maximum of three locations along Walnut Street, as approved by the City Engineer.



#### 4.5 PARKING FACILITIES, SUPPLY, AND DESIGN

On-street parking on Euclid Avenue and Walnut Street adjacent to this PUD shall not be allowed.

- a. Non-residential uses shall be provided with parking at a minimum ratio of one parking space per 250 gross square feet of building area. Such parking shall be located on site, and shall be accessible during operating hours of the businesses being served.
- b. Residential uses shall be provided with parking at a minimum ratio of 1.2 parking spaces per bedroom in each dwelling unit, inclusive of providing guest or unassigned parking spaces. Resident parking shall be located on site, and may have access restricted by gated entrance. Resident parking for each dwelling unit or guests of that dwelling unit may be provided within a garage space, as a tandem space, within a carport, as surface level parking, or in combination. Tandem spaces are restricted to those directly in front of a garage door and shall be assigned to the same dwelling unit as the garage space.
- c. A parking management plan shall be submitted for the Planning Director approval prior to the issuance of building permits. The plan shall address the assignment, distribution, and functionality of all parking spaces among the various uses, including the use of non-residential spaces providing overflow resident guest spaces when businesses are closed.
- d. Parking spaces shall not obstruct access to building entrances, pedestrian paths, trash storage areas, or loading areas.
- e. Parking space dimensions, drive aisles, etc. shall generally conform to the standards set forth in the ODC unless modified herein.

#### 4.6 RESIDENTIAL OPEN SPACE AND COMMON AMENITIES

Open space for the residential component shall be provided at a minimum ratio of 250 square feet per dwelling unit. Such space can be a combination of residential private open space and common amenities, subject to the following:

- a. A minimum of 50 square feet of individual private open space, in the form of balcony or patio area directly accessible from the interior of each dwelling unit, shall be provided. Individual balcony or patio areas shall have a minimum dimension for length and width of five feet.
- b. Common amenities shall be provided at the minimum ratio of 175 square feet per dwelling unit. This may include a combination of passive and active, indoor and outdoor spaces, roof-top or upper floor decks, as well as landscaped and hardscaped ground surfaces providing paseos between or adjacent to buildings. Up to 15 percent of the overall common amenity square footage may consist of indoor area and be grouped into a single building that is accessible to all residents. Such indoor area shall provide opportunities for fitness, lounge/gathering space, business/mail center, and similar amenities. The remaining common amenities provided shall be in the form of outdoor common areas consisting of both programmed and unprogrammed spaces. Programmed space may provide specific amenities: such as a dog park, seating/conversational areas, outdoor cooking facilities with table seating areas, etc. Unprogrammed space may provide passive use such as landscaped paseos.

#### 4.7 SERVICE FACILITIES

Service areas and facilities shall comply with the following:

- a. Loading and unloading in proximity to both the residential and non-residential uses shall be addressed as part of the parking management plan submitted to the Planning Director to ensure coordination of operational hours and occupancy/vacancy of parking areas.
- b. Trash receptacles/recyclable container storage areas shall be provided for all residential and non-residential uses. Such receptacle/storage area may receive trash from commercial and residential sources. Locations, sizes, and design of such areas shall be readily accessible by trash disposal company equipment and work crews, as approved by the Planning and Public Works Directors, in consultation with the trash disposal vendor.
- c. Individual storage units shall be provided for the occupants of each dwelling unit, exclusive of any closets in the units. The total amount of cubic feet provided shall average 150 cubic feet per dwelling unit.

#### 4.8 SIGNS

A Master Sign Program shall be submitted for approval by the Planning Director prior to issuance of a building permit to provide design and standards applicable to both residential and non-residential land uses within this PUD. The program will include specific sign criteria for gated access points. All signs shall comply with standards in the ODC. Any signage within the Euclid Avenue Caltrans right-of-way will require Caltrans review and approval.

#### 4.9 LANDSCAPE/HARDSCAPE

- a. A detailed plan shall be submitted with the Development Plan specifying all landscape and hardscape elements of the residential open space and common amenities, as well as the perimeter yards abutting the street rights-of-way and all street trees.
- b. Water conservation shall be provided through low water using plant materials, hydro zones, water efficient irrigation and weather-based controllers as required by City codes. Landscaped areas may be used for storm water infiltration through vegetated swales, retention basins, or dry wells as needed with the use of appropriate planting materials.
- c. The landscape design shall generally satisfy the requirements of the Landscape Development Standards outlined in the ODC and shall create well-functioning spaces within a sustainable design utilizing materials as provided in Table 5-1: Master Plant Palette.
- d. Within parking areas, the following landscape areas and standards apply:
  1. For each row of parking spaces located within the restricted access (gated) parking areas, planter islands of at least six feet in width that extend the full length of the abutting parking space shall be located at a minimum rate of every 15 spaces. This rate shall be increased to every 10 spaces for parking areas with unrestricted access and/or adjacent to Euclid Avenue.
  2. Tree wells, tree diamonds, or center planter strips shall be provided to allow for the planting of shade trees at a minimum ratio of one tree for each five parking spaces. Tree wells shall not have a minimum dimension less than five feet.
  3. All landscape planters within parking areas shall be delineated with a six-inch-wide curb regardless of parking space configuration. The use of a 12-inch-wide curb may be provided to allow for a "step area" in circumstances where there is increased frequency of passengers exiting or entering a vehicle.



4. Bordering the Euclid Avenue frontage, a minimum 10 foot in depth planter area shall be provided between the public right-of-way and a parking space oriented perpendicular to the right-of-way.
5. A minimum 20-foot deep planter area shall be provided at a driveway between any public right-of-way to the first parking space to allow for a minimum 20-foot drive aisle throat.
- f. Street trees shall comply with the variety, size, and spacing as directed by the City of Ontario Master Street Tree Plan.

#### 4.10 FENCES AND WALLS

- a. Fences and walls shall be an integral design or compatible with the building architecture and shall comply with the height and materials shown in Exhibit 5-6: Fence/Wall Concepts.
- b. Fences and walls may be setback zero feet from property lines except where such fence or wall is required to comply with Engineering Corner Sight Distance Standards and other applicable standards.
- c. Decorative walls, monuments, and/or other similar features shall not encroach into the public right-of-way.

#### 4.11 PUBLIC RIGHT-OF-WAY IMPROVEMENTS

As determined by the City Engineer, design and construction of any street improvements adjacent to the property frontage of Euclid Avenue and Walnut Street shall be conditioned and may include, but not be limited to, concrete curb and gutter, sidewalk, LED street lights, signing and striping, and parkway landscaping. Any improvements within the Euclid Avenue Caltrans right-of-way will require Caltrans review and approval.

#### 4.12 INFRASTRUCTURE

The parcels within the boundary of this PUD shall be served by existing water lines and wastewater flows and/or upgraded to satisfy the required capacities as determined by the City and its service purveyors/agencies, including the Fire Department.

On-site stormwater drainage facilities shall be provided consistent with the San Bernardino County Stormwater Program's Water Quality Management Plan (WQMP) requirements for new development projects. Stormwater capture and infiltration facilities may include the utilization of vegetated swales, depressed landscaped basins, pervious concrete pavement, and/or underground stormwater retention/infiltration vaults.

The parcels within the boundary of this PUD are considered a Priority Land Use (PLU). A PLU shall comply with the statewide Trash Provisions adopted by the State Water Resources Control Board (SWRCB) and trash requirements in the most current San Bernardino County Area-Wide MS4 Permit. Drainage from the PLU shall be designed with conveyance tributary to a Full Trash Capture System which has been approved by the SWRCB.

### 4.13 SUMMARY OF DEVELOPMENT STANDARDS

Table 4-1: Summary of Development Standards provides the quantitative development standards set forth in previous Sections 4.1 through 4.12 and any additional requirements for development within this PUD.

TABLE 4-1: SUMMARY OF DEVELOPMENT STANDARDS		
DEVELOPMENT STANDARD	REQUIREMENT	NOTES
Maximum Intensity - Floor Area Ratio	0.50 FAR	Gross building square footage of commercial space
Density Range - Minimum and Maximum	20.1 - 40	Up to a maximum of 369 dwelling units
Maximum Building Height by Number of Stories Four Stories Three Stories	60 ft. 50 ft.	Inclusive of architectural projections and equipment screening
Building Setbacks - From Right-of-Way	10 ft. minimum	
Setbacks - Interior Property Line Buildings Adjacent to Residential Buildings Adjacent to Non-Residential Carport or Trash Enclosure	50 ft. minimum 5 ft. minimum 5 ft. minimum	
Building Separation Building to Building Building to Drive Aisle or Parking Areas Building to Carport Patio to Patio	25 ft. minimum 5 ft. minimum 25 ft. minimum 15 ft. minimum	Individual driveway depth limited to 5 ft. or less, or 18 ft. or more
Minimum Number of Parking Spaces Ratio for Residential Uses Ratio for Non-Residential Uses	1.2 spaces/bedroom 1 space/250 sq. ft.	Inclusive of guest spaces
Residential Open Space and Common Amenities - Combined Minimum Ratio Minimum Private Open Space Ratio Minimum Common Amenity Ratio	250 sq. ft./du 50 sq. ft./du 175 sq. ft./du	5 ft. minimum width and length 15% maximum indoor
Residential Storage Units	150 cubic feet/du minimum	Does not include closets or cabinets interior to the unit

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# 5

## DESIGN CRITERIA

New development implemented under this PUD will generate new uses and design aesthetics in a way that fulfills many of the design goals and policies discussed previously in Chapter 2. The Community Design Element in TOP 2050 outlines specific “Place Types”; this PUD is categorized under Place Type 8e, which is considered “Neighborhood Center - Infill” type development, where the commercial and residential parcels were largely developed in an incremental manner prior to 2020. Redevelopment could result in either horizontal or vertical mixed use and are envisioned to incorporate site design that prioritizes safe, attractive, and well-shaded pedestrian access from the public rights-of-way and adjacent neighborhoods.

The parcels within this PUD site do not contain significant buildings, structures, or locations subject to historic preservation. While the first phase of development retains an existing fast-food restaurant structure, this building is not considered historic. The new infill development will include architecture that creates a dynamic visual environment and increases the pedestrian experience. The design criteria for the buildings provide articulation, dynamic materials and colors, and avoid bulky and monotonous elevations. Street trees and landscaped street-facing setback areas will provide opportunities to frame the street, create a pleasant pedestrian pathway, and minimize the building bulk from the public right-of-way.

The following sections provide guidance to City staff and private developers in the design of buildings, yards, and streets. Variations from strict interpretation of the standards are permitted, provided that the integrity of the urban design is not compromised. The following criteria shall be incorporated into the Development Plan for each phase of this PUD, subject to final interpretation by the Planning Commission.

### 5.1 BUILDING ORIENTATION

- a. Buildings along Euclid Avenue shall provide storefronts that invite pedestrian activity.
- b. Architectural focal treatments such as taller elements, textured surfaces, and unique fenestration shall be provided on frontage facing public streets.
- c. Buildings located at the street corner shall be designed to incorporate architectural features that respond to the corner location by having directed entries and/or tower elements.
- d. Multiple shop entrances and display windows with clear glazing, shall be provided along Euclid Avenue facades.

### 5.2 ACCESS AND PARKING FACILITIES

- a. Vehicular access and on-site parking shall be designed to reduce visual impact along Euclid Avenue and Walnut Street.
- b. On-site parking facilities serving non-residential uses shall be readily accessible, screened, and separated from the public right-of-way views with landscaping, including shade trees.
- c. On-site parking facilities serving residential uses may be located behind gated ingress/egress points. Gate access points from Euclid Avenue shall be set back to allow stacking of at least two vehicles, with sufficient space configured to allow a vehicle to turn around without backing into the street. The primary entry gate serving residential uses shall be designed to be easily recognizable to visitors.
- d. Carports and individual garage entries shall be designed to be compatible with the building architecture and use similar colors, materials, and details.

### 5.3 SERVICE FACILITIES

- a. Service, loading and, storage facilities shall be located away from public streets, outdoor spaces, and adjacent residential uses.
- b. Electrical equipment shall be located on the interior of a building. When interior locations are not practical, electrical equipment shall be enclosed and screened from public streets with walls, fencing, and/or landscaping that allows for sufficient ventilation, or buried in vaults.
- c. Service areas shall be screened and gated.
- d. All types of loading doors within view of public streets shall be screened with walls, berms, or plant materials.

## 5.4 PEDESTRIAN LINKAGES

- a. Pedestrian pathways shall be designed and located for clear and comfortable on-site pedestrian circulation. Sidewalks and pedestrian paths shall provide convenient connections between storefronts, outdoor spaces, and parking, as well as portals to adjacent residential uses.
- b. Landscape paseos shall be used to reinforce pedestrian connections. For instance, attractive paving and planting design may identify and highlight these connections by establishing a visual separation between vehicular and pedestrian routes and provide passive open space opportunities for residents.

## 5.5 ARCHITECTURAL CHARACTER

- a. The architectural character shall reflect the various styles within the City and along Euclid Avenue and shall fit in contextually without matching. The use of complementing proportions, building details, and building materials shall be employed.
- b. Compatibility between the vertical and horizontal mixed-use architecture shall be achieved through the use of unifying elements such as similar materials and colors.
- c. A schematic illustration of acceptable architectural character is shown in Exhibit 5-1: Architectural Character - Vertical Mixed-Use, Exhibit 5-2: Architectural Character - Three Story Residential, and Exhibit 5-3: - Four Story Residential.

## 5.6 MASSING & SCALE

- a. Simple, yet varied massing shall be used, with wall openings that create shadow line and provide visual relief.
- b. Massing and height of corner elements shall be emphasized by using strong and identifiable building forms such as taller building mass, tower element, or cupola.
- c. Building increments shall employ various architectural devices such as changes in colors/finish material, horizontal breaks and offsets, upper building portion reflecting the same increment of articulation as the ground level, and use of trim and moldings at the top of facades that reflect the vertical massing of the building.
- d. Where buildings will be of varying heights, they shall be designed to promote transition in massing and avoid abrupt changes in scale within the development.

## 5.7 ARTICULATION & FENESTRATION

- a. Buildings shall have three-dimensional qualities.
- b. The base and upper levels of a vertical mixed use building shall be differentiated with features for storefronts such as a bulkhead, display windows, and/or transom and detailed trim.
- c. Buildings shall be articulated on all sides. Fenestration, changes in wall plane, material, texture, color, etc. shall be used to create shadow lines and articulate building walls.
- d. Highly visible public entrances shall be provided where buildings are oriented towards Euclid Avenue to provide individual shop entrances featuring recesses, overhangs, special materials, and/or detailing.

# Exhibit 5-1: Architectural Character — Vertical Mixed-Use



- A** PACER WHITE SW6098 (OR SIMILAR)
- B** MYSTERIOUS MAUIVE SW6262 (OR SIMILAR)
- C** STARRY NIGHT SW6540 (OR SIMILAR)
- D** MON ORE SW705F (OR SIMILAR)
- E** TRICORN BLACK SW720E (OR SIMILAR)
- F** HIGH REFLECTIVE WHITE SW7004 (OR SIMILAR)

- G** NAVEL SW6887 Bldg. A Accent Color
- H** FORSYTHA SW6027 Bldg. B Accent Color
- I** CENTER STAGE SW6920 Bldg. C Accent Color



**1** EXTERIOR PLASTER 20/30 SAND FINISH TO MATCH PAINT SPECS



**2** FOAM TRIMS SHAPES AND SIZES WILL VARY TO MATCH PAINT SPECS F



**3** FIBER CEMENT LAP SIDING SMOOTH TO MATCH PAINT SPECS C & D



**4** FIBER CEMENT TRIM BOARDS SMOOTH TO MATCH PAINT SPEC F



**5** ALUMINUM STOREFRONT PAINT SPEC E



**6** METAL AWNING STYLE AND DESIGN MAY VARY TO MATCH PAINT SPEC E



**7** FABRICATED METAL RAILING TO MATCH PAINT SPEC E



**8** VINYL WINDOWS



**9** STONE VENEER



**10** METAL TRELLIS PAINT SPEC D

Exhibit 5-2: Architectural Character — Three-Story Residential



Exhibit 5-3: Architectural Character — Four-Story Residential



## 5.8 ARCHITECTURAL DETAILS

- a. Architectural details shall be used to enhance a building's appearance at the base, eaves, parapets, and around entries and windows.
- b. Human-scaled details such as canopies and awnings, transparent windows and window displays shall be provided facing Euclid Avenue.
- c. Architectural features and details shall be an integral part of the building without an appearance of being "tacked on."

## 5.9 STOREFRONTS

- a. Storefronts for each commercial establishment shall have a unifying architectural aesthetic, but may include alteration of exterior treatments on the individual frontage of the space where such modifications compliment the overall design quality of the development.
- b. Storefronts shall incorporate desirable building materials such as brick, stone, tile, exterior cement plaster, or fiber cement siding.
- c. Storefront glazing shall be clear glass to permit clear views into the interior space. The amount of such glass shall provide a balance between high visibility into the store interior and architectural quality.
- d. Entrance doors shall be of a traditional style and as transparent as possible.

## 5.10 MATERIAL & COLORS

- a. Materials shall be those of permanence and quality and that unify a building's appearance on all sides.
- b. Materials and colors shall accentuate the architectural details of the building and promote visual harmony.
- c. To create visual interest, at least three different building materials shall be used.

## 5.11 ROOF/ROOFTOP EQUIPMENT

- a. At least one break in roof plane shall be provided on each building
- b. Rooftop equipment, including ladders and antenna devices, shall be screened so as not to be visible from streets and adjacent buildings. Methods of rooftop screening should be integral to the building's form.

## 5.12 NON-RESIDENTIAL OUTDOOR DINING AREAS

Outdoor dining areas adjacent to a ground-level eating or drinking establishment shall be oriented toward Euclid Avenue.

## 5.13 RESIDENTIAL OUTDOOR SPACE, COMMON RECREATIONAL AMENITIES

- a. Private balcony and/or patio enclosures shall consist of materials that are complementary to materials and colors used on the building elevations. Each balcony shall be oriented or enclosed sufficiently to increase privacy between balconies of adjacent units.
- b. Common outdoor spaces providing passive recreation shall include either shade elements and/or trees providing shade canopy.
- c. Indoor recreation/fitness/community facilities shall be of the same architectural style and materials that match or complement the primary building architecture with a layout as shown in Exhibit 5-4: Typical Common Recreational Amenity.
- d. Outdoor seating, tables and umbrellas, gazebos, barbecues, natural or artificial lawn area, and/or other place-making features that are provided shall be compatible with the architectural style of the buildings with a layout as shown in Exhibit 5-5: Typical Courtyard.

Exhibit 5-4: Typical Common Recreational Amenity



Exhibit 5-5: Typical Courtyard



## 5.14 LANDSCAPE / HARDSCAPE ELEMENTS

- a. Landscaping elements shall contribute and complement the aesthetic quality and character of the public and private spaces.
- b. Table 5-1: Master Plant Palette shall guide the selection of materials for street trees, perimeter trees and shrubs, courtyard and common area trees, vines, screening and hedge plants, and groundcover.
- c. Landscaping shall be provided to define and enrich courtyards and walkways and shall include specimen trees of minimum size 24 inch box.
- d. Hardscaping shall be composed of decorative paving materials and patterns, rather than a single, continuous surface.
- e. Fences/walls shall complement the building materials similar to those depicted in Exhibit 5-6: Fence/Wall Concepts.

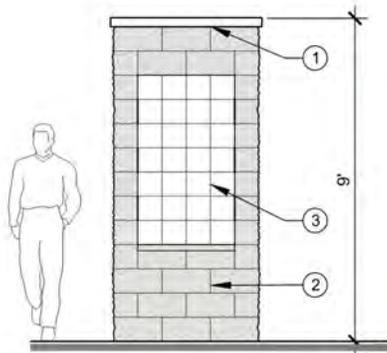
TABLE 5-1: MASTER PLANT PALETTE

BOTANICAL NAME	COMMON NAME	MINIMUM SIZE
STREET TREES		
<i>Grevillea robusta</i>	Silk Oak (Euclid)	24" Box
<i>Platanus wrightii</i>	Arizona Sycamore	
SITE TREES AND PALMS		
<i>Quercus agrifolia</i>	Coast Live Oak	48" Box
<i>Platanus racemosa</i>	California Sycamore	
<i>Ulmus parvifolia 'True Green'</i>	Evergreen Elm	
<i>Koelreuteria paniculata</i>	Golden Rain Tree	36" Box
<i>Lagerstroemia hybrids 'Muskogee'</i>	Crape Myrtle (Lavender)	
<i>Chilopsis linearis</i>	Desert Willow	
<i>Aloe bainesii</i>	Tree Aloe	24" Box
<i>Arbutus 'Marina'</i>	Strawberry Tree	
<i>Cercis occidentalis</i>	Western Redbud	
<i>Platanus acerifolia 'Bloodgood'</i>	London Plane Tree (anthracnose res.)	
<i>Podocarpus gracilior</i>	Fern Pine	
<i>Quercus wislizeni</i>	Interior Live Oak	
<i>Tristania conferta</i>	Brisbane Box	
<i>Phoenix dactylifera</i>	Date Palm	16' Brown Trunk Height

TABLE 5-1: MASTER PLANT PALETTE

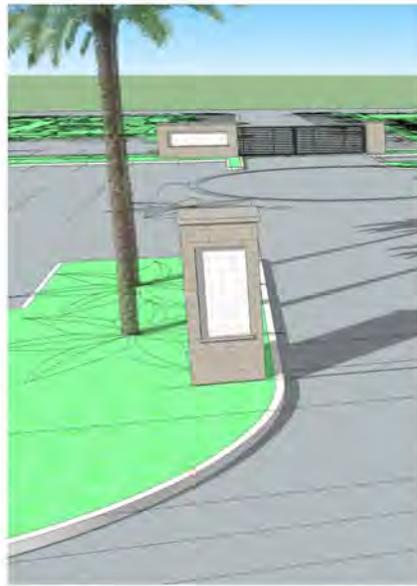
BOTANICAL NAME	COMMON NAME	MINIMUM SIZE
SHRUBS		
<i>Agave 'Blue Flame'</i>	Blue Flame Agave	5 Gallon
<i>Agave desmettiana 'Variegata'</i>	Variegated Dwarf Century Plant	
<i>Alyogne huegelii 'MONleon'</i>	Leon's Purple Delight Lilac Hibiscus	
<i>Arbutus unedo 'Elfin King'</i>	Elfin King Strawberry King	
<i>Buxus microphylla japonica</i>	Japanese Boxwood	1 Gallon
<i>Calandrinia spectabilis</i>	Rock Purslane	
<i>Carex tumulicola</i>	Foothill Sedge	
<i>Carissa grandiflora 'Green Carpet'</i>	Natal Plum	
<i>Dianella revoluta 'DR5000'</i>	Little Rev Flax Lily	
<i>Dianella tasmanica 'Silver Streak'</i>	Silver Streak Flax Lily	
<i>Ilex crenata 'Sky Pencil'</i>	Sky Pencil Ilex	
<i>Juniperus scopulorum 'Skyrocket'</i>	Skyrocket Juniper	
<i>Lantana montevedensis 'Monma'</i>	White Lightin' Lantana	1 Gallon
<i>Ligustrum japonicum 'Texanum'</i>	Wax Leaf Privet	5 Gallon
<i>Lomandra longifolia 'LM300'</i>	Breeze Dwarf Mat Rush	
<i>Muhlenbergia capillaris 'Regal Mist'</i>	Regal Mist Muhly	
<i>Myoporum parvifolium</i>	No Common Name	
<i>Philodendron x 'Xanadu'</i>	Dwarf Philodendron	5 Gallon
<i>Pittosporum tobira</i>	Tobira	
<i>Podocarpus elongatus 'Monmal'</i>	Icee Blue Yellow-Wood	
<i>Prunus caroliniana 'Bright n' Tight'</i>	Carolina Cherry	
<i>Raphiolepis indica 'Clara'</i>	Dwarf Indian Hawthorne	2 Gallon
<i>Raphiolepis x. 'Montic'</i>	Majestic Beauty Indian Hawthorne	
<i>Rosa 'Flower Carpet var. Noatraum'</i>	Pink Carpet Rose	
<i>Rosa f. 'Ice Berg'</i>	White Shrub Rose	5 Gallon
<i>Trachelospermum asiaticum</i>	Asian Jasmine	1 Gallon
VINES AND ESPALIERS		
<i>Clytostoma callistegioides</i>	Violet Trumpet Vine	5 Gallon
<i>Distictus buccinatoria</i>	Blood Red Trumpet Vine	
<i>Ficus pumila (repens)</i>	Creeping Fig	1 Gallon
<i>Parthenocissus tricuspidata</i>	Boston Ivy	

# Exhibit 5-6: Fence/Wall Concepts

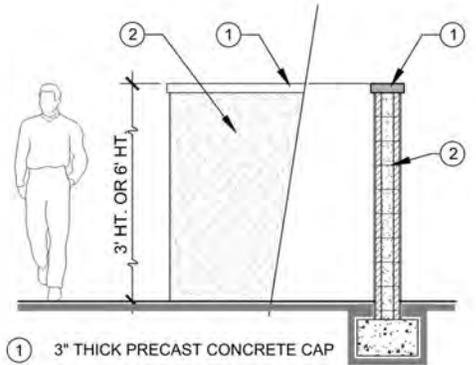


- ① 3" THICK PRECAST CONCRETE CAP
- ② 8x8x16 BURNISHED CMU WALL COLOR: TAN
- ③ PROJECT SIGN TILE INSET

4' SQ. PILASTER



SCALE: N.T.S.

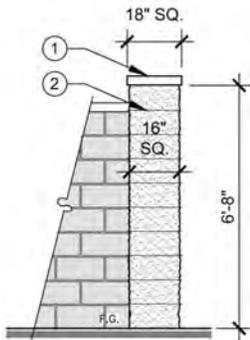


- ① 3" THICK PRECAST CONCRETE CAP
- ② 8" CMU BLOCK WALL W/ STUCCO FINISH COLOR: WHITE

3' HT. OR 6' HT. STUCCO WALL



SCALE: N.T.S.

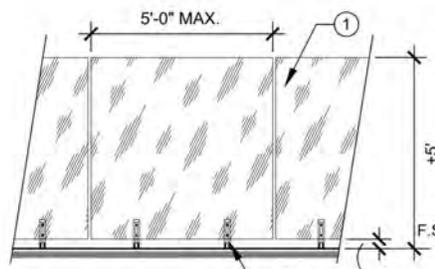


- ① 3" THICK PRECAST CONCRETE CAP
- ② 6x16x16 SPLIT FACE COLUMN BLOCK COLOR: TAN

16" SQ. PILASTER



SCALE: N.T.S.

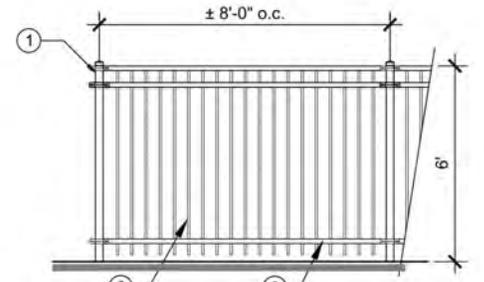


- ① POOL GLASS FENCE
- ② DAYTON RICHMOND DOWEL SPLICER SYSTEM

GLASS FENCE



SCALE: N.T.S.

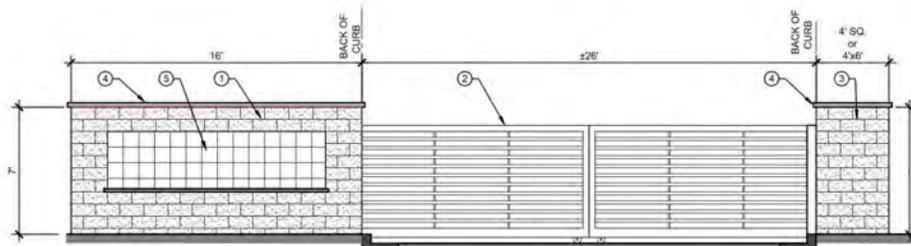


- ① 2" SQ. FENCE POST
- ② 2" SQ. TOP AND BOTTOM RAIL
- ③ 3/8" SQ. PICKETS @ 4" O.C. MAX. FENCE COLOR: BLACK

TUBULAR STEEL FENCE



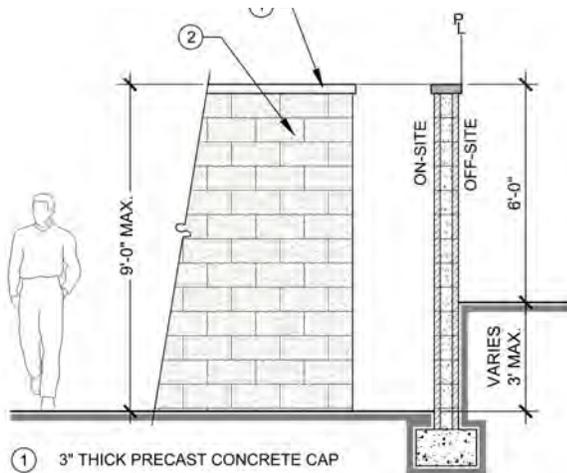
SCALE: N.T.S.



- ① BURNISHED BLOCK SIGN WALL, COLOR: TAN
- ② SLIDING T.S. VEHICULAR GATE, COLOR: BLACK
- ③ BURNISHED BLOCK PILASTER, COLOR: TAN
- ④ 3" THICK PRECAST CAP, COLOR: NATURAL
- ⑤ PROJECT SIGN AREA W/ TILE BACKDROP

ENTRY GATE

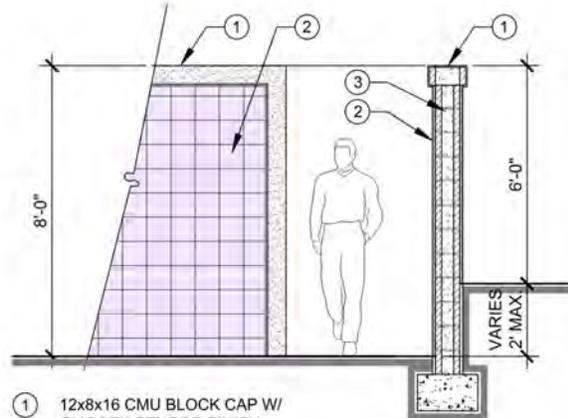




- ① 3" THICK PRECAST CONCRETE CAP
- ② 8x16 SPLIT FACE (2-SIDES) CMU WALL  
COLOR: TAN

PERIMETER WALL

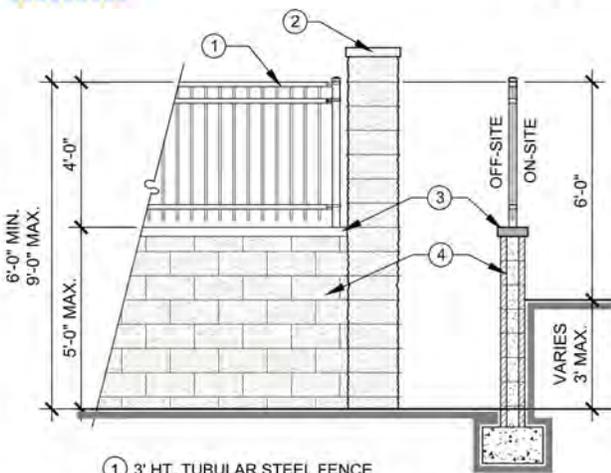
SCALE: N.T.S.



- ① 12x16 CMU BLOCK CAP W/  
SMOOTH STUCCO FINISH
- ② DECORATIVE TILE VENEER  
8" SQ. CEMENTINE TILE
- ③ 8x16 CMU BLOCK WALL W/  
SMOOTH STUCCO FINISH  
COLOR: WHITE

DECORATIVE STUCCO WALL

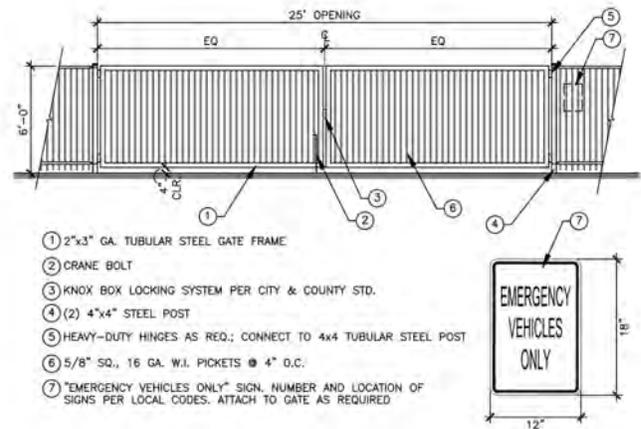
SCALE: N.T.S.



- ① 3' HT. TUBULAR STEEL FENCE
- ② 8X16 SPLIT FACE PILASTER  
COLOR: TAN
- ③ 3" THICK PRECAST CONCRETE CAP
- ④ 6X8X16 SPLIT FACE CMU WALL  
COLOR: TAN

SPLIT FACE COMBO WALL

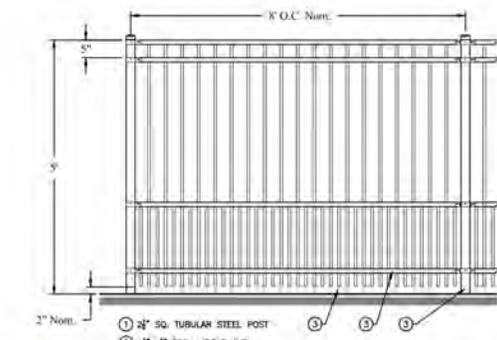
SCALE: N.T.S.



- ① 2"x3" GA. TUBULAR STEEL GATE FRAME
- ② CRANE BOLT
- ③ KNOX BOX LOCKING SYSTEM PER CITY & COUNTY STD.
- ④ (2) 4"x4" STEEL POST
- ⑤ HEAVY-DUTY HINGES AS REQ.; CONNECT TO 4x4 TUBULAR STEEL POST
- ⑥ 5/8" SQ., 16 GA. W.I. PICKETS @ 4" O.C.
- ⑦ "EMERGENCY VEHICLES ONLY" SIGN, NUMBER AND LOCATION OF  
SIGNS PER LOCAL CODES. ATTACH TO GATE AS REQUIRED

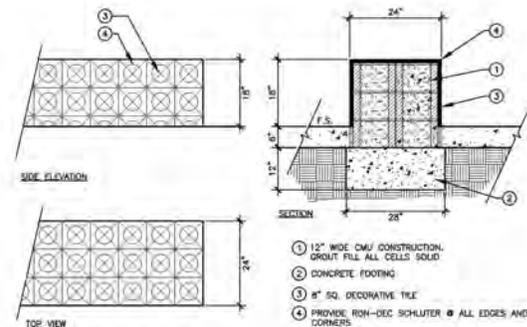
EVA GATE

SCALE: N.T.S.



DOG PARK FENCE

SCALE: N.T.S.



18" HT. DECORATIVE SEAT WALL

SCALE: N.T.S.



# 6

## ADMINISTRATION

### 6.1 ITEMS NOT ADDRESSED IN PUD

Any terms not defined herein and any issues affecting the design and development of the subject project area not specifically addressed in this PUD shall be governed by the provisions of the ODC.

## 6.2 DEVELOPMENT PLAN AND OTHER APPLICATIONS

A Development Plan shall be submitted for each phase of this PUD for approval by the Development Advisory Board and the Ontario Planning Commission, pursuant to the requirements and procedures outlined in the ODC.

To ensure proper implementation of the EA Overlay district, an application for a Certificate of Appropriateness shall be submitted in conjunction with the Development Plan required for each phase of this PUD, pursuant to all requirements and procedures outlined in the ODC.

Lot line adjustments or the combining of parcels within this PUD shall comply with all requirements and procedures outlined in the ODC. Such actions may be conditioned for compliance as part of the Development Plan approval process.

## 6.3 ADMINISTRATIVE EXCEPTIONS

Deviation from the development standards set forth in this PUD may be granted up to a maximum of 10 percent by the Zoning Administrator. Any deviation that is greater than 10 percent shall require Variance approval pursuant to the requirements and procedures outlined in the ODC.

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# Euclid / Walnut Mixed Use Planned Unit Development Project Health Risk Assessment Report

(Per Ontario Development Code Table 6.10-3)

June 26, 2023

Prepared for:

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*This document is formatted for double-sided printing to conserve natural resources.*

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Appendix C: Cancer and Non-Cancer Risk Values and Health Risk Calculations

List of Acronyms, Abbreviations, and Symbols	
Acronym / Abbreviation	Full Phrase or Description
AADT	Annual Average Daily Traffic
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
ASF	Age Sensitivity Factor
Benzo[a]pyrene	B[a]P
BR	Breathing Rate
BW	Body Weight
CAA	Federal Clean Air Act
C <sub>AIR</sub>	Concentration of TAC in air ( $\mu\text{g}/\text{m}^3$ )
Cal-EPA	California Environmental Protection Agency
CARB	California Air Resources Board
CPF	Cancer Potency Factor
CPF <sub>MSAT</sub>	Cancer Potency Factor for MSAT Inhalant
CPF <sub>W</sub>	Weighted Cancer Potency Factor
CT-EMFAC2017	Caltrans Version of EMFAC
DOSE <sub>AIR</sub>	Daily Inhalation Dose
DPM	Diesel Particulate Matter
D	Distance of roadway segment (mi)
ED	Exposure Duration
EF <sub>R</sub>	Running emissions factor, based on speed bin (g/veh-mile)
EF <sub>RL</sub>	Running loss emissions factor (g/veh-hour)
E <sub>R.HR</sub>	Running emissions (g-hr)
E <sub>RL.HR</sub>	Running loss emissions (g-hr)
EMFAC	CARB's Emissions Factor Database
FAH	Fraction at Home
g/s	Grams per second
HVAC	Heating ventilation and air conditioning
kg	Kilogram
L	Liters
MEI	Maximally Exposed Individual
MERV	Minimum Efficiency Rating Value
MPH	Miles per Hour
MSAT	Mobile Source Air Toxic

List of Acronyms, Abbreviations, and Symbols	
Acronym / Abbreviation	Full Phrase or Description
MSAT <sub>R</sub>	Ratio of MSAT to TOG
NED	National Elevation Dataset
OEHHA	California Office of Environmental Health Hazard Assessment
PeMS	Caltrans Performance Measurement System
POM	Polycyclic Organic Material
REL	Reference Exposure Level
REL <sub>MSAT</sub>	REL for MSAT Inhalant
Report	Health Risk Assessment Report
SCAQMD	South Coast Air Quality Management District
SR	State Route
TAC	Toxic Air Contaminants
TOG	Total Organic Gas
U.S. EPA	United State Environmental Protection Agency
UTM	Universal Transverse Mercator,
VMT	Vehicle Miles Traveled
VOL <sub>HR</sub>	Vehicle Volume per hour (veh-hr)
µm	Micron

## EXECUTIVE SUMMARY

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This Health Risk Assessment Report (Report) evaluates and documents the potential health risk impacts that could be posed to the receptors of the proposed Euclid / Walnut Mixed Use Planned Unit Development Project (Project) from existing sources of mobile source toxic air pollution along State Route 60 (SR 60), located approximately 665 feet north of the Planned Unit Development's (PUD) northernmost boundary. The Project is located at the northwest corner of Euclid Avenue / Walnut Street intersection in the City of Ontario, California 91761 and would accommodate up to 369 dwelling units and 12,000 square feet of retail space upon buildout on 10.6 acres.

The Project includes multifamily residential development, and the City of Ontario (City) has determined the Project is subject to the requirements identified in Ontario Development Code Table 6.01-3: Multiple-Family Residential Development Standards, which requires multiple-family development projects located within proximity of a freeway (as determined by the City's Zoning Administrator) to prepare a health risk assessment. This Report evaluates the potential risks posed by toxic air pollution, consistent with guidance and methodology documents maintained by United States Environmental Protection Agency (U.S. EPA), Office of Environmental Health and Hazard Assessment (OEHHA), and South Coast Air Quality Management District (SCAQMD), and outlines measures, if necessary, that would reduce risks below SCAQMD thresholds.

### S.1 PROPOSED PROJECT DESCRIPTION

The Project is a PUD that would accommodate up to 369 multi-family dwelling units and 12,000 square feet of retail space upon buildout. The 10.6-acre site is located at the northwest corner of Euclid Avenue / Walnut Street intersection, and the Project's northern boundary is approximately 665 feet south of SR 60. The Project would be constructed in at least two phases. Phase 1, the details for which are currently known, would provide 346 multi-family dwelling units in three- and four-story buildings, with 5,400 square feet of ground floor retail space within the four-story building fronting Euclid Avenue. Phase 1 construction activities would develop 9.4 acres of the Project site, excluding the southeast corner of the Project site. The southeast corner of the Project site is currently developed with a Carl's Jr. and may be developed in the future as Phase 2 of the Project. Phase 2 would accommodate the remaining 23 multi-family residential units and up to an additional 6,600 square feet of ground-floor retail space. The first phase of the Project is slated to become operational in 2025.

### S.2 HEALTH RISK ASSESSMENT RESULTS

A health risk assessment (HRA) was prepared to evaluate potential cancerogenic and non-cancerogenic health effects that could result from receptor exposure to toxic air contaminant (TAC) concentrations at the Project site. The HRA was prepared in accordance with applicable guidelines from the U.S. EPA, the SCAQMD, and OEHHA. Roadway traffic volumes in proximity of the Project site were obtained from Caltrans. Mobile Source Air Toxic (MSAT) emissions were estimated using these traffic volumes and emission factors derived from the Caltrans version of the California Air Resources Board (CARB) Emissions Factor Database (CT-EMFAC2017).<sup>1</sup> The U.S. EPA- and SCAQMD-approved American

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<sup>1</sup> The nine priority MSATs included in the HRA are: 1,3-Butadiene, Acetaldehyde, Acrolein, Benzene, Diesel Particulate Matter (DPM), Ethylbenzene, Formaldehyde, Naphthalene, Polycyclic Organic Matter (POM).

Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD, V. 21112) was used to predict pollutant concentrations at the Project site. The AERMOD dispersion model simulates the dispersion of pollutant emissions and estimates concentrations of pollutants at specified receptor locations.

The results of the modeling indicate that the Maximally Exposed Individual (MEI) for cancer risk would be located in the northeastern corner of the northeastern building of Phase 1 (i.e., the building with retail space on the ground floor) and have a cancer risk of 7.0 excess cancers per million, which would be below the SCAQMD's cancer risk threshold of 10.0 excess cancers per million. This cancer risk estimate accounts for Project compliance with Section 120.1(b)(1)(C) of the 2019 Title 24 Building Code, which requires that high-density residential buildings be constructed with HVAC system air filters that meet a designated efficiency equal to Minimum Efficiency Rating Value (MERV) 13 standards. The MERV 13 filters would be capable of removing approximately 90 percent of diesel particulate emissions from SR 60. Chronic and acute non-cancer risks for receptors at the site would also be below the SCAQMD non-cancer risk thresholds of 1.0. Cancer and non-cancer risks for Phase 2 receptors would be lower, because these receptors are further from SR 60 and would be exposed to lower pollutant concentrations.

As described above, cancer and non-cancer risks would not exceed thresholds and no mitigation or further abatement of air toxic concentrations is required. Compliance with standard building code requirements would be sufficient to reduce potential risks below SCAQMD thresholds.

# 1 INTRODUCTION

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This Health Risk Assessment Report (Report) has been developed for the proposed Euclid / Walnut Mixed Use Planned Unit Development Project (Project) located at the northwest corner of Euclid Avenue / Walnut Street intersection in the City of Ontario, California 91761. The Project would accommodate up to 369 multi-family dwellings and approximately 12,000 square feet of retail space upon buildout on 10.6 acres.

The Project would consist of a two-phased Planned Unit Development (PUD). Phase 1 would involve constructing 346 multi-family dwelling units and approximately 5,400 square feet of ground-floor retail space. Development details associated with Phase 1 are currently known and Legacy Partners is proposing to develop this portion of the Project. It is anticipated that this portion of the PUD, which comprises 9.4 acres, would become operational in 2025. Phase 2 would consist of an additional 23 multi-family residential units and up to an additional 6,600 square feet of retail space. This area would be located in the southwestern portion of the site. Further planning details for Phase 2 are not currently known at this time, but it is anticipated that this portion of the PUD would not be developed for another 15 years.

The 10.6-acre Project site is located approximately 665 feet south of State Route (SR 60). The operation of mobile sources (i.e., cars and trucks) along this roadway produce emissions from fuel combustion (i.e., exhaust) and evaporation, and some of these emissions are known Toxic Air Contaminants (TACs), as defined by the California Air Resources Board (CARB), that could affect the health and safety of Project occupants and visitors to the site. The City of Ontario Development Code Table 6.01-3: Multiple-Family Residential Development Standards requires multiple-family development projects located in proximity of a freeway (as determined by the City's Zoning Administrator) to prepare a health risk assessment. This Report evaluates potential risks from mobile sources on SR 60, consistent with risk assessment procedures maintained by the United States Environmental Protection Agency (U.S. EPA), Office of Environmental Health and Hazard Assessment (OEHHA), and South Coast Air Quality Management District (SCAQMD).

## 1.1 REPORT ORGANIZATION

This Report is organized as follows:

- Chapter 1, Introduction, explains the contents of this Report and its intended use.
- Chapter 2, Regulatory Framework, provides pertinent background information on the federal, state, and local entities that regulate air quality conditions at and near the Project site.
- Chapter 3, Project Description and Environmental Setting, provides pertinent information on the design and operating characteristics of the Project, as well as meteorological conditions and sources of toxic air pollution in proximity of the Project site.
- Chapter 4, Health Risk Assessment Methodology, discloses the methodology used to estimate the emissions of mobile sources in proximity of the Project site and the potential risks they could pose to future Project receptors.
- Chapter 5, Health Risk Assessment Results, describes the criteria used to evaluate potential health risks, the results of the health risk assessment prepared for the Project, and any potential measures necessary reduce risks below the applied thresholds.
- Chapter 6, Report Preparers and References, lists the individuals involved, and the references used, in the preparation of this Report.

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## 2 REGULATORY FRAMEWORK

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This Report has been prepared to satisfy Ontario Development Code Table 6.01-3: Multiple-Family Residential Development Standards, which requires multiple-family development projects located in proximity of a freeway (as determined by the City's Zoning Administrator) to prepare a health risk assessment.

The following provides an overview of the federal, state, and local regulatory entities that oversee and regulate air quality emissions in proximity of the Project site.

### 2.1 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### 2.1.1 Federal Clean Air Act

The Federal Clean Air Act (CAA) defines the United States Environmental Protection Agency's (U.S. EPA) responsibilities for protecting and improving the United States air quality and ozone layer. Key components of the CAA include reducing ambient concentrations of air pollutants that cause health and aesthetic problems, reducing emission of toxic air pollutants, and stopping production and use of chemicals that destroy the ozone.

### 2.2 CALIFORNIA AIR RESOURCES BOARD

#### 2.2.1 California Clean Air Act

In addition to being subject to Federal requirements, air quality in the State is also governed by more stringent regulations under the California Clean Air Act, which was enacted in 1988 to develop plans and strategies for attaining the California Ambient Air Quality Standards. The California Air Resources Board (CARB), which is part of the California Environmental Protection Agency (Cal-EPA), develops Statewide air quality regulations, including industry-specific limits on criteria, toxic, and nuisance pollutants.

In California, both the Federal and State Clean Air Acts are administered by CARB. It sets all air quality standards including emission standards for vehicles, fuels, and consumer goods as well as monitors air quality and sets control measures for toxic air contaminants. CARB oversees the functions of local air pollution control districts and air quality management districts, which in turn administer air quality activities at the regional level.

### 2.3 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

The SCAQMD is the agency primarily responsible for maintaining air quality and regulating emissions of criteria and toxic air pollutants within the South Coast Air Basin (Basin).<sup>2</sup> The SCAQMD carries out this responsibility by preparing, adopting, and implementing plans, regulations, and rules that are designed to achieve attainment of state and national air quality standards.

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<sup>2</sup> the South Coast Air Basin (Basin) which includes Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside counties. The Basin encompasses approximately 6,745 square miles of coastal plains and is bounded by the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east.



### 3 PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING

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The proposed Project consists of a Planned Unit Development (PUD) that would accommodate up to 369 multi-family dwelling units and 12,000 square feet of retail space in the City of Ontario, California 91761. The Project is located at the northwest corner of Euclid Avenue / Walnut Street intersection and would be constructed in two phases, with most development occurring in Phase 1.

#### 3.1 PROJECT LOCATION AND SURROUNDING LAND USES

The 10.6-acre rectangular Project site is located at the northwest corner of Euclid Avenue / Walnut Street intersection in the City of Ontario, California 91761 (see Figure 3-1 for Project location). The site consists of three parcels (Assessor Parcel Numbers 041018133, 041018134, and 041018135), and is primarily developed as a surface parking lot that once served a commercial shopping center anchored by K-Mart (located on the western portion of the Project site), a nail salon and toy store (located in the northeastern portion of the Project site), and Carl's Jr. (located in the southeastern corners of the Project site).

The Project site is surrounded by a preschool, residential land uses, and retail and commercial office land uses. These include:

- North of the Project Site: The "Monty's Montessori Academy of Ontario" preschool and single-family and multi-family residential land uses
- Northwest of the Project Site: Multi-family residential land uses at the "Belcourt Apartments" apartment complex
- West of the Project Site: Various commercial and retail office land uses
- South of the Project Site: Across Walnut Street, single family residential land uses
- East of the Project Site: Across Euclid Avenue, various commercial amenities such as "7-Eleven", "Victor's Cleaners and Laundry", "N8's Billiards" and then single-family residential land uses further to the east beyond the aforementioned non-residential land uses

#### 3.2 PROPOSED DEVELOPMENT AND PHASING

As mentioned above the Project would be comprised of two phases totaling 369 multi-family dwelling units and up to 12,000 square feet of retail space. Legacy Partners (Legacy) is proposing to construct Phase 1 of the Project, which would consist of 346 multi-family dwelling units and 5,400 square feet of ground floor retail space on approximately 9.4 acres of land in the northeast, northwest, and southwest portions of the Project site (see Figure 3-2). Phase 2 would consist of an additional 23 multi-family dwelling units and up to an additional 6,600 square feet of retail space constructed on the remaining approximately 1.2 acres of land located in the southeastern portion of the site. Specific details regarding Phase 2 development are currently unknown at this time.

##### 3.2.1 Phase 1 PUD Development: Legacy Partners

Phase 1 would consist of two, four-story apartment buildings with tuck under garages, one of which would have approximately 5,400 square feet of ground-floor retail space, and six, three-story apartment buildings with tuck under garages, carports, and surface parking. The four-story building with ground floor retail space would be located in the northeastern portion of the site. In addition to the 5,400 square feet of retail space, the ground floor of this building would include a mail/parcel facility area, leasing office space,

pool court and fitness area, club open space, and sports lounge, while the upper floors would be comprised of residential units. A dog park would be located to north of this building. Three (3), three-story multi-family buildings would be located west of the ground-floor retail space building (i.e., in the northwestern corner of the Project site) and be oriented in a north-south direction. Three (3) additional three-story multi-family buildings, also oriented in a north-south direction, would be constructed in the southwest corner of the Project site. Finally, a four-story “C” shaped multi-family residential building would be constructed in the southeastern portion of the Phase 1 area and adjacent to the Phase 2 area. Each residential dwelling unit would have window(s) and/or a balcony that would provide their unit with access to outdoor air.

### 3.2.2 Phase 2 PUD Development

Phase 2 would involve the construction and operation of up to an additional 23 multi-family dwelling units and up to an additional 6,600 square feet of retail space. It is anticipated that Phase 2 of the PUD would not occur for approximately 15 more years. No additional project-specific details associated with Phase 2 are known at this time.

## 3.3 SOURCES OF AIR TOXICS IN PROXIMITY OF THE PROJECT SITE

The Project site is located within 700 feet of SR 60. Vehicles traveling along this freeway produce pollutants designated by CARB as TACs. TACs are pollutants that are known, or suspected, to cause cancer or other serious health effects.

### 3.3.1 Mobile Source Air Toxics

Operation of fossil-fueled motor vehicles, such as those operating in proximity of the Project site, produce emissions through fuel combustion. Mobile Source Air Toxics (MSATs) are a subset of TACs that are emitted by mobile sources (i.e., cars and trucks). There are nine priority MSATs, which include: 1,3-Butadiene, Acetaldehyde, Acrolein, Benzene, Diesel Particulate Matter (DPM), Ethylbenzene, Formaldehyde, Naphthalene, Polycyclic Organic Matter (POM). These MSATs (excluding DPM) are a fraction of the Total Organic Gas (TOG) emissions from the motor vehicles.

## 3.4 METEOROLOGY AND WIND CONDITIONS AT THE PROJECT SITE

Southwestern San Bernardino County and the broader South Coast Air Basin (Basin) are defined by a semi-arid, Mediterranean climate with mild winters and warm summers. The San Gabriel, San Bernardino, and San Jacinto Mountains bound the Basin to the north and east trap ambient air and pollutants within the Los Angeles and Inland Empire valleys below. The climate of the greater Los Angeles region is classified as Mediterranean, but weather conditions within the Basin are dependent on local topography and proximity to the Pacific Ocean. The climate is dominated by the Pacific high-pressure system that results in generally mild, dry summers and mild, wet winters. This temperate climate is occasionally interrupted by extremely hot temperatures during the summer, Santa Ana winds during the fall, and storms from the Pacific northwest during the winter. In addition to the basin's topography and geographic location, El Niño and La Niña patterns also have large effects on weather and rainfall received between November and March.

The Pacific high-pressure system drives the prevailing winds in the Basin. The winds tend to blow onshore in the daytime and offshore at night. In the summer, an inversion layer is created over the coastal areas and increases ozone levels. A temperature inversion is created when a layer of cool air is overlain by a layer of warmer air; this can occur over coastal areas when cool, dense air that originates over the ocean is blown onto land and flows underneath the warmer, drier air that is present over land. In the winter, areas

throughout the Basin often experience a shallow inversion layer that prevents the dispersion of surface level air pollutants, resulting in higher concentrations of criteria air pollutants such as CO and NO<sub>x</sub>.

Temperatures near the Project site range from a high of 92 degrees Fahrenheit (F) in July and August to a low of 40 degrees Fahrenheit in January. Annual precipitation is approximately 20 inches, falling mostly from November through March (WRCC, 1980).

The SCAQMD maintains publicly meteorological data for use in air quality analyses. The Project site is approximately 2.5 miles southwest of Ontario International Airport. As shown in Figure 3-3, the prevailing wind at Ontario International Airport is generally from the west-southwest, indicating the prevailing wind at the Project site is also likely from the west-southwest.

Figure 3-1 Site Aerial

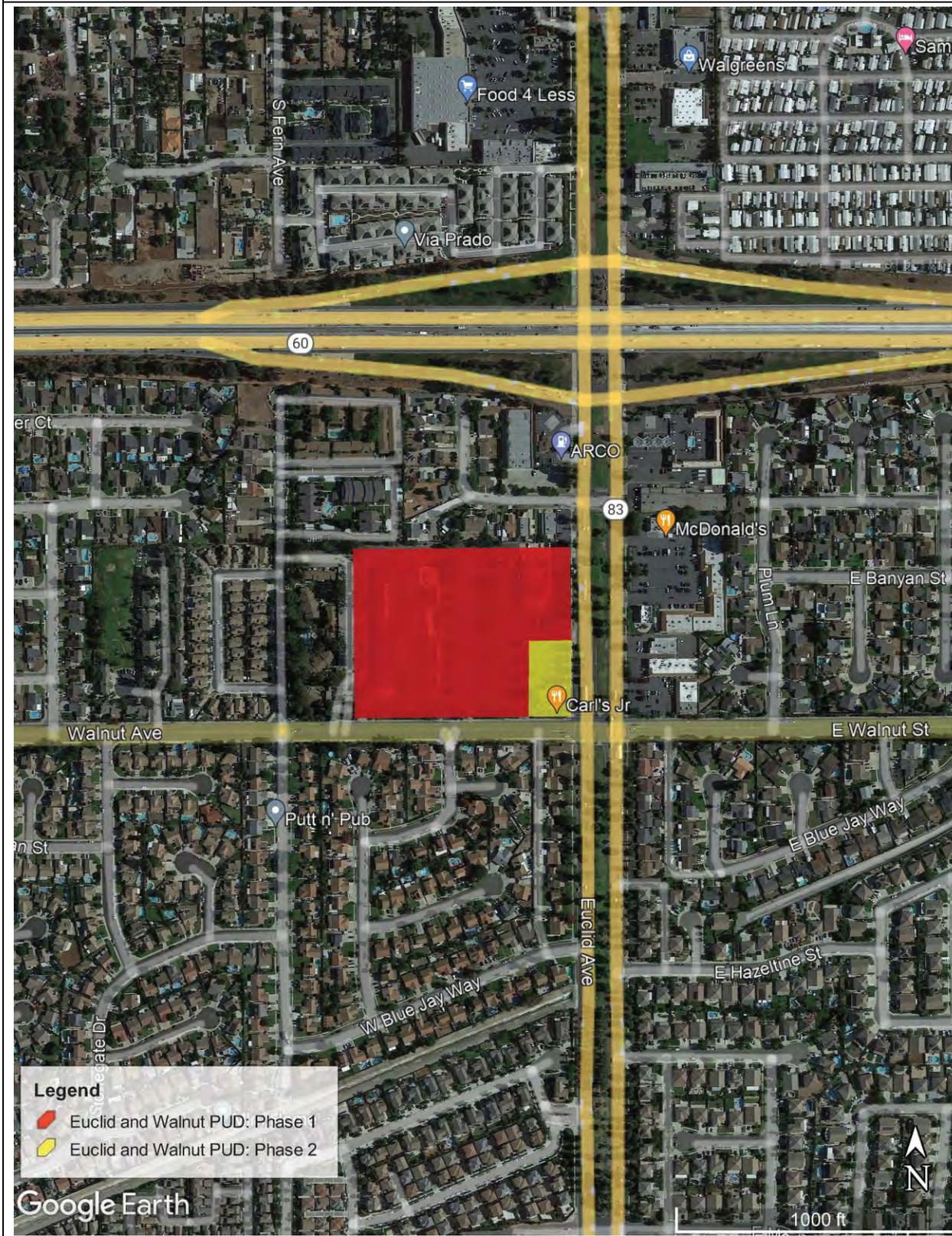


Figure 3-2 Site Plan

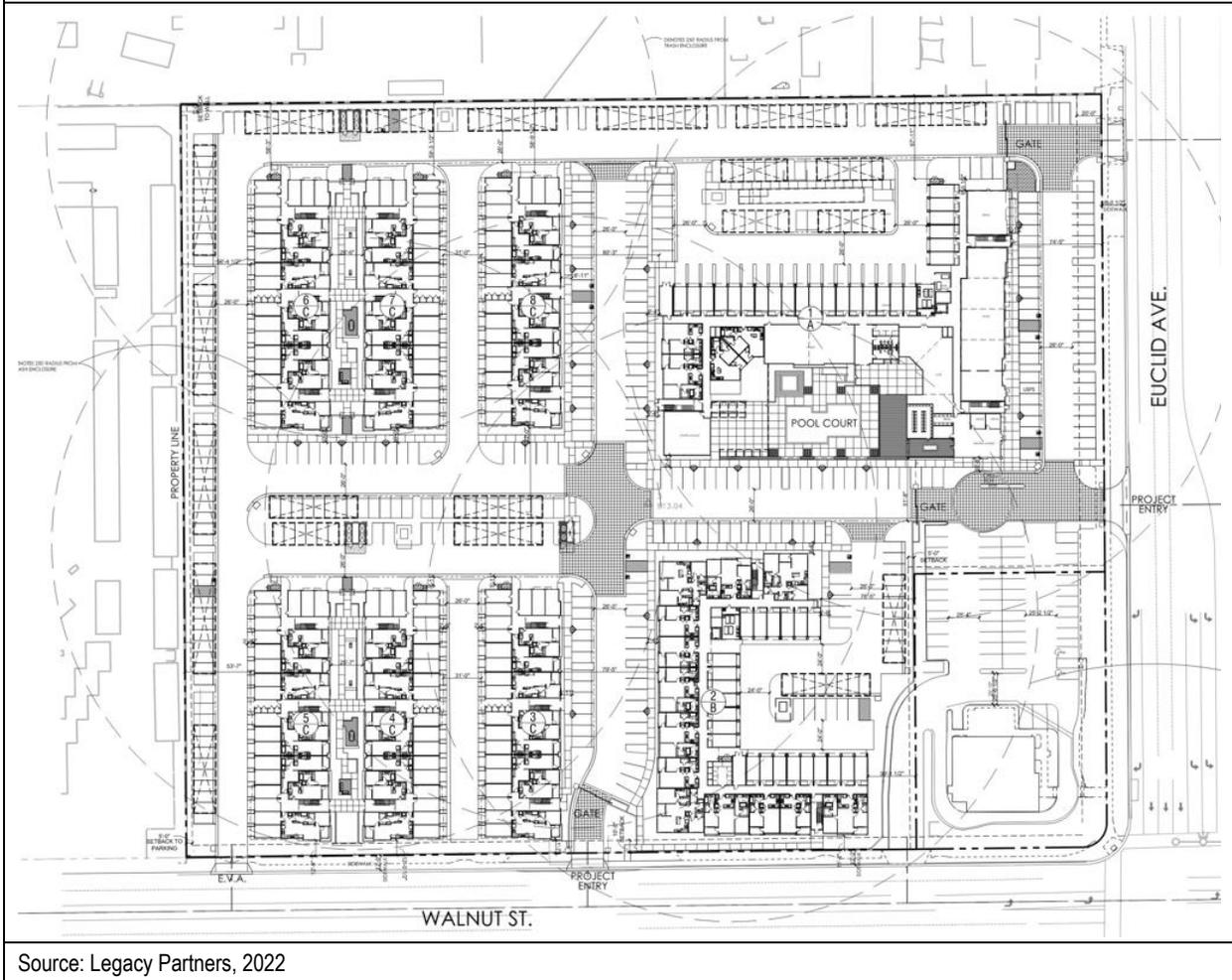
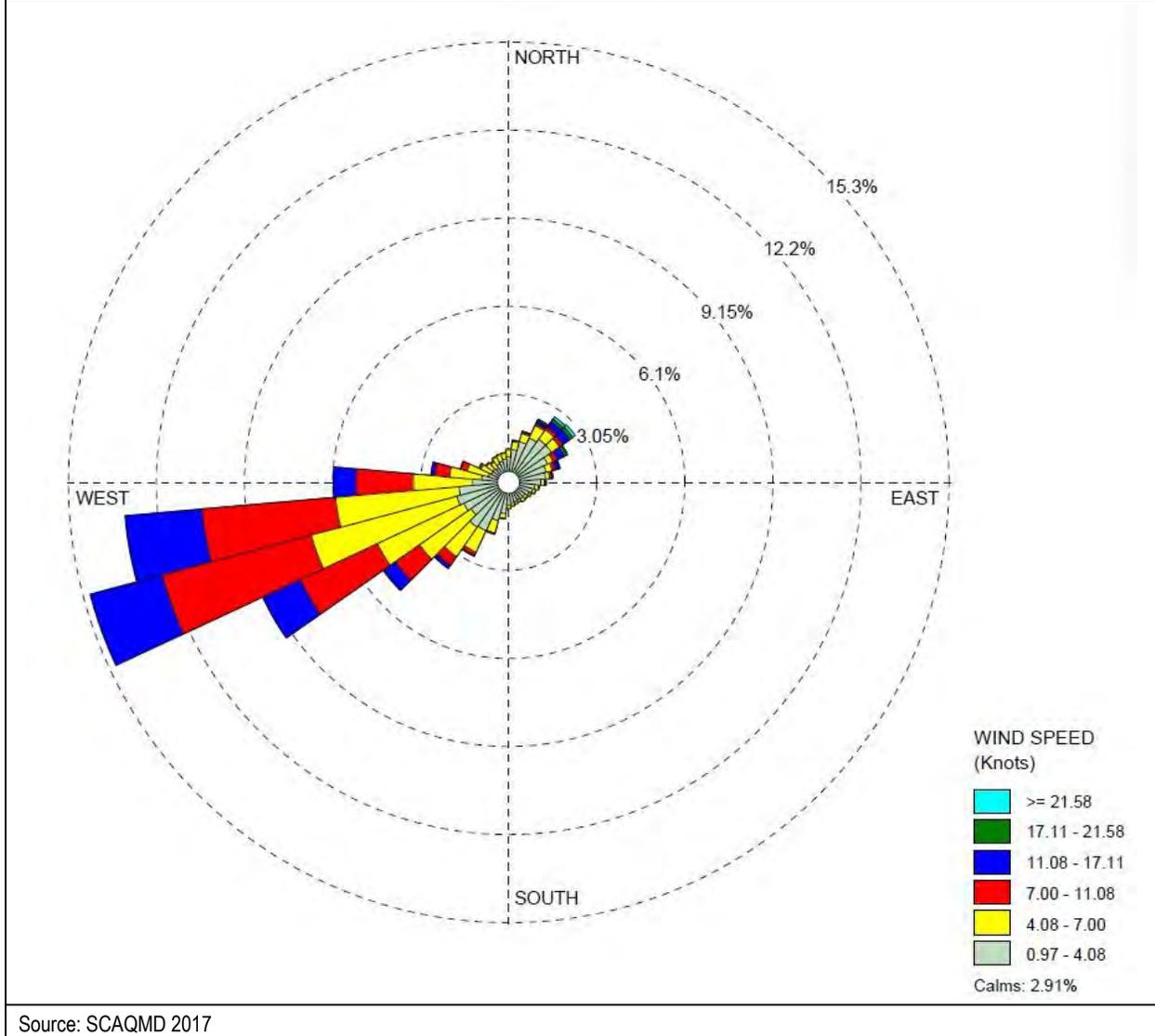


Figure 3-3 Wind Rose for Ontario International Airport (2012 to 2016) (Blowing From)



## 4 ANALYSIS METHODOLOGY

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This Chapter describes the methodology utilized to estimate emissions, conduct dispersion modeling, and assess potential cancer and non-cancer risks at the Project site.

### 4.1 MOBILE SOURCE EMISSIONS

Mobile source emissions were estimated for freeways (including freeway on- and off-ramps) based hourly vehicle flow by type of pollutant.

#### 4.1.1 Traffic Volumes, Time of Day Splits, and Traffic Speeds

Mobile source emissions were estimated for freeways and (including freeway on- and off-ramps) based on hourly vehicle flows. These pieces of information were obtained from several Caltrans sources. Specifically, the roadway segments evaluated include:

- State Route 60 (Eastbound and Westbound)
- State Route 60 Westbound On-Ramp from Euclid Avenue
- State Route 60 Eastbound Off-Ramp from Euclid Avenue
- State Route 60 Eastbound On-Ramp from Euclid Avenue
- State Route 60 Westbound On-Ramp from Euclid Avenue

See Appendix A for all details related to traffic volumes, time of day splits, and traffic speeds for the various roadway segments.

#### Traffic Volumes

Traffic volumes for the roadway segments evaluated were obtained from the following sources. The Project is anticipated to become operational in 2025. Traffic volumes were scaled up by one percent each year to derive 2025 volumes from prior years.<sup>3</sup>

- State Route 60 traffic volumes (for all vehicles and trucks) were obtained from the Caltrans Traffic Census Program, which provided Annual Average Daily Traffic (AADT) on the California Highway System in 2019.<sup>4</sup> All traffic vehicle volumes were split evenly between Eastbound and Westbound SR 60 (Caltrans, 2022a).
  - All Vehicles. The AADT values for three Caltrans “breakpoints” were evaluated to determine the traffic volume on SR 60 north of the Project site; these three breakpoints were: Mountain Avenue; Ontario, Jct. Rte. 83; and Grove Avenue. The AADT values between Mountain Avenue and the SR 60 / SR 83 junction were marginally higher than the AADT values between SR 83 and Grove Avenue (i.e., approximately 0.2%) and therefore were applied to the entirety of the portion of SR 60 modeled.

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<sup>3</sup> For example, if the data sourced is from 2020, the traffic volume for that year would be scaled up by one percent for five years (i.e., approximately a five percent increase).

<sup>4</sup> The 2019 calendar year was selected as the base year for scaling, because it predates the COVID-19 pandemic and is considered to be a better reference for what traffic levels may look like in the future, compared to those of recent years that have been affected by the COVI-19 pandemic.

- Trucks. The AADT values on SR 60 east of and west of the SR 60 / SR 83 junction were averaged to derive the proportion truck traffic volume on SR 60 adjacent to the Project site.<sup>5</sup>
- State Route 60 on- and off-ramp volumes for Euclid Avenue (all vehicles) were calculated using the same process as that described for the SR 60 volumes. The ramp segments utilized from the Caltrans data were “WB on from Euclid/83,” “EB off to Euclid/83,” “EB on from Euclid/83,” and “WB Off to Euclid Ave” (Caltrans 2022a).

### Time of Day Split

Time of day traffic volume splits were developed for each of the roadway segments utilizing the Caltrans Performance Measurement System (PeMS), which collects data from approximately 40,000 individual detectors spanning the freeway system across all major metropolitan areas of California. Data was obtained for the entire 2019 calendar year<sup>6</sup> for all vehicles and trucks and then summed for each hour to develop the time-of-day splits for the two vehicle categories (Caltrans 2022b).<sup>7</sup> The SR 60 Eastbound data were obtained from the “Mainline VDS 801356 - EUCLID” segment and the SR 60 Westbound data were obtained from the “Mainline VDS 801355 - EUCLID” segment.

The average daily traffic volumes were multiplied through by the time-of-day splits to derive vehicle and truck volumes for each hour of the day.

### Vehicle Speeds

The rate at which vehicles generate exhaust emissions is in part dependent on the speed at which it travels. The following describes the way vehicle speeds were assigned to the various roadway segments.

- State Route 60 vehicle speeds were derived using the Caltrans PeMS data source. Speed averages were taken for each hour across the entire year and then down up to the nearest factor of five (e.g., if the average speed was 67 miles per hour, it was rounded down to 65 miles per hour). The PeMS data source does not distinguish speed by all vehicles and trucks. Therefore, truck speeds were limited to a maximum of 55 miles per hour, which is the speed limit for vehicles towing a trailer. See Appendix A for a breakdown of hourly speeds for vehicles traveling on SR 60.
- State Route 60 on- and off-ramp vehicle speeds were assumed to be 45 and 5 miles per hour, respectively, on a consistent basis.

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<sup>5</sup> The AADT for trucks was estimated to provide the Caltrans version of the CARB Emissions Factor Database (CT-EMFAC) with an input. The CT-EMFAC model is described further on in this section. The truck AADT was not used for any other purpose.

<sup>6</sup> The 2019 calendar year was selected for vehicle/truck AADT values, because it precedes the COVID-19 pandemic and provides a better representation of how travel behaviors between all vehicles and trucks are anticipated to be in the future.

<sup>7</sup> These two sets of splits were developed because vehicles that emit DPM typically have different travel patterns than passenger vehicles and therefore the emissions from these vehicles disperse differently (i.e., peak hour volumes for passenger vehicles differ from those of trucks and therefore the peak hour emissions for the two types of vehicles would be subject to differing meteorological conditions).

#### 4.1.2 Mobile Source Emissions and Emissions Rates

The traffic roadway volumes, time of day splits, and vehicle speed derived using the methodology described in Section 4.1.1 were utilized in conjunction with emissions factors derived from Caltrans version of EMFAC2017, also known as CT-EMFAC2017, to estimate emissions generated by mobile sources in proximity of the Project site. CT-EMFAC2017 provides running (exhaust) and running loss (evaporative) emission factors for mobile source criteria air pollutants, including TOG, and all nine priority MSATs based on the geographic area in which they are occurring, the year they are occurring in, and the makeup of cars and trucks on the roadway.

The CT-EMFAC2017 model was run derive emission factors for the average vehicle mix on freeways. The model run specified San Bernardino County as the region and 2025 as the year. For SR 60, the traffic mix was developed using the truck AADT described under the “Traffic Volumes” subheading of Section 4.1.1.<sup>8</sup>

The CT-EMFAC2017 outputs were used to develop three sets of hourly emissions estimates for each roadway – one for TOG running (exhaust) emissions, another for TOG running loss (evaporative) emissions, and one for DPM running (exhaust) emissions.<sup>9</sup> Whereas the running emissions factors (grams/vehicle-mile) are based on speed bins in 5 mile per hour increments, the running loss emissions factors (grams/vehicle-hour) are independent of the speed of the car. Therefore, running emissions are based on the speed of the car across a specified distance, while running loss emissions are based on the amount of time the car is on the roadway. In other words, a car will generally produce more emissions when moving slowly across a given distance than it would if it were traveling faster.<sup>10</sup> The equations for calculating hourly running and running loss emissions are presented in Equation 1 and Equation 2 below.

##### *Equation 1: Running (Exhaust) Emissions*

$$E_{R,HR} = EF_R \times D \times VOL_{HR}$$

Where:

- $E_{R,HR}$  = Running emissions (g-hr)
- $EF_R$  = Running emissions factor, based on speed bin (g/veh-mile)
- $D$  = Distance of roadway segment (mi)

---

<sup>8</sup> CT-EMFAC includes two truck categories, Truck 1 and Truck 2, which correspond to medium duty trucks and heavy duty trucks, respectively. The truck AADT data provided from the Caltrans Traffic Census Program breaks down trucks by axle. Trucks with two axels were assign to the Truck 1 category. Trucks with three or more axels were assigned to the Truck 2 category. The freeway run of CT-EMFAC has a truck makeup of 12.3%, with 3.1% consisting of Truck 1 and 9.2% consisting of Truck 2.

<sup>9</sup> Consistent with the guidance contained in the SCAQMD *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions* white paper, DPM emissions were treated as PM<sub>10</sub>, even though CT-EMFAC provides emission rates for DPM, specifically (SCAQMD 2003).

<sup>10</sup> In addition to having running and running loss emissions scale at different rates, there are two other reasons for developing three sets of emission factors for each roadway. The first is that the ratio of MSATs to TOG differs between running and running loss emissions factors (see Section 4.3.1 for more information). The second being that the source / release characteristics of TOG and DPM differ. For example, the time of day splits between the two pollutants differ (see Section 4.1.1), as do the typical heights at which they are released (i.e., TOG is generated by passenger vehicles, which have a relatively low release point, while DPM is generated by trucks that have a higher release point; see Section 4.2.1 for more information).

$VOL_{HR}$  = Vehicle volume per hour (veh-hr)

*Equation 2: Running Loss (Evaporative) Emissions*

$$E_{RL.HR} = EF_{RL} \times \frac{D}{MPH} \times VOL_{HR}$$

Where:

$E_{RL.HR}$  = Running loss emissions (g-hr)  
 $EF_{RL}$  = Running loss emissions factor (g/veh-hour)  
 $D$  = Distance of roadway segment (mi)  
 $MPH$  = Speed of vehicle (mi-hr)  
 $VOL_{HR}$  = Vehicle volume per hour (veh-hr)

The roadway distances utilized for the emission estimation are based on the length of roadway source modeled in AERMOD (see Table 4-1). The hourly running and running loss emissions were converted to a rate of grams per second (g/s) by dividing the hourly rate by 3,600 (i.e., the number of seconds in an hour). See Appendix A for details regarding the emissions rates for each roadway segment.

## 4.2 AERMOD DISPERSION MODELING

The U.S. EPA's AERMOD dispersion model (version 21112) was used to predict pollutant concentrations at the Project site. The AERMOD dispersion model is a U.S. EPA-approved and SCAQMD-recommended model for simulating the dispersion of pollutant emissions and estimating concentrations of pollutants at specified receptor locations. AERMOD requires the user to input information on the source(s) of pollutants being modeled, the receptors where pollutant concentrations are modeled, and the meteorology, terrain, and other factors that affect the potential dispersion of pollutants. Two AERMOD runs were completed for the Project. The first modeled TOG emissions as  $PM_{2.5}$ , because AERMOD does not have a pollutant dispersion option for TOG, and the second modeled DPM as  $PM_{10}$ .

### 4.2.1 Modeled Sources and Emissions Rates

Mobile source emissions occurring on roadways in proximity of the Project site were modeled as a series of line area sources, as shown in Table 4-1 and depicted in Figure 4-1. An emissions rate for each source listed in Table 4-1 was derived using the methodology described in Section 4.1.

ID	Description	UTM Coordinates <sup>(A)</sup>		Length (m)	Width (m)
		X	Y		
ARLN01	SR 60 Westbound Freeway Exhaust <sup>(B)</sup>	440650.04	3765727.33	1779.1	18.29
ARLN02	SR 60 Eastbound Freeway Exhaust <sup>(B)</sup>	438872.22	3765713.80	1778.6	18.29
ARLN03	SR 60 Westbound On-ramp Exhaust <sup>(B)</sup>	439895.14	3765792.04	475.1	3.96
ARLN04	SR 60 Eastbound Off-ramp Exhaust <sup>(B)</sup>	439895.39	3765645.74	436.3	7.62
ARLN05	SR 60 Eastbound On-ramp Exhaust <sup>(B)</sup>	439941.30	3765645.29	508.2	3.96
ARLN06	SR 60 Westbound Off-ramp Exhaust <sup>(B)</sup>	440392.61	3765738.84	455	11.58
ARLN07	SR 60 Westbound Freeway Evaporative	440650.04	3765727.33	1779.1	18.29
ARLN08	SR 60 Eastbound Freeway Evaporative	438872.22	3765713.80	1778.6	18.29
ARLN09	SR 60 Westbound On-ramp Evaporative	439895.14	3765792.04	475.1	3.96
ARLN10	SR 60 Eastbound Off-ramp Evaporative	439895.39	3765645.74	436.3	7.62
ARLN11	SR 60 Eastbound On-ramp Evaporative	439941.30	3765645.29	508.2	3.96
ARLN12	SR 60 Westbound Off-ramp Evaporative	440392.61	3765738.84	455	11.58

See Appendix B

(A) UTM coordinates represent the initial coordinate of the source.

(B) These source parameters were the same for the TOG emissions modeling as the DPM emission modeling.

The TOG emissions sources were assigned a release height of 1.3 meters and an initial vertical dimension of 1.2 meters (U.S. EPA 2010). These parameters for the TOG emissions sources are representative of the exhaust and evaporative plume height from light-duty vehicles. The DPM emissions source were assigned a release height of 3.4 meters and an initial vertical dimension of 3.2 meters. These parameters for the DPM emissions sources are representative of the exhaust plume height for heavy-duty vehicles (U.S. EPA 2010).

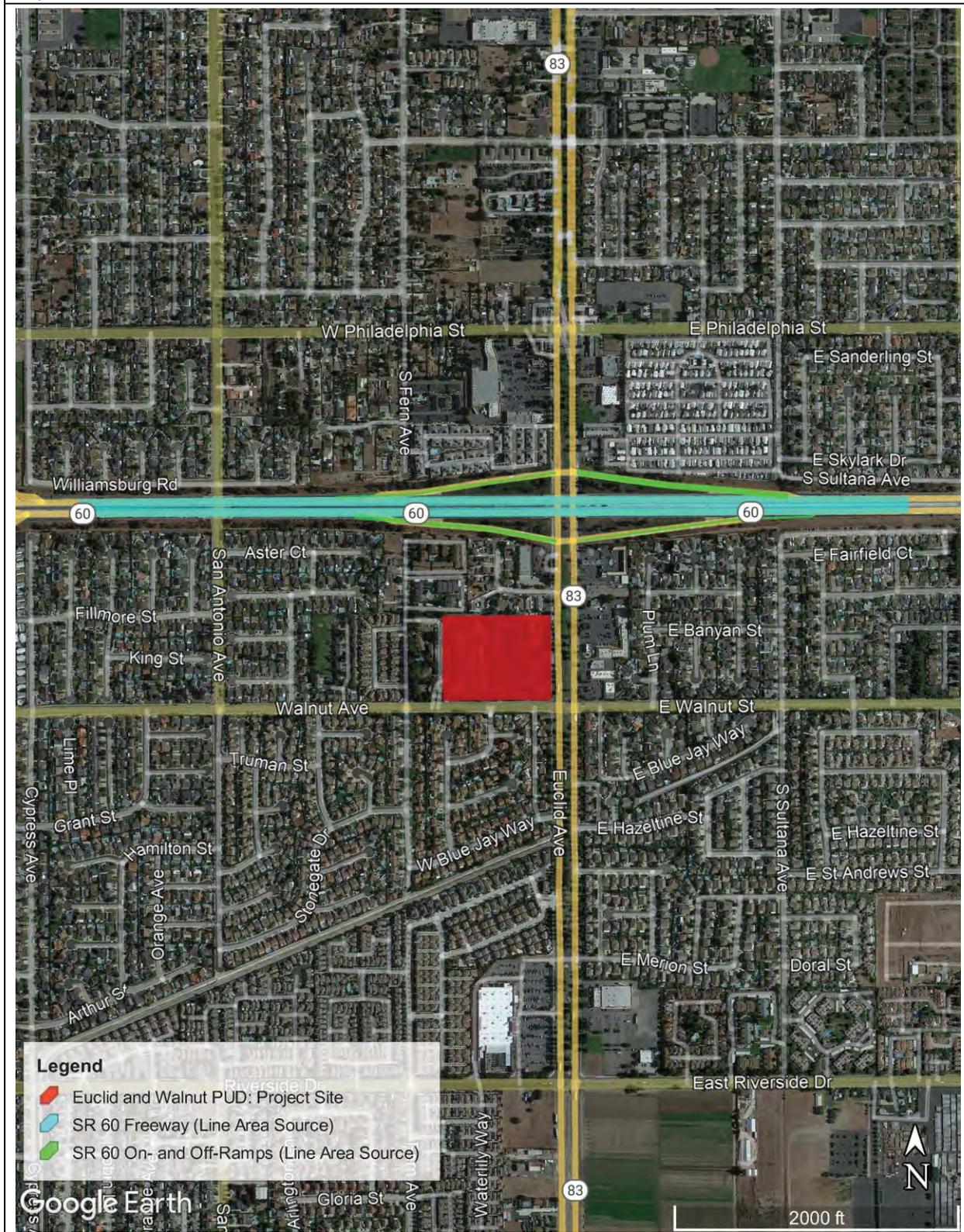
Each roadway source was modeled to have an emissions rate of 1 gram per second (g/s). AERMOD allows users to specify variable emissions factors for sources depending on the temporal interval over which emissions are released. These variable emissions factors function as multipliers for the source's base emissions rate (as noted previously, this base emissions rate is 1 g/s). Variable emissions factors were assigned to each source for each hour of the day (i.e., 12 AM, 1 AM, 2 AM, etc.) in order to reflect the source's emissions characteristics (i.e., the emissions that would be generated by hourly traffic volumes that were derived using the methodology described in Section 4.1.1).

#### 4.2.2 Meteorological Data Inputs

AERMOD requires meteorological data as an input for the model. The meteorological data is processed using AERMET, a pre-processor to AERMOD. AERMET requires surface meteorological data, upper air meteorological data, and surface parameter data such as albedo (reflectivity) and surface roughness.

For the proposed Project, pre-processed surface data was obtained from the SCAQMD for Ontario International Airport (KONT) (see Figure 3-3). Upper air data was obtained from Marine Corps Air Station Miramar (KNKX), since this is the upper air profile provided by the SCAQMD with the KONT surface data. These data sets contained five complete years of meteorological data from January 2012 to December 2016. The meteorological data was processed using AERMET version 16216 with the adjusted U\* option.

Figure 4-1 Modeled Emission Sources



### 4.2.3 Terrain Inputs

The SR 60 overpass with Euclid Avenue is one of the closest portions of SR 60 to Project site. As identified in the U.S. EPA's *AERMOD Implementation Guide*:

“For cases in which receptor elevations are lower than the base elevation of the source (i.e., receptors that are down-slope of the source), AERMOD will predict concentrations that are less than what would be estimated from an otherwise identical flat terrain situation... To avoid underestimating concentrations in such situations, it may be reasonable in cases of terrain-following plumes in sloping terrain to apply the non-DEFAULT (sic) option to assume flat, level terrain” (U.S. EPA 2022a; pg. 12).

Consistent with this guidance from the U.S. EPA, the non-regulatory “Flat” terrain option was selected, meaning that AERMOD does not account for terrain in the dispersion modeling.

### 4.2.4 Modeled Receptors

Several cartesian receptor grids were generated in proximity of the Project site to evaluate the dispersion characteristics of the modeled emissions sources and estimate pollutant concentrations for the future receptors that would be located at the Project site. The receptor grids were then converted to discrete cartesian receptors. Receptors were modeled at ground level. In general, the receptor grids moved from fine resolution to coarse resolution data (i.e., UCART1 had the finest resolution, while UCART3 had the coarsest resolution). The details of the receptor grids generated for the Project are presented in Table 4-2.

Grid ID	Description	UTM Coordinates <sup>(A)</sup>		Grid Dimensions	Spacing (m)	Receptor Height (m)
		X	Y			
UCART1	Project Site (Fine)	439769.00	3765400.00	47 x 37	5	0
UCART2	Project Site (Coarse)	439769.00	3765400.00	9 x 7	30	0
UCART3	Project Vicinity	439769.00	3765400.00	11 x 11	100	0

Source: SCAQMD 2020.  
(A) UTM coordinates represent the center coordinate of the grid.

Receptors associated with UCART1 in the roadways and non-occupiable portions of the project site were removed, so the fine resolution receptor spacing was tailored to where receptors could be located at the Project site (i.e., in landscaped areas, residential units, recreational areas, and at the dog park). In total, 1,115 discrete cartesian receptors were modeled.

## 4.3 HEALTH RISK ASSESSMENT METHODOLOGY

Cancer and non-cancer health risks to sensitive receptors at the Project site were estimated using the U.S. EPA's AERMOD dispersion model and recommendations contained in the SCAQMD's *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions white paper and Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics Hot Spots Information and Assessment Act*, as well as the California Office of Environmental Health Hazard Assessment (OEHHA) *Air Toxics Hot Spots Program Guidance Manual* (SCAQMD 2003 and 2020; OEHHA 2015) for mobile sources (i.e., MSAT emissions).

## 4.3.1 Mobile Source Health Risk Assessment Methodology

Cancer Risk

Cancer risk is the calculated, pollutant-specific estimated probability of developing cancer based upon the dose and exposure to a TAC. Cancer risk is determined by calculating the combinatory effects of the cancer potency factor (CPF) when inhaling the toxic, the daily inhalation dose, the age group the receptor is cohort to, the duration of exposure over a lifetime (70 years), and other factors such as age sensitivity and the amount of time spent at the location of exposure. Risks were assessed for the inhalation pathway (i.e., breathing) for residential receptors at the Project site. Cancer risk calculations for residential receptors are summarized in Equation 3 and Equation 4 below.

Equation 3: Residential Cancer Risk

$$RISK_{INH.RES} = DOSE_{AIR.RES} \times CPF \times ASF \times \frac{ED}{AT} \times FAH$$

Where:

- DOSE<sub>AIR</sub> = Daily Inhalation Dose (mg/kg-day). See Equation 4.
- CPF = Cancer Potency Factor for Inhalants (mg/kg-day). CPF is expressed as the 95<sup>th</sup> percent upper confidence limit of the slope of the dose response curve under continuous lifetime exposure conditions. See Table 4-3 for MSAT CPFs.
- ASF = Age Sensitivity Factor. ASF is a protective coefficient intended to take into account increased susceptibility to long-term health effects from early-life exposure to TACs. The recommended ASFs are 10 for the third-trimester to birth and two-year age bins, 3 for the two-year to nine-year and 16-year age bins, and 1 for receptors over 16 years of age.
- ED = Exposure Duration (years). Exposure duration characterizes the length of residency (30 Years)
- FAH = Fraction at Home. FAH is the percentage of time the receptor is physically at the receptor location. The recommended percentages are 85 percent for the third-trimester to birth and two-year age bins, 72 percent for the two-year to nine-year and 16-year age bins, and 73 for receptors over 16 years of age.

Equation 4: Residential Dose

$$DOSE_{AIR.RES} = C_{AIR} \times \frac{BR}{BW} \times A \times EF \times 10^{-6}$$

Where:

- C<sub>AIR</sub> = Concentration of TAC in air (µg/m<sup>3</sup>). Concentration of toxic in micrograms per one cubic meter of air. The AERMOD program is used in the study to determine concentrations of MSATs at surrounding discrete and grid receptor points.
- BR/BW = Breathing Rate ÷ Body Weight (L/kg/day). Daily breathing rate normalized to body weight. The 95<sup>th</sup> percentile breathing rate to body weight ratios are used in this study with a recommended 361 L/kg/day for the third-trimester to birth age bin and 1,090 L/kg/day for the birth to two-years age bin. The 80<sup>th</sup> percentile breathing rate to body weight ratios are used in this study with a recommended 572 for the two-years to 16-

years age bin, 261 L/kg/day for the 16-years to 30-years age bin, and 233 L/kg/day for the 16-years to 70-years age bin.

- A = Inhalation Absorption Factor. Is a coefficient that reflects the fraction of chemical absorbed in studies used in the development of CPF and Reference Exposure Levels (RELS). An absorption factor of one is recommended for all chemicals.
- EF = Exposure Frequency. EF is the ratio of days in a year that a receptor is receiving the dose. The recommended EF is 0.96 characterizing an assumed 350 days a year that a residential receptor is home for some portion of the day.

### Non-Cancer Risk

The chronic non-cancer hazard quotient is the calculated pollutant-specific indicator for risk of developing an adverse health effect on specific organ system(s) targeted by the identified TAC. The potential for exposure to result in chronic non-cancer effects is evaluated by comparing the estimated annual average air concentration to the chemical-specific, non-cancer chronic RELs. The same is true for evaluating acute non-cancer effects. The REL is a concentration below which there is assumed to be no observable adverse health impact to a target organ system. When calculated for a single chemical, the comparison yields a ratio termed a hazard quotient. To evaluate the potential for adverse non-cancer health effects from simultaneous exposure to multiple chemicals, the hazard quotients for all chemicals are summed, yielding a hazard index. For a chronic non-cancer hazard index, the annual average pollutant concentration is divided by chronic hazard quotient. For an acute hazard index, the one-hour maximum concentration is divided by the acute hazard quotient. Table 4-3 presents the chronic and acute non-cancer RELs applicable to MSAT emissions in the vicinity of the Project site.

Table 4-3. MSAT Cancer Potency Factors and Reference Exposure Levels			
Pollutant	CPF	Chronic REL	Acute REL
1,3-Butadiene	6.00E-01	2.00E+00	6.60E+02
Acetaldehyde	1.00E-02	1.40E+02	4.70E+02
Acrolein	--	3.50E-01	2.50E+00
Benzene	1.00E-01	3.00E+00	2.70E+01
Diesel PM	1.10E+00	5.00E+00	--
Ethylbenzene	8.70E-03	2.00E+03	0.00E+00
Formaldehyde	2.10E-02	9.00E+00	5.50E+01
Naphthalene	1.20E-01	9.00E+00	0.00E+00
POM	7.95E-01 <sup>(A)</sup>	--	--

Source: BAAQMD 2021

(A) The CPF for POM was estimated based on the assumption that POM has a carcinogenic potency equal to 5% of that for pure benzo[a]pyrene (B[a]P), which has an inhalation cancer slope factor of 3.9 and an oral cancer slope factor of 12. Combined these factors yield a CPF of 15.9 before being multiplied through by the 5%.

### Weighted Cancer and Non-cancer Risk Factors

As described in Section 4.2, pollutant concentrations were evaluated for three sets of emissions: running (exhaust) TOG, running loss (evaporative) TOG, and DPM. With the exception of DPM, emissions of MSATs were not directly modeled; rather, TOG was used as a proxy for assessing how MSAT pollutants

would disperse. The CT-EMFAC2017 provides a breakdown of emissions factors for each MSAT, along with TOG. These breakdowns were used to develop ratios between MSAT concentrations and those modeled through the TOG emission factor inputs for AERMOD. The emissions factors from the 5 mile per hour bin was utilized for the running exhaust emissions factors, because it provided the greatest ratio of MSATs to TOG. Equation 5 and Equation 6 present the manner in which MSAT CPFs and RELs were weighted per emission TOG.

*Equation 5: Weighted Cancer Risk Potency Factor*

$$CPF_W = \sum MSAT_R \times CPF_{MSAT}$$

Where:

$CPF_W$  = Weighted Cancer Potency Factor (mg/kg-day)

$MSAT_R$  = Ratio of MSAT to TOG (unitless).

$CPF_{MSAT}$  = Cancer Potency Factor for MSAT Inhalant (mg/kg-day). See Table 4-3.

*Equation 6: Weighted Reference Exposure Level*

$$REL_W = \frac{1}{\sum MSAT_R \times REL_{MSAT}}$$

Where:

$REL_W$  = Weighted Reference Exposure Level (unitless)

$MSAT_R$  = Ratio of MSAT to TOG (unitless).

$REL_{MSAT}$  = REL for MSAT Inhalant. See Table 4-3.

Table 4-4 and Table 4-5 present the ratio of MSAT to TOG for running (exhaust) and running loss (evaporative) emissions, respectively, as well as the weighted CPF and REL values used for the health risk assessment.

Table 4-4. Weighted CPFs and RELs for TOG Running (Exhaust) Emissions								
Pollutant	Emissions Factor <sup>(A)</sup>	Ratio to TOG	CPF	Chronic REL	Acute REL	Weighted Toxicity Factor		
						CPF	Chronic REL	Acute REL
TOG	0.187712	--	--	--	--	--	--	--
1,3-Butadiene	0.000764	0.004070	6.00E-01	2.00E+00	6.60E+02	2.44E-03	2.04E-03	6.17E-06
Acetaldehyde	0.002473	0.013174	1.00E-02	1.40E+02	4.70E+02	1.32E-04	9.41E-05	2.80E-05
Acrolein	0.000165	0.000879	0.00E+00	3.50E-01	2.50E+00	0.00E+00	2.51E-03	3.52E-04
Benzene	0.003663	0.019514	1.00E-01	3.00E+00	2.70E+01	1.95E-03	6.50E-03	7.23E-04
Ethylbenzene	0.001444	0.007693	8.70E-03	2.00E+03	0.00E+00	6.69E-05	3.85E-06	0.00E+00
Formaldehyde	0.006140	0.032710	2.10E-02	9.00E+00	5.50E+01	6.87E-04	3.63E-03	5.95E-04
Naphthalene	0.000127	0.000677	1.20E-01	9.00E+00	0.00E+00	8.12E-05	7.52E-05	0.00E+00
POM	0.000159	0.000847	7.95E-01	--	--	6.73E-04	--	--
Total						6.03E-03	6.73E+01 <sup>(B)</sup>	5.87E+02 <sup>(B)</sup>

Source: CT-EMFAC2017; see Appendix C.  
 (A) Emissions in grams / veh-mi for 5 mile per hour speed bin.  
 (B) Value reflects the inverse of the above REL's summed.

Table 4-5. Weighted CPFs and RELs for TOG Running Loss (Evaporative) Emissions								
Pollutant	Emissions Factor <sup>(A)</sup>	Ratio to TOG	CPF	Chronic REL	Acute REL	Weighted Toxicity Factor		
						CPF	Chronic REL	Acute REL
TOG	1.275299	--	--	--	--	--	--	--
1,3-Butadiene	0	0.0%	6.00E-01	2.00E+00	6.60E+02	0.00E+00	0.00E+00	0.00E+00
Benzene	0.012753	1.0%	1.00E-01	3.00E+00	2.70E+01	1.00E-03	3.33E-03	3.70E-04
Ethylbenzene	0.020915	1.6%	8.70E-03	2.00E+03	0.00E+00	1.43E-04	8.20E-06	0.00E+00
Naphthalene	0.001785	0.1%	1.20E-01	9.00E+00	0.00E+00	1.68E-04	1.56E-04	0.00E+00
Total						1.31E-03	2.86E+02 <sup>(B)</sup>	2.70E+03 <sup>(B)</sup>

Source: CT-EMFAC2017; see Appendix C.  
 (A) Emissions in grams / veh-hour.  
 (B) Value reflects the inverse of the above REL's summed.

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## 5 HEALTH RISK ASSESSMENT RESULTS

This chapter presents the results of the health risk assessment and compares risks against thresholds to determine their significance.

### 5.1 THRESHOLDS OF SIGNIFICANCE

The SCAQMD maintains significance thresholds for cancer and non-cancer health risks. These thresholds are presented below in Table 5-1.

Table 5-1. SCAQMD Health Risk Thresholds	
Risk Category	Threshold
Cancer Risk	Increased cancer risk of >10.0 in a million
Non-Cancer Risk	Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute)
Source: SCAQMD 2021	

### 5.2 ESTIMATED HEALTH RISKS

Using the average DPM and TOG concentrations derived from AERMOD, the individual residential cancer and non-cancer risks were computed using the methodology described in Section 4.3.1. Table 5-2 presents the cancer and non-cancer risk estimates from each source, as well as the cumulative risk from the sources combined at the Maximally Exposed Individuals (MEIs). MEIs have been evaluated Phase 1 only.<sup>11</sup> Whereas only the residential complexes are considered for cancer risk and chronic non-cancer risk, because receptors could be there for the 30-year duration assessed in the risk assessment, acute non-cancer risks are also considered for receptors at the dog park, because receptors at that location could be there for 1-hour or more (i.e., the temporal interval over which acute risks are assessed).

Figure 5-1 and Figure 5-2 present contours of total TOG exhaust and total TOG evaporative concentrations, respectively, while Figure 5-3 identifies DPM concentrations. The location of the Phase 1 MEI for cancer risk and chronic hazard risk would be located at the northeastern corner of the building with retail space on the bottom floor, in the northeastern portion of the PUD. The MEI for acute risk would be located in the northwestern portion of the Phase 1 dog park.

The proposed Project would be subject to the California Title 24 Building Code, including Section 120.1(b)(1)(C), which per the 2019 Title 24 Building Code, requires high-density residential buildings to be constructed with HVAC system air filters that meet a designated efficiency equal to Minimum Efficiency Rating Value (MERV) 13 standards. As reported by the U.S. EPA, MERV 13 filters are capable of removing

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<sup>11</sup> As shown further on in the analysis, pollutant concentrations and corresponding risks would be greatest in the northern portion of the PUD. If risks for Phase 1 are acceptable, so too would risks for Phase 2. This is because emissions from SR 60 (and the on- and off-ramps) are anticipated to decrease in the future as more cars and trucks transition cleaner fuel sources (e.g., electric vehicles).

90 percent of particles between 3 and 10  $\mu\text{m}$  (U.S. EPA 2022b).<sup>12</sup> As shown in Table 5-2, the cancer risk from SR 60 would be approximately 5.6 excess cancers per million after accounting for the MERV-13 filtration system. Cumulative cancer risks from SR 60 and vehicles on the on- and off-ramps would be 7.0 excess cancers per million, which is below the SCAQMD threshold of 10.0 excess cancers per million. Cumulative non-cancer risks (chronic and acute) would also be below the SCAQMD thresholds.

Source	Maximum Cancer Risk (per million)	Maximum Chronic Hazard Index	Maximum Acute Hazard Index
State Route 60 Freeway	5.6	0.01	0.01
State Route 60 On- and Off-ramps	1.4	<0.01	<0.01
<i>Combined Risks</i>	7.0 <sup>(A)</sup>	0.02	0.02
SCAQMD Threshold	10.0	1.0	1.0
Threshold Exceeded?	No	No	No

Source: SCAQMD 2021  
 (A) Approximately 71% of the 7.0 excess cancer risk would be from DPM.

<sup>12</sup> High-efficiency particulate filters (MERV-13 to HEPA) cannot completely remove TOG from the air, because the particles that contribute to TOG emissions are smaller than the particulate matter sizes that the MERV filters are designed to capture.

Figure 5-1 Total Annual Average TOG Exhaust Concentrations ( $\mu\text{g}/\text{m}^3$ )

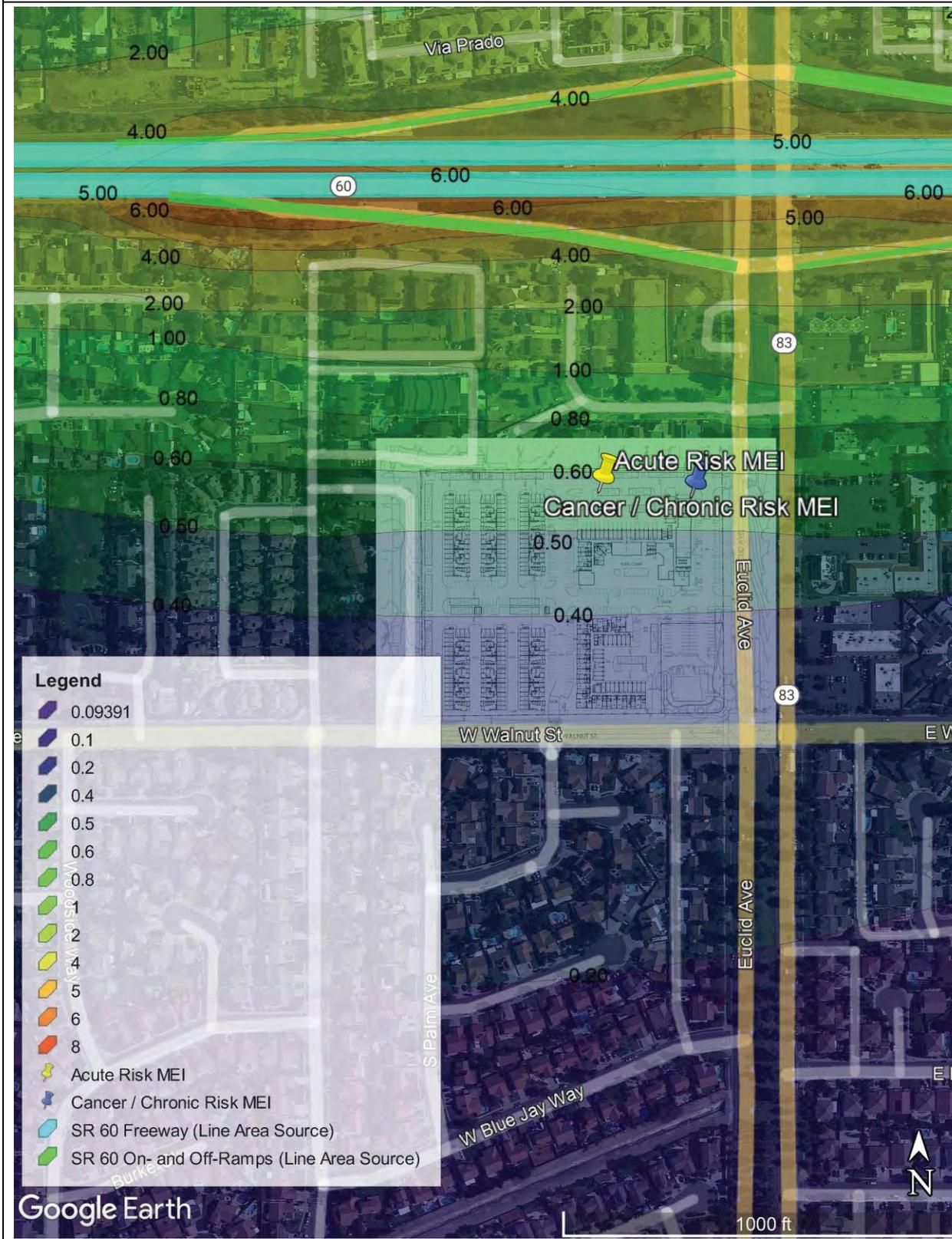


Figure 5-2 Total Annual Average TOG Evaporative Concentrations ( $\mu\text{g}/\text{m}^3$ )

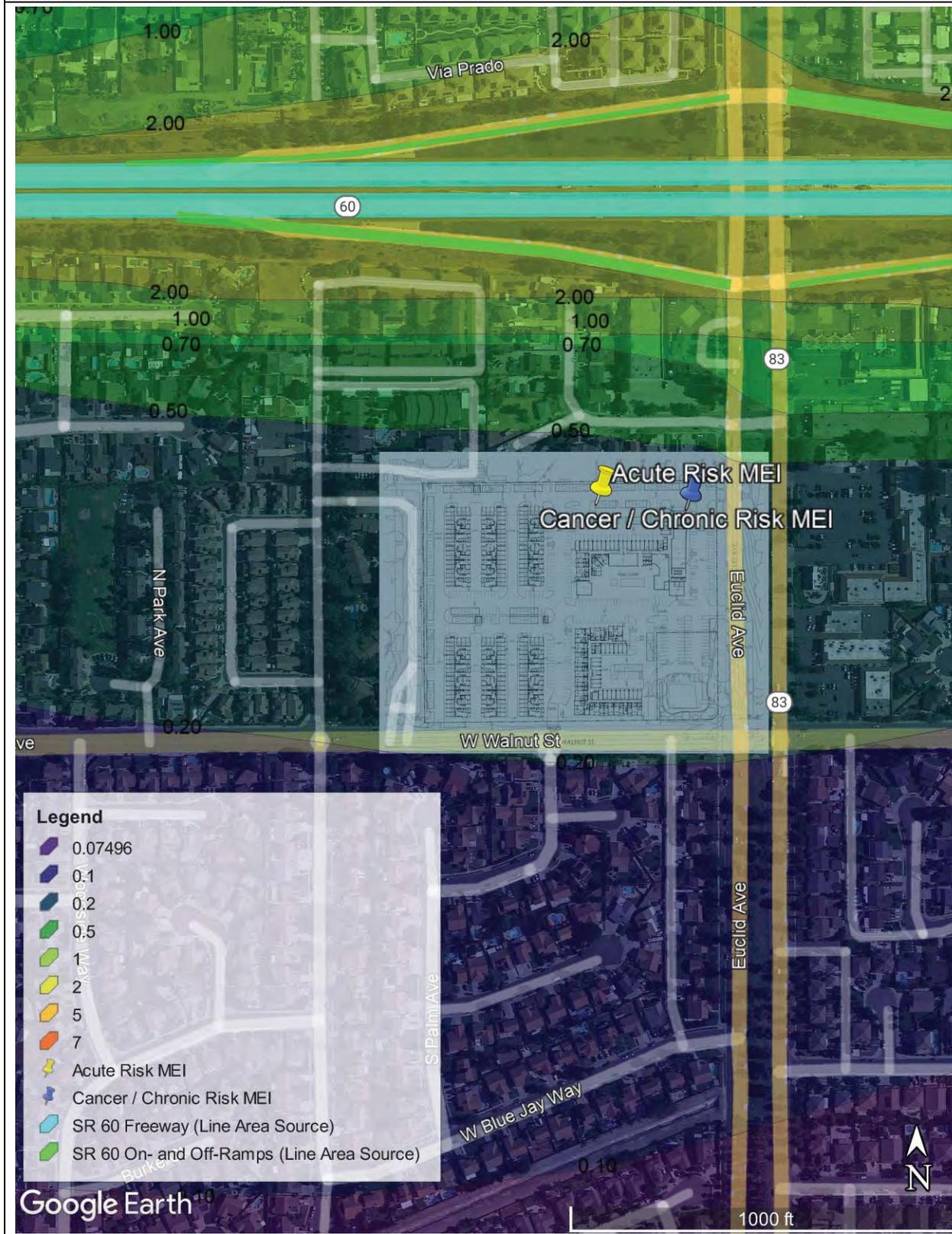
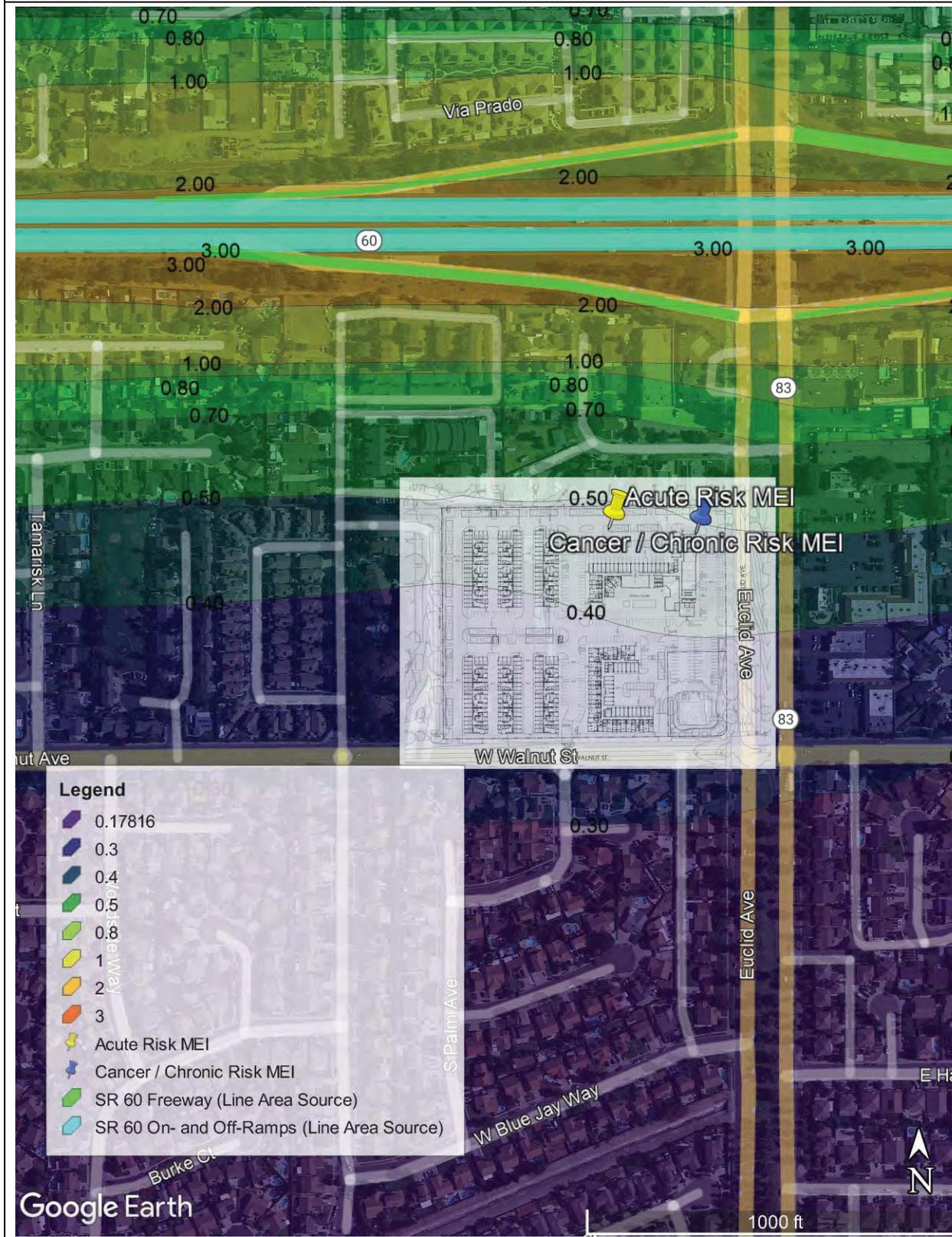


Figure 5-3 Total Annual Average DPM Exhaust Concentrations ( $\mu\text{g}/\text{m}^3$ )



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## 6 REPORT PREPARERS AND REFERENCES

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This Health Risk Assessment Report was prepared by MIG under contract to Legacy Partners. This Report reflects the independent, objective, professional opinion of MIG.

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**Appendix A**  
**Traffic Volumes and Mobile Source Emissions Quantification**  
**for AERMOD**

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# **Euclid/Walnut Mixed Use Planned Unit Development Project (City of Ontario, CA)**

## **Health Risk Assessment Report**

### **Appendix A: Traffic Volumes and Mobile Source Emissions Quantification for AERMOD**

**Prepared by: MIG, Inc.**

**October 2022**

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- Sheet 1: AERMOD Source Lengths and Release Height Parameters
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Sheet 1: AERMOD Source Lengths and Release Height Parameters

Table 1-1: AERMOD Source Parameters

Source	Description	Length (m)	Width (m)	TOG Height	TOG Int Vert Dim	DPM Height	DPM Int Vert Dim
ARLN01	SR 60 WB TOG Exh	1779.1	18.29	1.3	1.2	--	--
ARLN02	SR 60 EB TOG Exh	1778.6	18.29	1.3	1.2	--	--
ARLN03	SR 60 WB On-ramp TOG Exh	475.1	3.96	1.3	1.2	--	--
ARLN04	SR 60 EB Off-Ramp TOG Exh	436.3	7.62	1.3	1.2	--	--
ARLN05	SR 60 EB On-ramp TOG Exh	508.2	3.96	1.3	1.2	--	--
ARLN06	SR 60 WB Off-Ramp TOG Exh	455	11.58	1.3	1.2	--	--
ARLN07	SR 60 WB TOG Exh	1779.1	18.29	1.3	1.2	--	--
ARLN08	SR 60 EB TOG Evap	1778.6	18.29	1.3	1.2	--	--
ARLN09	SR 60 WB On-ramp TOG Evap	475.1	3.96	1.3	1.2	--	--
ARLN10	SR 60 EB Off-Ramp TOG Evap	436.3	7.62	1.3	1.2	--	--
ARLN11	SR 60 EB On-ramp TOG Evap	508.2	3.96	1.3	1.2	--	--
ARLN12	SR 60 WB Off-Ramp TOG Evap	455	11.58	1.3	1.2	--	--
ARLN13	SR 60 WB DPM Exh	--	--	--	--	3.4	3.2
ARLN14	SR 60 EB DPM Exh	--	--	--	--	3.4	3.2
ARLN15	SR 60 WB On-ramp DPM Exh	--	--	--	--	3.4	3.2
ARLN16	SR 60 EB Off-Ramp DPM Exh	--	--	--	--	3.4	3.2
ARLN17	SR 60 EB On-ramp DPM Exh	--	--	--	--	3.4	3.2
ARLN18	SR 60 WB Off-Ramp DPM Exh	--	--	--	--	3.4	3.2

Sheet 2: AERMOD Source Emissions Rates

Table 2-1: TOG Exhaust Emission Rates for AERMOD

Segment	TOG Running (Exhaust) Emissions (g/s)																							
	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SR 60 WB	1.44E-02	1.99E-02	2.03E-02	3.12E-02	6.47E-02	7.49E-02	8.43E-02	9.15E-02	9.01E-02	8.89E-02	9.00E-02	9.23E-02	9.43E-02	9.64E-02	9.98E-02	1.02E-01	1.03E-01	1.00E-01	8.86E-02	7.29E-02	6.26E-02	5.93E-02	4.91E-02	3.61E-02
SR 60 EB	1.72E-02	1.24E-02	1.08E-02	1.26E-02	2.03E-02	3.40E-02	4.31E-02	4.57E-02	4.39E-02	4.14E-02	4.20E-02	4.39E-02	4.63E-02	4.83E-02	5.01E-02	4.91E-02	5.08E-02	5.06E-02	4.72E-02	4.59E-02	4.17E-02	4.08E-02	3.34E-02	2.48E-02
SR 60 WB On-ramp	2.51E-03	1.97E-03	2.01E-03	3.09E-03	6.42E-03	7.58E-03	8.54E-03	9.11E-03	8.96E-03	8.84E-03	8.96E-03	9.18E-03	9.38E-03	9.59E-03	9.93E-03	1.01E-02	1.02E-02	1.01E-02	8.97E-03	7.24E-03	6.34E-03	5.89E-03	4.87E-03	3.58E-03
SR 60 EB Off-Ramp	2.61E-03	1.88E-03	1.65E-03	1.92E-03	3.09E-03	5.18E-03	7.27E-03	8.11E-03	7.80E-03	7.34E-03	7.45E-03	7.79E-03	8.22E-03	8.57E-03	8.85E-03	8.68E-03	8.52E-03	8.49E-03	8.37E-03	7.75E-03	7.03E-03	6.21E-03	5.08E-03	3.78E-03
SR 60 EB On-ramp	4.01E-03	2.88E-03	2.53E-03	2.94E-03	4.74E-03	7.94E-03	1.11E-02	1.24E-02	1.20E-02	1.13E-02	1.14E-02	1.19E-02	1.26E-02	1.31E-02	1.36E-02	1.33E-02	1.31E-02	1.30E-02	1.28E-02	1.19E-02	1.08E-02	9.51E-03	7.79E-03	5.80E-03
SR 60 WB Off-Ramp	4.02E-04	3.16E-04	3.22E-04	4.95E-04	1.03E-03	1.21E-03	1.37E-03	1.46E-03	1.44E-03	1.42E-03	1.43E-03	1.47E-03	1.50E-03	1.54E-03	1.59E-03	1.62E-03	1.64E-03	1.62E-03	1.44E-03	1.16E-03	1.02E-03	9.42E-04	7.81E-04	5.74E-04

Table 2-2: TOG Evaporative Emission Rates for AERMOD

Segment	Running Loss (Evap) Emissions (g/s)																							
	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SR 60 WB	1.09E-02	8.55E-03	8.71E-03	1.34E-02	2.78E-02	3.56E-02	4.01E-02	4.67E-02	4.59E-02	4.53E-02	4.59E-02	4.70E-02	4.81E-02	4.91E-02	5.09E-02	5.19E-02	5.24E-02	4.76E-02	4.21E-02	3.14E-02	2.98E-02	2.55E-02	2.11E-02	1.55E-02
SR 60 EB	1.30E-02	9.32E-03	8.17E-03	9.51E-03	1.53E-02	2.57E-02	3.90E-02	4.75E-02	4.56E-02	4.30E-02	4.36E-02	4.56E-02	4.81E-02	5.02E-02	5.70E-02	5.59E-02	6.10E-02	6.08E-02	4.90E-02	4.16E-02	3.77E-02	3.07E-02	2.52E-02	1.87E-02
SR 60 WB On-ramp	3.41E-03	2.68E-03	2.73E-03	4.20E-03	8.72E-03	1.03E-02	1.16E-02	1.24E-02	1.22E-02	1.20E-02	1.22E-02	1.25E-02	1.27E-02	1.30E-02	1.35E-02	1.38E-02	1.39E-02	1.38E-02	1.22E-02	9.83E-03	8.61E-03	8.00E-03	6.62E-03	4.87E-03
SR 60 EB Off-Ramp	3.95E-04	2.84E-04	2.49E-04	2.90E-04	4.66E-04	7.82E-04	1.10E-03	1.22E-03	1.18E-03	1.11E-03	1.12E-03	1.18E-03	1.24E-03	1.29E-03	1.34E-03	1.31E-03	1.29E-03	1.28E-03	1.26E-03	1.17E-03	1.06E-03	9.37E-04	7.67E-04	5.71E-04
SR 60 EB On-ramp	5.45E-03	3.92E-03	3.43E-03	4.00E-03	6.44E-03	1.08E-02	1.51E-02	1.69E-02	1.62E-02	1.53E-02	1.55E-02	1.62E-02	1.71E-02	1.78E-02	1.84E-02	1.81E-02	1.77E-02	1.77E-02	1.74E-02	1.61E-02	1.46E-02	1.29E-02	1.06E-02	7.88E-03
SR 60 WB Off-Ramp	4.82E-04	3.79E-04	3.86E-04	5.94E-04	1.23E-03	1.46E-03	1.64E-03	1.75E-03	1.72E-03	1.70E-03	1.72E-03	1.76E-03	1.80E-03	1.84E-03	1.91E-03	1.94E-03	1.96E-03	1.95E-03	1.72E-03	1.39E-03	1.22E-03	1.13E-03	9.37E-04	6.89E-04

Table 2-3: DPM Emission Rates for AERMOD

Segment	DPM Running (Exhaust) Emissions (g/s)																							
	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SR 60 WB	9.57E-04	6.59E-04	5.79E-04	1.03E-03	2.94E-03	4.68E-03	5.27E-03	6.01E-03	6.49E-03	6.66E-03	6.88E-03	7.25E-03	7.07E-03	6.83E-03	6.62E-03	6.43E-03	6.19E-03	6.05E-03	4.94E-03	3.85E-03	3.48E-03	3.02E-03	2.24E-03	1.43E-03
SR 60 EB	2.74E-03	2.71E-03	2.64E-03	2.72E-03	3.39E-03	4.30E-03	5.41E-03	5.02E-03	5.91E-03	7.06E-03	7.47E-03	7.31E-03	6.90E-03	6.30E-03	4.30E-03	3.33E-03	2.60E-03	2.35E-03	3.29E-03	4.02E-03	4.26E-03	3.98E-03	3.80E-03	3.14E-03
SR 60 WB On-ramp	8.17E-05	5.63E-05	4.94E-05	8.80E-05	2.51E-04	8.80E-05	4.50E-04	5.13E-04	5.54E-04	5.68E-04	5.87E-04	6.18E-04	6.03E-04	5.82E-04	5.65E-04	5.48E-04	5.28E-04	5.16E-04	4.21E-04	3.29E-04	2.97E-04	2.58E-04	1.91E-04	1.22E-04
SR 60 EB Off-Ramp	4.51E-05	4.46E-05	4.33E-05	4.47E-05	5.58E-05	7.08E-05	8.90E-05	8.25E-05	4.71E-05	1.16E-04	1.23E-04	1.20E-04	1.13E-04	1.04E-04	8.15E-05	6.30E-05	5.48E-05	4.97E-05	5.41E-05	6.62E-05	7.01E-05	6.55E-05	6.25E-05	5.16E-05
SR 60 EB On-ramp	3.14E-04	3.10E-04	3.01E-04	3.11E-04	3.88E-04	1.08E-04	6.19E-04	5.74E-04	6.76E-04	8.08E-04	8.55E-04	8.36E-04	7.89E-04	7.20E-04	5.67E-04	4.38E-04	3.81E-04	3.45E-04	3.76E-04	4.60E-04	4.88E-04	4.56E-04	4.35E-04	3.59E-04
SR 60 WB Off-Ramp	2.29E-05	1.58E-05	1.39E-05	2.47E-05	7.04E-05	1.12E-04	1.26E-04	1.44E-04	1.55E-04	1.59E-04	1.65E-04	1.73E-04	1.69E-04	1.63E-04	1.58E-04	1.54E-04	1.48E-04	1.45E-04	1.18E-04	9.23E-05	8.34E-05	7.23E-05	5.35E-05	3.42E-05

Sheet 3: SR 60 TOG Emissions

Table 3-1: SR 60 AADT Information

All Veh AADT	2019	2025
SR 60	235,000	249,457

Assumes 1% Traffic Growth per year

Table 3-2: SR 60 Hourly Vehicle Volumes and Speed (TOG)

Roadway Segment	Vehicle Volumes and Speed by Hour																							
	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SR 60 (WB)	1.45%	1.14%	1.16%	1.78%	3.70%	4.37%	4.92%	5.25%	5.17%	5.10%	5.17%	5.29%	5.41%	5.53%	5.73%	5.84%	5.89%	5.84%	5.17%	4.17%	3.66%	3.39%	2.81%	2.07%
SR 60 (EB)	1.72%	1.24%	1.09%	1.27%	2.04%	3.42%	4.79%	5.35%	5.14%	4.84%	4.91%	5.14%	5.42%	5.65%	5.84%	5.73%	5.62%	5.60%	5.52%	5.11%	4.63%	4.09%	3.35%	2.49%
Veh-Hr (WB)	1,805	1,418	1,445	2,224	4,614	5,454	6,139	6,551	6,445	6,360	6,442	6,603	6,746	6,895	7,145	7,278	7,352	7,284	6,449	5,205	4,559	4,233	3,506	2,577
Veh-Hr (EB)	2,151	1,547	1,356	1,579	2,541	4,262	5,980	6,670	6,413	6,037	6,125	6,406	6,764	7,048	7,283	7,141	7,006	6,983	6,887	6,372	5,780	5,105	4,182	3,111
WB Speed	65	65	65	65	65	60	60	55	55	55	55	55	55	55	55	55	55	60	60	65	60	65	65	65
EB Speed	65	65	65	65	65	65	60	55	55	55	55	55	55	55	50	50	45	45	55	60	60	65	65	65

Table 3-3: SR 60 Segment Distances

Distance (Mi)	WB SR 60	EB SR 60
Segment distance	1.11	1.11

Table 3-4: SR 60 TOG Running (Exhaust) Emissions per Hour

Roadway Segment	TOG Running (Exhaust) Emissions (g) by Hour of Day																							
	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SR 60 WB	5.19E+01	4.08E+01	4.16E+01	6.39E+01	1.33E+02	1.42E+02	1.59E+02	1.62E+02	1.59E+02	1.57E+02	1.59E+02	1.63E+02	1.66E+02	1.70E+02	1.76E+02	1.80E+02	1.81E+02	1.89E+02	1.67E+02	1.50E+02	1.18E+02	1.22E+02	1.01E+02	7.41E+01
SR 60 EB	6.18E+01	4.45E+01	3.90E+01	4.54E+01	7.31E+01	1.23E+02	1.55E+02	1.65E+02	1.58E+02	1.49E+02	1.51E+02	1.58E+02	1.67E+02	1.74E+02	1.80E+02	1.77E+02	1.83E+02	1.82E+02	1.70E+02	1.65E+02	1.50E+02	1.47E+02	1.20E+02	8.94E+01

Table 3-5: SR 60 TOG Running Loss (Evap) Emissions per Hour

Roadway Segment	TOG Running Loss (Evap) Emissions (g) by Hour of Day																							
	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SR 60 WB	3.91E+01	3.07E+01	3.13E+01	4.82E+01	1.00E+02	1.28E+02	1.44E+02	1.68E+02	1.65E+02	1.63E+02	1.65E+02	1.69E+02	1.73E+02	1.77E+02	1.83E+02	1.87E+02	1.88E+02	1.71E+02	1.52E+02	1.13E+02	1.07E+02	9.18E+01	7.60E+01	5.59E+01
SR 60 EB	4.66E+01	3.36E+01	2.94E+01	3.42E+01	5.51E+01	9.24E+01	1.40E+02	1.71E+02	1.64E+02	1.55E+02	1.57E+02	1.64E+02	1.73E+02	1.81E+02	2.05E+02	2.01E+02	2.19E+02	2.19E+02	1.76E+02	1.50E+02	1.36E+02	1.11E+02	9.07E+01	6.75E+01

Table 3-6: SR 60 TOG Running (Exhaust) Emissions per Second

Roadway Segment	Running (Exhaust) Emissions (g/s)																							
	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SR 60 WB	1.44E-02	1.99E-02	2.03E-02	3.12E-02	6.47E-02	7.49E-02	8.43E-02	9.15E-02	9.01E-02	8.89E-02	9.00E-02	9.23E-02	9.43E-02	9.64E-02	9.98E-02	1.02E-01	1.03E-01	1.00E-01	8.86E-02	7.29E-02	6.26E-02	5.93E-02	4.91E-02	3.61E-02
SR 60 EB	1.72E-02	1.24E-02	1.08E-02	1.26E-02	2.03E-02	3.40E-02	4.31E-02	4.57E-02	4.39E-02	4.14E-02	4.20E-02	4.39E-02	4.63E-02	4.83E-02	5.01E-02	4.91E-02	5.08E-02	5.06E-02	4.72E-02	4.59E-02	4.17E-02	4.08E-02	3.34E-02	2.48E-02

Table 3-6: SR 60 TOG Running Loss (Evap) Emissions per Second

Roadway Segment	Running Loss (Evap) Emissions (g/s)																							
	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SR 60 WB	1.09E-02	8.55E-03	8.71E-03	1.34E-02	2.78E-02	3.56E-02	4.01E-02	4.67E-02	4.59E-02	4.53E-02	4.59E-02	4.70E-02	4.81E-02	4.91E-02	5.09E-02	5.19E-02	5.24E-02	4.76E-02	4.21E-02	3.14E-02	2.98E-02	2.55E-02	2.11E-02	1.55E-02
SR 60 EB	1.30E-02	9.32E-03	8.17E-03	9.51E-03	1.53E-02	2.57E-02	3.90E-02	4.75E-02	4.56E-02	4.30E-02	4.36E-02	4.56E-02	4.81E-02	5.02E-02	5.70E-02	5.59E-02	6.10E-02	6.08E-02	4.90E-02	4.16E-02	3.77E-02	3.07E-02	2.52E-02	1.87E-02

Sheet 4: SR 60 On- and Off-ramp TOG Emissions

Table 4-1: SR 60 On- and Off-Ramp AADT Information for Euclid Avenue

Segment	Year	All (Trucks+Cars) ADT Volume	
		Caltrans Data	2025
SR 60 WB On-ramp (Euclid)	2015	10,200	11,267
SR 60 EB Off-Ramp (Euclid)	2018	10,004	10,726
SR 60 EB On-ramp (Euclid)	2018	13,168	14,118
SR 60 WB Off-Ramp (Euclid)	2018	13,967	14,975

Assumes 1% Traffic Growth per year

Table 4-2: SR 60 East- and Westbound On- and Off-Ramps at Eucalid - Hourly Vehicle Volumes and Speed (Cars)

Roadway Segment	SR 60 Off- and On-ramp Vehicle Volumes and Speed by Hour																							
	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
Car Breakdown (WB)	1.45%	1.14%	1.16%	1.78%	3.70%	4.37%	4.92%	5.25%	5.17%	5.10%	5.17%	5.29%	5.41%	5.53%	5.73%	5.84%	5.89%	5.84%	5.17%	4.17%	3.66%	3.39%	2.81%	2.07%
Car Breakdown (EB)	1.72%	1.24%	1.09%	1.27%	2.04%	3.42%	4.79%	5.35%	5.14%	4.84%	4.91%	5.14%	5.42%	5.65%	5.84%	5.73%	5.62%	5.60%	5.52%	5.11%	4.63%	4.09%	3.35%	2.49%
SR 60 WB On-ramp Vol (TOG)	163	128	131	201	417	493	555	592	582	574	582	597	609	623	645	657	664	658	583	470	412	382	317	233
SR 60 EB Off-Ramp Vol (TOG)	185	133	117	136	219	366	514	574	551	519	527	551	582	606	626	614	602	600	592	548	497	439	360	267
SR 60 EB On-ramp Vol (TOG)	243	175	153	179	288	482	677	755	726	683	693	725	766	798	824	808	793	790	779	721	654	578	473	352
SR 60 WB Off-Ramp Vol (TOG)	217	170	173	267	554	655	737	786	774	764	773	793	810	828	858	874	883	874	774	625	547	508	421	309
On-ramp Speed	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Off-ramp Speed	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45

Table 4-3: SR 60 East- and Westbound On- and Off-Ramps at Eucalid - Segment Distances

Distance (Mi)	SR 60 WB On	SR 60 EB Off	SR 60 EB On	SR 60 WB Off
Segment	0.30	0.27	0.32	0.28

Table 4-4: SR 60 East- and Westbound On- and Off-Ramps at Eucalid - TOG Running (Exhaust) Emissions per Hour

Roadway Segment	Running (Exhaust) Emissions (g) by Hour of Day																							
	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SR 60 WB Car On-ramp	9.03E+00	7.10E+00	7.23E+00	1.11E+01	2.31E+01	2.73E+01	3.07E+01	3.28E+01	3.23E+01	3.18E+01	3.22E+01	3.31E+01	3.38E+01	3.45E+01	3.58E+01	3.64E+01	3.68E+01	3.65E+01	3.23E+01	2.61E+01	2.28E+01	2.12E+01	1.75E+01	1.29E+01
SR 60 EB Car Off-Ramp	9.41E+00	6.77E+00	5.93E+00	6.91E+00	1.11E+01	1.86E+01	2.62E+01	2.92E+01	2.81E+01	2.64E+01	2.68E+01	2.80E+01	2.96E+01	3.08E+01	3.19E+01	3.13E+01	3.07E+01	3.06E+01	3.01E+01	2.79E+01	2.53E+01	2.23E+01	1.83E+01	1.36E+01
SR 60 EB Car On-ramp	1.44E+01	1.04E+01	9.10E+00	1.06E+01	1.70E+01	2.86E+01	4.01E+01	4.48E+01	4.30E+01	4.05E+01	4.11E+01	4.30E+01	4.54E+01	4.73E+01	4.89E+01	4.79E+01	4.70E+01	4.68E+01	4.62E+01	4.28E+01	3.88E+01	3.43E+01	2.81E+01	2.09E+01
SR 60 WB Car Off-Ramp	1.45E+00	1.14E+00	1.16E+00	1.78E+00	3.70E+00	4.37E+00	4.92E+00	5.25E+00	5.17E+00	5.10E+00	5.16E+00	5.29E+00	5.41E+00	5.53E+00	5.73E+00	5.84E+00	5.89E+00	5.84E+00	5.17E+00	4.17E+00	3.66E+00	3.39E+00	2.81E+00	2.07E+00

Table 4-5: SR 60 East- and Westbound On- and Off-Ramps at Eucalid - TOG Running Loss (Evap) Emissions per Hour

Roadway Segment	Running Loss (Evap) Emissions (g) by Hour of Day																							
	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SR 60 WB Car On-ramp	1.23E+01	9.64E+00	9.83E+00	1.51E+01	3.14E+01	3.71E+01	4.18E+01	4.46E+01	4.38E+01	4.33E+01	4.38E+01	4.49E+01	4.59E+01	4.69E+01	4.86E+01	4.95E+01	5.00E+01	4.95E+01	4.39E+01	3.54E+01	3.10E+01	2.88E+01	2.38E+01	1.75E+01
SR 60 EB Car Off-Ramp	1.42E+00	1.02E+00	8.96E-01	1.04E+00	1.68E+00	2.82E+00	3.95E+00	4.41E+00	4.24E+00	3.99E+00	4.05E+00	4.23E+00	4.47E+00	4.66E+00	4.81E+00	4.72E+00	4.63E+00	4.61E+00	4.55E+00	4.21E+00	3.82E+00	3.37E+00	2.76E+00	2.06E+00
SR 60 EB Car On-ramp	1.96E+01	1.41E+01	1.24E+01	1.44E+01	2.32E+01	3.89E+01	5.45E+01	6.08E+01	5.85E+01	5.50E+01	5.58E+01	5.84E+01	6.17E+01	6.43E+01	6.64E+01	6.51E+01	6.39E+01	6.37E+01	6.28E+01	5.81E+01	5.27E+01	4.65E+01	3.81E+01	2.84E+01
SR 60 WB Car Off-Ramp	1.74E+00	1.36E+00	1.39E+00	2.14E+00	4.44E+00	5.25E+00	5.91E+00	6.30E+00	6.20E+00	6.12E+00	6.20E+00	6.35E+00	6.49E+00	6.63E+00	6.87E+00	7.00E+00	7.07E+00	7.01E+00	6.20E+00	5.01E+00	4.39E+00	4.07E+00	3.37E+00	2.48E+00

Table 4-6: SR 60 East- and Westbound On- and Off-Ramps at Eucalid - TOG Running (Exhaust) Emissions per Second

Roadway Segment	Running (Exhaust) Emissions (g/s)																							
	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SR 60 WB Car On-ramp	2.51E-03	1.97E-03	2.01E-03	3.09E-03	6.42E-03	7.58E-03	8.54E-03	9.11E-03	8.96E-03	8.84E-03	8.96E-03	9.18E-03	9.38E-03	9.59E-03	9.93E-03	1.01E-02	1.02E-02	1.01E-02	8.97E-03	7.24E-03	6.34E-03	5.89E-03	4.87E-03	3.58E-03
SR 60 EB Car Off-Ramp	2.61E-03	1.88E-03	1.65E-03	1.92E-03	3.09E-03	5.18E-03	7.27E-03	8.11E-03	7.80E-03	7.34E-03	7.45E-03	7.79E-03	8.22E-03	8.57E-03	8.85E-03	8.68E-03	8.52E-03	8.49E-03	8.37E-03	7.75E-03	7.03E-03	6.21E-03	5.08E-03	3.78E-03
SR 60 EB Car On-ramp	4.01E-03	2.88E-03	2.53E-03	2.94E-03	4.74E-03	7.94E-03	1.11E-02	1.24E-02	1.20E-02	1.13E-02	1.14E-02	1.19E-02	1.26E-02	1.31E-02	1.36E-02	1.33E-02	1.31E-02	1.30E-02	1.28E-02	1.19E-02	1.08E-02	9.51E-03	7.79E-03	5.80E-03
SR 60 WB Car Off-Ramp	4.02E-04	3.16E-04	3.22E-04	4.95E-04	1.03E-03	1.21E-03	1.37E-03	1.46E-03	1.44E-03	1.42E-03	1.43E-03	1.47E-03	1.50E-03	1.54E-03	1.59E-03	1.62E-03	1.64E-03	1.62E-03	1.44E-03	1.16E-03	1.02E-03	9.42E-04	7.81E-04	5.74E-04

Table 4-7: SR 60 East- and Westbound On- and Off-Ramps at Eucalid - TOG Running Loss (Evap) Emissions per Second

Roadway Segment	Running Loss (Evap) Emissions (g/s)																							
	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SR 60 WB Car On-ramp	3.41E-03	2.68E-03	2.73E-03	4.20E-03	8.72E-03	1.03E-02	1.16E-02	1.24E-02	1.22E-02	1.20E-02	1.22E-02	1.25E-02	1.27E-02	1.30E-02	1.35E-02	1.38E-02	1.39E-02	1.38E-02	1.22E-02	9.83E-03	8.61E-03	8.00E-03	6.62E-03	4.87E-03
SR 60 EB Car Off-Ramp	3.95E-04	2.84E-04	2.49E-04	2.90E-04	4.66E-04	7.82E-04	1.10E-03	1.22E-03	1.18E-03	1.11E-03	1.12E-03	1.18E-03	1.24E-03	1.29E-03	1.34E-03	1.31E-03	1.29E-03	1.28E-03	1.26E-03	1.17E-03	1.06E-03	9.37E-04	7.67E-04	5.71E-04
SR 60 EB Car On-ramp	5.45E-03	3.92E-03	3.43E-03	4.00E-03	6.44E-03	1.08E-02	1.51E-02	1.69E-02	1.62E-02	1.53E-02	1.55E-02	1.62E-02	1.71E-02	1.78E-02	1.84E-02	1.81E-02	1.77E-02	1.77E-02	1.74E-02	1.61E-02	1.46E-02	1.29E-02	1.06E-02	7.88E-03
SR 60 WB Car Off-Ramp	4.82E-04	3.79E-04	3.86E-04	5.94E-04	1.23E-03	1.46E-03	1.64E-03	1.75E-03	1.72E-03	1.70E-03	1.72E-03	1.76E-03	1.80E-03	1.84E-03	1.91E-03	1.94E-03	1.96E-03	1.95E-03	1.72E-03	1.39E-03	1.22E-03	1.13E-03	9.37E-04	6.89E-04

Sheet 5: I-280 DPM Emissions

Table 5-1: SR 60 AADT Information

All Veh AADT	2019	2025
SR 60	235,000	249,457

Assumes 1% Traffic Growth per year

Table 5-2: SR 60 Hourly Vehicle Volumes and Speed (DPM)

Roadway Segment	Vehicle Volumes and Speed by Hour																							
	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SR 60 (WB)	0.89%	0.61%	0.54%	0.96%	2.73%	4.35%	4.90%	5.59%	6.04%	6.19%	6.40%	6.74%	6.57%	6.35%	6.16%	5.98%	5.75%	5.62%	4.59%	3.58%	3.24%	2.81%	2.08%	1.33%
SR 60 (EB)	2.55%	2.52%	2.45%	2.53%	3.15%	4.00%	5.03%	4.67%	5.49%	6.57%	6.95%	6.80%	6.42%	5.86%	4.61%	3.56%	3.10%	2.81%	3.06%	3.74%	3.97%	3.71%	3.53%	2.92%
Veh-Hr (WB)	1,110	765	671	1,196	3,411	5,430	6,115	6,969	7,529	7,723	7,981	8,405	8,199	7,916	7,678	7,455	7,177	7,012	5,727	4,470	4,040	3,502	2,593	1,655
Veh-Hr (EB)	3,183	3,144	3,057	3,154	3,933	4,992	6,280	5,820	6,852	8,191	8,671	8,480	8,006	7,308	5,749	4,442	3,865	3,503	3,814	4,669	4,947	4,622	4,408	3,637
WB Speed	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
EB Speed	55	55	55	55	55	55	55	55	55	55	55	55	55	55	50	50	45	45	55	55	55	55	55	55

Table 5-3: SR 60 Segment Distances

Distance (Mi)	WB SR 60	EB SR 60
Segment Distance	1.1	1.1

Table 5-4: SR 60 DPM Running (Exhaust) Emissions per Hour

Roadway Segment	Diesel PM Running Emissions (g) by Hour of Day																							
	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SR 60 WB	3.45E+00	2.37E+00	2.08E+00	3.71E+00	1.06E+01	1.69E+01	1.90E+01	2.16E+01	2.34E+01	2.40E+01	2.48E+01	2.61E+01	2.55E+01	2.46E+01	2.38E+01	2.31E+01	2.23E+01	2.18E+01	1.78E+01	1.39E+01	1.25E+01	1.09E+01	8.05E+00	5.14E+00
SR 60 EB	9.88E+00	9.76E+00	9.49E+00	9.79E+00	1.22E+01	1.55E+01	1.95E+01	1.81E+01	2.13E+01	2.54E+01	2.69E+01	2.63E+01	2.48E+01	2.27E+01	1.55E+01	1.20E+01	9.35E+00	8.48E+00	1.18E+01	1.45E+01	1.54E+01	1.43E+01	1.37E+01	1.13E+01

Table 5-5: SR 60 DPM Running (Exhaust) Emissions per Second

Roadway Segment	Diesel PM Running (Exhaust) Emissions (g/s)																							
	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SR 60 WB	9.57E-04	6.59E-04	5.79E-04	1.03E-03	2.94E-03	4.68E-03	5.27E-03	6.01E-03	6.49E-03	6.66E-03	6.88E-03	7.25E-03	7.07E-03	6.83E-03	6.62E-03	6.43E-03	6.19E-03	6.05E-03	4.94E-03	3.85E-03	3.48E-03	3.02E-03	2.24E-03	1.43E-03
SR 60 EB	2.74E-03	2.71E-03	2.64E-03	2.72E-03	3.39E-03	4.30E-03	5.41E-03	5.02E-03	5.91E-03	7.06E-03	7.47E-03	7.31E-03	6.90E-03	6.30E-03	4.30E-03	3.33E-03	2.60E-03	2.35E-03	3.29E-03	4.02E-03	4.26E-03	3.98E-03	3.80E-03	3.14E-03

Sheet 6: SR 60 On- and Off-ramp DPM Emissions

Table 6-1: SR 60 On- and Off-Ramp AADT Information for Euclid Avenue

Segment	Year	All (Trucks+Cars) ADT Volume	
		Caltrans Data	2025
SR 60 WB On-ramp (Euclid)	2015	10,200	11,267
SR 60 EB Off-Ramp (Euclid)	2018	10,004	10,726
SR 60 EB On-ramp (Euclid)	2018	13,168	14,118
SR 60 WB Off-Ramp (Euclid)	2018	13,967	14,975

Assumes 1% Traffic Growth per year

Table 6-2: SR 60 On- and Off-Ramp Hourly Vehicle Volumes and Speed

Roadway Segment	SR 60 Off- and On-ramp Vehicle Volumes and Speed by Hour																							
	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
Truck Breakdown (WB)	0.89%	0.61%	0.54%	0.96%	2.73%	4.35%	4.90%	5.59%	6.04%	6.19%	6.40%	6.74%	6.57%	6.35%	6.16%	5.98%	5.75%	5.62%	4.59%	3.58%	3.24%	2.81%	2.08%	1.33%
Truck Breakdown (EB)	2.55%	2.52%	2.45%	2.53%	3.15%	4.00%	5.03%	4.67%	5.49%	6.57%	6.95%	6.80%	6.42%	5.86%	4.61%	3.56%	3.10%	2.81%	3.06%	3.74%	3.97%	3.71%	3.53%	2.92%
SR 60 WB On-ramp Vol (DPM)	100	69	61	108	308	490	552	630	680	698	721	759	741	715	694	673	648	633	517	404	365	316	234	149
SR 60 EB Off-Ramp Vol (DPM)	274	270	263	271	338	429	540	500	589	704	746	729	688	628	494	382	332	301	328	401	425	397	379	313
SR 60 EB On-ramp Vol (DPM)	360	356	346	357	445	565	711	659	776	927	981	960	906	827	651	503	438	397	432	528	560	523	499	412
SR 60 WB Off-Ramp Vol (DPM)	133	92	81	144	409	652	734	837	904	927	958	1,009	984	950	922	895	862	842	688	537	485	420	311	199
On-ramp Speed	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Off-ramp Speed	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45

Table 6-3: SR 60 On- and Off-Ramp Segment Distances

Distance (Mi)	SR 60 WB On	SR 60 EB Off	SR 60 EB On	SR 60 WB Off
Segment Distance	0.30	0.27	0.32	0.28

Table 6-4: SR 60 East- and Westbound On- and Off-Ramps at Euclid - DPM Running (Exhaust) Emissions per Hour

Roadway Segment	Diesel PM Running (Exhaust) Emissions (g) by Hour of Day																							
	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SR 60 WB On-ramp (Euclid)	2.94E-01	2.03E-01	1.78E-01	3.17E-01	9.03E-01	3.17E-01	1.62E+00	1.85E+00	1.99E+00	2.05E+00	2.11E+00	2.23E+00	2.17E+00	2.10E+00	2.03E+00	1.97E+00	1.90E+00	1.86E+00	1.52E+00	1.18E+00	1.07E+00	9.27E-01	6.87E-01	4.38E-01
SR 60 EB Off-Ramp (Euclid)	1.62E-01	1.60E-01	1.56E-01	1.61E-01	2.01E-01	2.55E-01	3.20E-01	2.97E-01	3.50E-01	4.18E-01	4.42E-01	4.33E-01	4.09E-01	3.73E-01	2.93E-01	2.27E-01	1.97E-01	1.79E-01	1.95E-01	2.38E-01	2.52E-01	2.36E-01	2.25E-01	1.86E-01
SR 60 EB On-ramp (Euclid)	1.13E+00	1.12E+00	1.09E+00	1.12E+00	1.40E+00	3.91E-01	2.23E+00	2.07E+00	2.43E+00	2.91E+00	3.08E+00	3.01E+00	2.84E+00	2.59E+00	2.04E+00	1.58E+00	1.37E+00	1.24E+00	1.35E+00	1.66E+00	1.76E+00	1.64E+00	1.56E+00	1.29E+00
SR 60 WB Off-Ramp (Euclid)	8.25E-02	5.68E-02	4.99E-02	8.89E-02	2.53E-01	4.03E-01	4.54E-01	5.18E-01	5.59E-01	5.74E-01	5.93E-01	6.25E-01	6.09E-01	5.88E-01	5.70E-01	5.54E-01	5.33E-01	5.21E-01	4.26E-01	3.32E-01	3.00E-01	2.60E-01	1.93E-01	1.23E-01

Table 6-5: SR 60 R 60 East- and Westbound On- and Off-Ramps at Euclid - DPM Running (Exhaust) Emissions per Second

Roadway Segment	Diesel PM Running (Exhaust) Emissions (g/s)																							
	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SR 60 WB On-ramp (Euclid)	8.17E-05	5.63E-05	4.94E-05	8.80E-05	2.51E-04	8.80E-05	4.50E-04	5.13E-04	5.54E-04	5.68E-04	5.87E-04	6.18E-04	6.03E-04	5.82E-04	5.65E-04	5.48E-04	5.28E-04	5.16E-04	4.21E-04	3.29E-04	2.97E-04	2.58E-04	1.91E-04	1.22E-04
SR 60 EB Off-Ramp (Euclid)	4.51E-05	4.46E-05	4.33E-05	4.47E-05	5.58E-05	7.08E-05	8.90E-05	8.25E-05	9.71E-05	1.16E-04	1.23E-04	1.20E-04	1.13E-04	1.04E-04	8.15E-05	6.30E-05	5.48E-05	4.97E-05	5.41E-05	6.62E-05	7.01E-05	6.55E-05	6.25E-05	5.16E-05
SR 60 EB On-ramp (Euclid)	3.14E-04	3.10E-04	3.01E-04	3.11E-04	3.88E-04	1.08E-04	6.19E-04	5.74E-04	6.76E-04	8.08E-04	8.55E-04	8.36E-04	7.89E-04	7.20E-04	5.67E-04	4.38E-04	3.81E-04	3.45E-04	3.76E-04	4.60E-04	4.88E-04	4.56E-04	4.35E-04	3.59E-04
SR 60 WB Off-Ramp (Euclid)	2.29E-05	1.58E-05	1.39E-05	2.47E-05	7.04E-05	1.12E-04	1.26E-04	1.44E-04	1.55E-04	1.59E-04	1.65E-04	1.73E-04	1.69E-04	1.63E-04	1.58E-04	1.54E-04	1.48E-04	1.45E-04	1.18E-04	9.23E-05	8.34E-05	7.23E-05	5.35E-05	3.42E-05

**Sheet 7: CT-EMFAC2017 Emission Factors**

**Freeway**

Vehicle Category	VTM Fraction	Diesel VMT Fraction	Gas VMT Fraction
	Across Category	Within Category	Within Category
Truck 1	0.031	0.526	0.474
Truck 2	0.092	0.942	0.027
Non-Truck	0.877	0.012	0.965

Fleet Average Running Exhaust Emission Factors (grams/veh-mile)

Pollutant Name	Emissions Factor by Speed (mph)														
	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75
PM2.5	0.009208	0.006192	0.004301	0.003155	0.002481	0.002108	0.001944	0.001937	0.002061	0.002302	0.002654	0.003120	0.003707	0.003810	0.003810
PM10	0.00993	0.006664	0.004624	0.003388	0.002659	0.002255	0.002074	0.002062	0.002189	0.002439	0.002808	0.003297	0.003916	0.004026	0.004026
TOG	0.187712	0.127375	0.084894	0.059673	0.045314	0.036153	0.030056	0.026062	0.023615	0.022411	0.022320	0.023486	0.026013	0.027927	0.028308
ROG	0.120321	0.079002	0.051353	0.035256	0.026437	0.020996	0.017499	0.015319	0.014111	0.013694	0.014008	0.015110	0.017141	0.018705	0.019040
1,3-Butadiene	0.000764	0.000494	0.000332	0.000234	0.000176	0.000140	0.000117	0.000103	0.000095	0.000092	0.000094	0.000101	0.000115	0.000124	0.000124
Acetaldehyde	0.002473	0.001701	0.000973	0.000579	0.000427	0.000342	0.000285	0.000248	0.000228	0.000221	0.000229	0.000251	0.000286	0.000319	0.000319
Acrolein	0.000165	0.000106	0.000072	0.000052	0.000039	0.000031	0.000026	0.000023	0.000021	0.000020	0.000021	0.000022	0.000025	0.000027	0.000027
Benzene	0.003663	0.002383	0.001574	0.001094	0.000820	0.000651	0.000544	0.000477	0.000441	0.000428	0.000439	0.000472	0.000533	0.000579	0.000579
Diesel PM	0.001991	0.001637	0.001274	0.001035	0.000914	0.000888	0.000942	0.001072	0.001274	0.001546	0.001889	0.002302	0.002710	0.002732	0.002732
Ethylbenzene	0.001444	0.000932	0.000628	0.000444	0.000334	0.000265	0.000221	0.000194	0.000180	0.000175	0.000179	0.000192	0.000217	0.000235	0.000235
Formaldehyde	0.006140	0.004167	0.002468	0.001531	0.001133	0.000905	0.000754	0.000659	0.000606	0.000589	0.000607	0.000662	0.000752	0.000832	0.000832
Naphthalene	0.000127	0.000087	0.000058	0.000041	0.000031	0.000025	0.000021	0.000018	0.000016	0.000015	0.000014	0.000015	0.000017	0.000018	0.000016
POM	0.000159	0.000105	0.000068	0.000046	0.000034	0.000027	0.000023	0.000020	0.000019	0.000018	0.000019	0.000020	0.000023	0.000025	0.000025

Fleet Average Running Loss Emission Factors (grams/veh-hour)

Pollutant Name	Emission Factor
TOG	1.275299
ROG	1.275299
1,3-Butadiene	0
Benzene	0.012753
Ethylbenzene	0.020915
Naphthalene	0.001785

Sheet 8: Caltrans All Vehicle AADT Data

DISTRICT	ROUTE	RTE_SFX	COUNTY	PM_PFX	PM	PM_SFX	DESCRIPTION	BACK_PEAK_HOUR	BACK_PEAK_MADT	BACK_AADT	AHEAD_PEAK_HOU	AHEAD_PEAK_MADT	AHEAD_AADT
08	060		SBD	R	3.602		MOUNTAIN AVENUE	15900	246000	238000	15700	243000	235000
08	060		SBD	R	4.580		ONTARIO, JCT. RTE. 83	15700	243000	235000	15600	242000	234000
08	060		SBD	R	5.855		GROVE AVENUE	15600	242000	234000	15200	236000	228000

Sheet 9: Caltrans Truck AADT Data

RTE	RTE_SFX	DIST	CNTY	POSTMILE_PFX	POSTMILE	POSTMILE_SFX	LEG	DESCRIPTION	VEHICLE_AADT_TOTAL	TRUCK_AADT_TOTAL	TRK_PERCENT_TOT	TRK_2_AXLE	TRK_3_AXLE	TRK_4_AXLE	TRK_5_AXLE	TRK_2_AXLE_PCT	TRK_3_AXLE_PCT	TRK_4_AXLE_PCT	TRK_5_AXLE_PCT	EAL	YEAR_VER	EST
060	08	SBD	R	4.580	B	ONTARIO, JCT. RTE. 83			235000	28764	12.24	7,231	2,871	903	17,759	25.14	9.98	3.14	61.74	6,777	04	E
060	08	SBD	R	4.580	A	ONTARIO, JCT. RTE. 83			234000	28642	12.24	7,201	2,858	899	17,684	25.14	9.98	3.14	61.74	6,748	04	E

Sheet 10: Caltrans All Vehicle On- and Off-ramp AADT Data

DISTRICT	COUNTY	ROUTE	RTE_SFX	PM_PFX	PM	PM_SFX	DESCRIPTION	YR_2011	YR_2012	YR_2013	YR_2014	YR_2015	YR_2016	YR_2017	YR_2018	YR_2019	YR_2020
08	SBD	060	R		4.387		WB ON FR EUCLID/83					10200					
08	SBD	060	R		4.388		EB OFF TO EUCLID/83								10004		
08	SBD	060	R		4.789		EB ON FR EUCLID/83								13168		
08	SBD	060	R		4.806		WB OFF TO EUCLID AVE								13967		

**Appendix B**  
**AERMOD Output**

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Appendix B is comprised of 1,230 pages and is available in electronic format upon request.

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**Appendix C**  
**Cancer and Non-Cancer Risk Values and Health Risk**  
**Calculations**

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**Appendix C: Health Risk Assessment Calculations**  
**Euclid/Walnut Mixed Use Planned Unit Development Project**  
**Health Risk Assessment Report**  
**Summary of Cancer and Non-Cancer Risks**

**Uncontrolled (i.e., Without Filtration) Total Excess Risk at MEI**

Source	Cancer Risk (Per Million)			Total	Chronic Hazard Index	Acute Hazard Index
	DPM	TOG Exh	TOG Evap			
SR 60 Freeway	19.5	1.3	0.2	21.0	0.01	0.01
SR 60 On- and Off-ramps	3.8	0.5	0.1	4.4	0.00	0.00
<i>Cumulative Risk</i>	23.3	1.8	0.3	25.4	0.02	0.02

<b>MERV13 Particle Removal Effectiveness (3 to 10 µm)</b>
79%

Note: Assumes 90% base reduction, two hours of outdoor exposure per day, and one hour of exposure from open windows.

**Controlled (i.e., with MERV 13 Filter) Total Excess Risk at MEI**

Source	Cancer Risk (Per Million)			Total	Chronic Hazard Index	Acute Hazard Index
	DPM	TOG Exh	TOG Evap			
SR 60 Freeway	4.1	1.3	0.2	5.6	0.01	0.01
SR 60 On- and Off-ramps	0.8	0.5	0.1	1.4	0.00	0.00
<i>Cumulative Risk</i>	5.0	1.8	0.3	7.0	0.02	0.02
Threshold				10.0	1.0	1.0
Threshold Exceeded?				No	No	No

Note: The methodology for the HRA requires quantifying “uncontrolled” risks at receptor locations before “controlled” risks can be quantified. The “uncontrolled” risks reflect those that would occur at the site if no air filtration were to occur at all. The “uncontrolled” scenario is a hypothetical / non-realistic scenario, because the building would be required to install HVAC system air filters that meet a designated efficiency equal to Minimum Efficiency Rating Value (MERV) 13 standards, consistent with Section 120.1(b)(1)(C) of the California Title 24 Building Code. This is described on pages 5-1 and 5-2 of the Report.

In contrast, the "controlled" risks reflect those that would actually occur at the site under implementation of the project with the operation of the HVAC system. The “uncontrolled” risks are used as the baseline to assess how much the MERV-13 air filters would reduce risks (i.e., by 79%, after conservatively accounting for some non-controlled exposure from outdoor recreation and residents having their windows open for part of the day, as shown between the "uncontrolled" and "controlled" tables above).

**Appendix C: Health Risk Assessment Calculations**  
**Euclid/Walnut Mixed Use Planned Unit Development Project**  
**Health Risk Assessment Report**  
**Weighted Risk Factor Calculations**

**Summary of Fleet Average Running Exhaust Emission Factors (grams/veh-mile)**

Roadway	Weighted per TOG		
	CPF	Chronic REL	Acute REL
Freeway	6.03E-03	6.73E+01	5.87E+02

**Summary of Fleet Average Running Loss Emission Factors (grams/veh-hour)**

Roadway	Weighted per TOG		
	CPF	Chronic REL	Acute REL
Freeway	1.31E-03	2.86E+02	2.70E+03

**Freeway**

**Fleet Average Running Exhaust Emission Factors (grams/veh-mile)**

Pollutant Name	Emissions Factor by Speed	% of TOG	CPF	Chronic REL	Acute REL	Weighted per TOG		
	5					CPF	Chronic REL	Acute REL
TOG	0.187712	--	--	--	--	--	--	--
1,3-Butadiene	0.000764	0.004070	6.00E-01	2.00E+00	6.60E+02	2.44E-03	2.04E-03	6.17E-06
Acetaldehyde	0.002473	0.013174	1.00E-02	1.40E+02	4.70E+02	1.32E-04	9.41E-05	2.80E-05
Acrolein	0.000165	0.000879	0.00E+00	3.50E-01	2.50E+00	0.00E+00	2.51E-03	3.52E-04
Benzene	0.003663	0.019514	1.00E-01	3.00E+00	2.70E+01	1.95E-03	6.50E-03	7.23E-04
Diesel PM	0.001991	--	--	--	--	--	--	--
Ethylbenzene	0.001444	0.007693	8.70E-03	2.00E+03	0.00E+00	6.69E-05	3.85E-06	0.00E+00
Formaldehyde	0.006140	0.032710	2.10E-02	9.00E+00	5.50E+01	6.87E-04	3.63E-03	5.95E-04
Naphthalene	0.000127	0.000677	1.20E-01	9.00E+00	0.00E+00	8.12E-05	7.52E-05	0.00E+00
POM	0.000159	0.000847	7.95E-01	--	--	6.73E-04	--	--
<b>Total</b>						<b>6.03E-03</b>	<b>6.73E+01</b>	<b>5.87E+02</b>

**Fleet Average Running Loss Emission Factors (grams/veh-hour)**

Pollutant Name	Emission Factor	% of TOG	CPF	Chronic REL	Acute REL	Weighted per TOG		
						CPF	Chronic REL	Acute REL
TOG	1.275299	--	--	--	--	--	--	--
1,3-Butadiene	0	0.0%	6.00E-01	2.00E+00	6.60E+02	0.00E+00	0.00E+00	0.00E+00
Benzene	0.012753	1.0%	1.00E-01	3.00E+00	2.70E+01	1.00E-03	3.33E-03	3.70E-04
Ethylbenzene	0.020915	1.6%	8.70E-03	2.00E+03	0.00E+00	1.43E-04	8.20E-06	0.00E+00
Naphthalene	0.001785	0.1%	1.20E-01	9.00E+00	0.00E+00	1.68E-04	1.56E-04	0.00E+00
<b>Total</b>						<b>1.31E-03</b>	<b>2.86E+02</b>	<b>2.70E+03</b>

**Appendix C: Health Risk Assessment Calculations**  
**Euclid/Walnut Mixed Use Planned Unit Development Project**  
**Health Risk Assessment Report**  
**SR 60 Freeway Uncontrolled (i.e., Without Filtration) Health Risk Calculations**

**METHODOLOGY**

Dose (Air) = Cair x DBR x A x EF x CF

Where:                      Cair Chemical concentration in air ( $\mu\text{g}/\text{m}^3$ )  
                                 DBR: Daily breathing rate (L/kg-day)  
                                 A: Inhalation adsorption factor (unitless)  
                                 EF: Exposure Frequency, days at home / days in year (unitless)  
                                 CF:  $10^{-6}$  Conversion Factor ( $\text{m}^3/\text{L}$  and  $\text{mg}/\mu\text{g}$ )

Cancer Risk (per million) = Dose (Air) x CPF x ASF x (ED/AT) x FAH x 1,000,000

Where:                      Dose: Dose of chemical in the air ( $\mu\text{g}/\text{m}^3$ )  
                                 CPF: Cancer Potency Factor ( $\text{mg}/\text{kg}\text{-day}$ )<sup>-1</sup>  
                                 ASF: Age Sensitivity Factor  
                                 ED: Exposure Duration (years)  
                                 AT: Averaging Time for lifetime cancer risks  
                                 FAH: Fraction of daily time spent at home

**Risk Parameter Values by Age Bin**

Variable	Residential Age Bin				
	3rd Trimester	0-2 Years	2-16 Years	16-30 Years	16-70 Years
DBR	361	1090	572	261	233
A	1	1	1	1	1
EF	0.96	0.96	0.96	0.96	0.96
CF	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06
ASF	10	10	3	1	1
ED	0.25	2	14	14	54
AT	70	70	70	70	70
FAH	0.85	0.85	0.72	0.73	0.73

**Risk Factors**

<u>Pollutant</u>	<u>CPF</u>	<u>Chronic REL</u>	<u>Acute</u>
DPM	1.1	5	0
Veh TOG Exh	6.03E-03	6.73E+01	5.87E+02
Veh TOG Evap	1.31E-03	2.86E+02	2.70E+03

**AERMOD Modeled Annual Concentrations (MEI)**

	<u>MEI</u>		
	Conc.	X	Y
DPM	0.033	439859	3765470
Veh TOG Exh	0.40777	439859	3765470
Veh TOG Evap	0.247	439859	3765470

**AERMOD Modeled Maximum 1-HR Concentrations (MEI)**

	<u>MEI</u>		
	Conc.	X	Y
Veh TOG Exh	5.44130	439789	3765475
Veh TOG Evap	4.07794	439789	3765475

**Chronic Risk Assessment at MEI**

Pollutant	Annual AERMOD Conc.	Chronic Hazard Index	Threshold	Exceeded?
DPM	0.03	0.01	--	--
Veh TOG Exh	0.41	0.01	--	--
Veh TOG Evap	0.25	0.00	--	--
	Hazard Index	0.01	1.0	No

**1-HR Risk Assessment at MEI**

Pollutant	1-HR AERMOD Conc.	1-HR Hazard Index	Threshold	Exceeded?
Veh TOG Exh	5.4413	0.01	--	--
Veh TOG Evap	4.07794	0.00	--	--
	Hazard Index	0.01	1.0	No

**DPM Dose @ MEI**

Age Group	Cair x	BR	A	EF	CF		Dose
3rd Trimester	0.033	361	1	0.96	1.00E-06	=	1.14E-05
0-2 Years	0.033	1090	1	0.96	1.00E-06	=	3.45E-05
2-16 Years	0.033	572	1	0.96	1.00E-06	=	1.81E-05
16-30 Years	0.033	261	1	0.96	1.00E-06	=	8.26E-06
30-70 Years	0.033	233	1	0.96	1.00E-06	=	7.37E-06

**DPM Excess Risk at MEI**

Age Group	Dose	CPF	ASF	ED	AT	FAH	Conversion	Risk
3rd Trimester	1.14E-05	1.1	10	0.25	70	0.85	1,000,000	0.4
0-2 Years	3.45E-05	1.1	10	1.00	70	0.85	1,000,000	4.6
2-16 Years	1.81E-05	1.1	3	1.00	70	0.72	1,000,000	0.6
16-30 Years	8.26E-06	1.1	1	1.00	70	0.73	1,000,000	0.1
30-70 Years	7.37E-06	1.1	1	1.00	70	0.73	1,000,000	0.1

**TOG Exh Dose @ MEI**

Age Group	Cair x	BR	A	EF	CF		Dose
3rd Trimester	0.40777	361	1	0.96	1.00E-06	=	1.41E-04
0-2 Years	0.40777	1090	1	0.96	1.00E-06	=	4.26E-04
2-16 Years	0.40777	572	1	0.96	1.00E-06	=	2.24E-04
16-30 Years	0.40777	261	1	0.96	1.00E-06	=	1.02E-04
30-70 Years	0.40777	233	1	0.96	1.00E-06	=	9.11E-05

**TOG Exh Excess Risk at MEI**

Age Group	Dose	CPF	ASF	ED	AT	FAH	Conversion	Risk
3rd Trimester	1.41E-04	6.03E-03	10	0.25	70	0.85	1,000,000	0.0
0-2 Years	4.26E-04	6.03E-03	10	1.00	70	0.85	1,000,000	0.3
2-16 Years	2.24E-04	6.03E-03	3	1.00	70	0.72	1,000,000	0.0
16-30 Years	1.02E-04	6.03E-03	1	1.00	70	0.73	1,000,000	0.0
30-70 Years	9.11E-05	6.03E-03	1	1.00	70	0.73	1,000,000	0.0

**TOG Evap Dose @ MEI**

Age Group	Cair x	BR	A	EF	CF		Dose
3rd Trimester	0.247	361	1	0.96	1.00E-06	=	8.55E-05
0-2 Years	0.247	1090	1	0.96	1.00E-06	=	2.58E-04
2-16 Years	0.247	572	1	0.96	1.00E-06	=	1.35E-04
16-30 Years	0.247	261	1	0.96	1.00E-06	=	6.18E-05
30-70 Years	0.247	233	1	0.96	1.00E-06	=	5.52E-05

**TOG Evap Excess Risk at MEI**

Age Group	Dose	CPF	ASF	ED	AT	FAH	Conversion	Risk
3rd Trimester	8.55E-05	1.31E-03	10	0.25	70	0.85	1,000,000	0.0
0-2 Years	2.58E-04	1.31E-03	10	1.00	70	0.85	1,000,000	0.0
2-16 Years	1.35E-04	1.31E-03	3	1.00	70	0.72	1,000,000	0.0
16-30 Years	6.18E-05	1.31E-03	1	1.00	70	0.73	1,000,000	0.0
30-70 Years	5.52E-05	1.31E-03	1	1.00	70	0.73	1,000,000	0.0

**Total Excess Risk at MEI (Cumulative, Based on Age at Start of Construction)**

Exposure Year	Exposure Duration (Years)	Age	Year	Cancer Risk (Per Million)			Total
				DPM	TOG Exh	TOG Evap	
0	0.25	-0.25 - 0	2025	0.4	0.0	0.0	0.4
1	1	0-1	2026	4.6	0.3	0.0	5.0
2	1	1-2	2027	4.6	0.3	0.0	5.0
3	1	2-3	2028	0.6	0.0	0.0	0.7
4	1	3-4	2029	0.6	0.0	0.0	0.7
5	1	4-5	2030	0.6	0.0	0.0	0.7
6	1	5-6	2031	0.6	0.0	0.0	0.7
7	1	6-7	2032	0.6	0.0	0.0	0.7
8	1	7-8	2033	0.6	0.0	0.0	0.7
9	1	8-9	2034	0.6	0.0	0.0	0.7
10	1	9-10	2035	0.6	0.0	0.0	0.7
11	1	10-11	2036	0.6	0.0	0.0	0.7
12	1	11-12	2037	0.6	0.0	0.0	0.7
13	1	12-13	2038	0.6	0.0	0.0	0.7
14	1	13-14	2039	0.6	0.0	0.0	0.7
15	1	14-15	2040	0.6	0.0	0.0	0.7
16	1	15-16	2041	0.6	0.0	0.0	0.7
17	1	16-17	2042	0.1	0.0	0.0	0.1
18	1	17-18	2043	0.1	0.0	0.0	0.1
19	1	18-19	2044	0.1	0.0	0.0	0.1
20	1	19-20	2045	0.1	0.0	0.0	0.1
21	1	20-21	2046	0.1	0.0	0.0	0.1
22	1	21-22	2047	0.1	0.0	0.0	0.1
23	1	22-23	2048	0.1	0.0	0.0	0.1
24	1	23-24	2049	0.1	0.0	0.0	0.1
25	1	24-25	2050	0.1	0.0	0.0	0.1
26	1	25-26	2051	0.1	0.0	0.0	0.1
27	1	26-27	2052	0.1	0.0	0.0	0.1
28	1	27-28	2053	0.1	0.0	0.0	0.1
29	1	28-29	2054	0.1	0.0	0.0	0.1
30	1	29-30	2055	0.1	0.0	0.0	0.1
<b>Cumulative Life</b>				<b>19.5</b>	<b>1.3</b>	<b>0.2</b>	<b>21.0</b>

**Appendix C: Health Risk Assessment Calculations**  
**Euclid/Walnut Mixed Use Planned Unit Development Project**  
**Health Risk Assessment Report**  
**SR 60 On- and Off-ramp Uncontrolled (i.e., Without Filtration) Health Risk Calculations**

**METHODOLOGY**

Dose (Air) =  $C_{air} \times DBR \times A \times EF \times CF$

Where:  $C_{air}$  Chemical concentration in air ( $\mu\text{g}/\text{m}^3$ )  
 DBR: Daily breathing rate (L/kg-day)  
 A: Inhalation adsorption factor (unitless)  
 EF: Exposure Frequency, days at home / days in year (unitless)  
 CF:  $10^{-6}$  Conversion Factor ( $\text{m}^3/\text{L}$  and  $\text{mg}/\mu\text{g}$ )

Cancer Risk (per million) = Dose (Air) x CPF x ASF x (ED/AT) x FAH x 1,000,000

Where: Dose: Dose of chemical in the air ( $\mu\text{g}/\text{m}^3$ )  
 CPF: Cancer Potency Factor ( $\text{mg}/\text{kg}\text{-day}$ )<sup>-1</sup>  
 ASF: Age Sensitivity Factor  
 ED: Exposure Duration (years)  
 AT: Averaging Time for lifetime cancer risks  
 FAH: Fraction of daily time spent at home

**Risk Parameter Values by Age Bin**

Variable	Residential Age Bin				
	3rd Trimester	0-2 Years	2-16 Years	16-30 Years	16-70 Years
DBR	361	1090	572	261	233
A	1	1	1	1	1
EF	0.96	0.96	0.96	0.96	0.96
CF	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06
ASF	10	10	3	1	1
ED	0.25	2	14	14	54
AT	70	70	70	70	70
FAH	0.85	0.85	0.72	0.73	0.73

**Risk Factors**

<u>Pollutant</u>	<u>CPF</u>	<u>Chronic REL</u>	<u>Acute</u>
DPM	1.1	5	0
Veh TOG Exh	6.03E-03	6.73E+01	5.87E+02
Veh TOG Evap	1.31E-03	2.86E+02	2.70E+03

**AERMOD Modeled Annual Concentrations (MEI)**

	<u>MEI</u>		
	Conc.	X	Y
DPM	0.00645	439859	3765470
Veh TOG Exh	0.1432	439859	3765470
Veh TOG Evap	0.12991	439859	3765470

**AERMOD Modeled Maximum 1-HR Concentrations (MEI)**

	<u>MEI</u>		
	Conc.	X	Y
Veh TOG Exh	2.32951	439789	3765475
Veh TOG Evap	2.53377	439789	3765475

**Chronic Risk Assessment at MEI**

Pollutant	Annual AERMOD Conc.	Chronic Hazard Index	Threshold	Exceeded?
DPM	0.01	0.00	--	--
Veh TOG Exh	0.14	0.00	--	--
Veh TOG Evap	0.13	0.00	--	--
	Hazard Index	0.00	1.0	No

**1-HR Risk Assessment at MEI**

Pollutant	1-HR AERMOD Conc.	1-HR Hazard Index	Threshold	Exceeded?
Veh TOG Exh	2.32951	0.00	--	--
Veh TOG Evap	2.53377	0.00	--	--
	Hazard Index	0.00	1.0	No

**DPM Dose @ MEI**

Age Group	Cair x	BR	A	EF	CF		Dose
3rd Trimester	0.00645	361	1	0.96	1.00E-06	=	2.23E-06
0-2 Years	0.00645	1090	1	0.96	1.00E-06	=	6.74E-06
2-16 Years	0.00645	572	1	0.96	1.00E-06	=	3.54E-06
16-30 Years	0.00645	261	1	0.96	1.00E-06	=	1.61E-06
30-70 Years	0.00645	233	1	0.96	1.00E-06	=	1.44E-06

**DPM Excess Risk at MEI**

Age Group	Dose	CPF	ASF	ED	AT	FAH	Conversion	Risk
3rd Trimester	2.23E-06	1.1	10	0.25	70	0.85	1,000,000	0.1
0-2 Years	6.74E-06	1.1	10	1.00	70	0.85	1,000,000	0.9
2-16 Years	3.54E-06	1.1	3	1.00	70	0.72	1,000,000	0.1
16-30 Years	1.61E-06	1.1	1	1.00	70	0.73	1,000,000	0.0
30-70 Years	1.44E-06	1.1	1	1.00	70	0.73	1,000,000	0.0

**TOG Exh Dose @ MEI**

Age Group	Cair x	BR	A	EF	CF		Dose
3rd Trimester	0.14320	361	1	0.96	1.00E-06	=	4.96E-05
0-2 Years	0.14320	1090	1	0.96	1.00E-06	=	1.50E-04
2-16 Years	0.14320	572	1	0.96	1.00E-06	=	7.85E-05
16-30 Years	0.14320	261	1	0.96	1.00E-06	=	3.58E-05
30-70 Years	0.14320	233	1	0.96	1.00E-06	=	3.20E-05

**TOG Exh Excess Risk at MEI**

Age Group	Dose	CPF	ASF	ED	AT	FAH	Conversion	Risk
3rd Trimester	4.96E-05	6.03E-03	10	0.25	70	0.85	1,000,000	0.0
0-2 Years	1.50E-04	6.03E-03	10	1.00	70	0.85	1,000,000	0.1
2-16 Years	7.85E-05	6.03E-03	3	1.00	70	0.72	1,000,000	0.0
16-30 Years	3.58E-05	6.03E-03	1	1.00	70	0.73	1,000,000	0.0
30-70 Years	3.20E-05	6.03E-03	1	1.00	70	0.73	1,000,000	0.0

**TOG Evap Dose @ MEI**

Age Group	Cair x	BR	A	EF	CF		Dose
3rd Trimester	0.12991	361	1	0.96	1.00E-06	=	4.50E-05
0-2 Years	0.12991	1090	1	0.96	1.00E-06	=	1.36E-04
2-16 Years	0.12991	572	1	0.96	1.00E-06	=	7.13E-05
16-30 Years	0.12991	261	1	0.96	1.00E-06	=	3.25E-05
30-70 Years	0.12991	233	1	0.96	1.00E-06	=	2.90E-05

**TOG Evap Excess Risk at MEI**

Age Group	Dose	CPF	ASF	ED	AT	FAH	Conversion	Risk
3rd Trimester	4.50E-05	1.31E-03	10	0.25	70	0.85	1,000,000	0.0
0-2 Years	1.36E-04	1.31E-03	10	1.00	70	0.85	1,000,000	0.0
2-16 Years	7.13E-05	1.31E-03	3	1.00	70	0.72	1,000,000	0.0
16-30 Years	3.25E-05	1.31E-03	1	1.00	70	0.73	1,000,000	0.0
30-70 Years	2.90E-05	1.31E-03	1	1.00	70	0.73	1,000,000	0.0

**Total Excess Risk at MEI (Cumulative, Based on Age at Start of Construction)**

Exposure Year	Exposure Duration (Years)	Age	Year	Cancer Risk (Per Million)			Total
				DPM	TOG Exh	TOG Evap	
0	0.25	-0.25 - 0	2025	0.1	0.0	0.0	0.1
1	1	0-1	2026	0.9	0.1	0.0	1.0
2	1	1-2	2027	0.9	0.1	0.0	1.0
3	1	2-3	2028	0.1	0.0	0.0	0.1
4	1	3-4	2029	0.1	0.0	0.0	0.1
5	1	4-5	2030	0.1	0.0	0.0	0.1
6	1	5-6	2031	0.1	0.0	0.0	0.1
7	1	6-7	2032	0.1	0.0	0.0	0.1
8	1	7-8	2033	0.1	0.0	0.0	0.1
9	1	8-9	2034	0.1	0.0	0.0	0.1
10	1	9-10	2035	0.1	0.0	0.0	0.1
11	1	10-11	2036	0.1	0.0	0.0	0.1
12	1	11-12	2037	0.1	0.0	0.0	0.1
13	1	12-13	2038	0.1	0.0	0.0	0.1
14	1	13-14	2039	0.1	0.0	0.0	0.1
15	1	14-15	2040	0.1	0.0	0.0	0.1
16	1	15-16	2041	0.1	0.0	0.0	0.1
17	1	16-17	2042	0.0	0.0	0.0	0.0
18	1	17-18	2043	0.0	0.0	0.0	0.0
19	1	18-19	2044	0.0	0.0	0.0	0.0
20	1	19-20	2045	0.0	0.0	0.0	0.0
21	1	20-21	2046	0.0	0.0	0.0	0.0
22	1	21-22	2047	0.0	0.0	0.0	0.0
23	1	22-23	2048	0.0	0.0	0.0	0.0
24	1	23-24	2049	0.0	0.0	0.0	0.0
25	1	24-25	2050	0.0	0.0	0.0	0.0
26	1	25-26	2051	0.0	0.0	0.0	0.0
27	1	26-27	2052	0.0	0.0	0.0	0.0
28	1	27-28	2053	0.0	0.0	0.0	0.0
29	1	28-29	2054	0.0	0.0	0.0	0.0
30	1	29-30	2055	0.0	0.0	0.0	0.0
<b>Cumulative Life</b>				<b>3.8</b>	<b>0.5</b>	<b>0.1</b>	<b>4.4</b>

**Appendix B**  
**AERMOD Output**

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FULL CIRCLE THINKING®

PRELIMINARY HYDROLOGY REPORT

# EUCLID-WALNUT ONTARIO, CA

NW Corner of E. Euclid Avenue and Walnut Street  
Ontario, California

Prepared For  
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**Project Manager:**  
Carolina Gonzalez

**Date Prepared:** September 2022  
**Revision 1** : April 2023  
**Job Number:** 424-027

full circle thinking®

# PRELIMINARY HYDROLOGY REPORT

## EUCLID-WALNUT

Located at NW corner of E. Euclid Avenue and Walnut Street  
in the  
City of Ontario  
County of San Bernardino, California

Prepared for:

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Date Created: September 2022

Revised : April 2023

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*Appendix 1 Soil Classification and Maps*

*Appendix 2 NOAA Precipitation Data*

*Appendix 3 Rational Method Pre and Post Development (Q100-24H & Q10-24H)*

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*Appendix 5 Unit Hydrograph and Routing Calculation and Proposed Temporary Detention system*

*Appendix 6 Supporting Documents (MPD Map)*

*Appendix 7 Soil's Report*

# 1.0 INTRODUCTION

## 1.1 GEOGRAPHIC SETTING

The proposed Euclid-Walnut project is located at the northwest corner of East Euclid Avenue and Walnut Street. It is currently developed commercial area with a gross land area of approximately 9.60 Acres. This specific site is part of APN 1051-271-66-0 in the City of Ontario, CA. The approximate latitude and longitude of the project is 34.027414 and -117.652412 respectively. The total disturbed area for this development is approximately 9.83 Ac. For additional detail see Project Site Location or Vicinity Map on paragraph 1.3 next page.

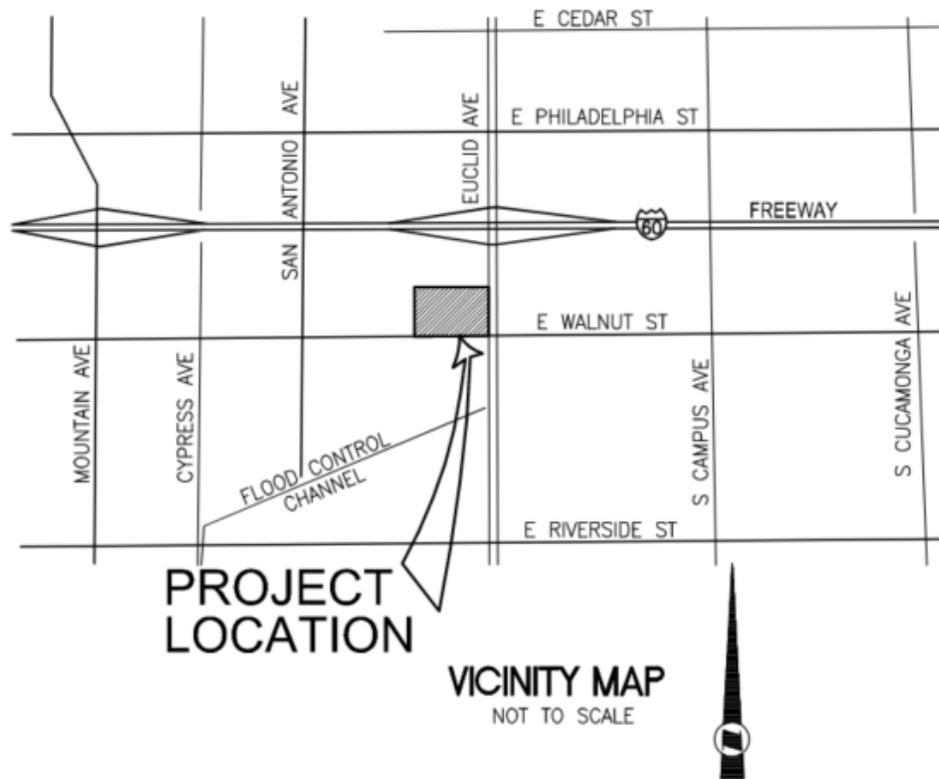
## 1.2 PURPOSE OF THIS REPORT

The proposed Euclid and Walnut development will include the construction of an apartment complex with its amenities, drive aisles , landscaping, parking areas and dry/wet utilities. The purpose of this report is to determine the storm water runoff from the completed project site will not exceed 90% of the pre-project runoff discharge rate for the 24-hour design storm for 10-year and 100-year return frequency rainfall events. Sizing of all on-site and off-site drainage pipes and structures will not be part of this preliminary report.

## 1.3 REFERENCES

- San Bernardino County Hydrology Manual 1986
- The Urban Drainage Design Manual (Federal Highway Administration)

### 1.3 PROJECT SITE LOCATION MAP



### 1.4 SOIL & PRECIPITATION-RAINFALL INTENSITY DATA

Per the Geotechnical Exploration Report conducted Leighton and Associates, Inc under Project No. 13493.001 dated May 13, 2022, the site is underlain by a relatively thin mantle of undocumented artificial fill materials overlaying Quaternary-aged young alluvial fan deposits. Groundwater was not encountered during the subsurface exploration to the maximum depth of 51.5 feet. Therefore, groundwater is not expected to pose a constraint during or after construction. Percolation testing was also performed and concluded that the site is marginally feasible for stormwater infiltration.

The Precipitation and Rainfall Intensity Data for this site was obtained from NOAA web site.

## **2.0 EXISTING TOPOGRAPHIC & HYDROLOGIC CONDITIONS**

### **2.1 EXISTING TOPOGRAPHY**

The project site is currently a developed commercial site with approximately 93.3% imperviousness. It is slightly elevated from northeast to southwest with elevations ranging from 825 to 809 feet above mean sea level (amsl). The ground surface cover consisted of commercial buildings, asphalt pavement and some landscaped areas. West and North of the property are currently commercial and residential areas. East of the property is bounded by Euclid Avenue while at the southern portion by Walnut Street.

### **2.2 EXISTING DRAINAGE SYSTEM**

Per City of Ontario Master Plan of Drainage (MPD) this project lies within the drainage subbasins E12, draining to system EULD-VII-1 on the east and subbasin E15, draining to system FERN-VII-1 on the west. Currently there is no existing drainage facilities on site. Therefore, runoff generating from the site surface flows into the adjacent public street. Runoff generating from easterly portion of the site (Area DA-1 per Pre-Development drainage Map, this report) sheet flows from northeast location then it drains to a valley gutter at the mid-portion of the property. It then goes along to a parkway drain that runs to the public street (Walnut Street) gutter from east to west direction. Similarly, runoff generating from the rest of the site (Area DA-2 per Pre-Development drainage Map, this report) sheet flows and then drain through an onsite valley gutter located on the west side of the site, draining south, towards Walnut street through the existing concrete driveway approach. Therefore, in existing condition the entire site drain into the existing MPD drainage system FERN-VII-1 located on the west side of the project. See Appendix 4 for the existing drainage map.

## **3.0 PROPOSED DEVELOPMENT AND DRAINAGE FACILITIES**

### **3.1 PROPOSED DEVELOPMENT**

The proposed development will include the construction of an apartment complex, drive aisles, landscaping and parking areas. In addition, the development will include installation of

appropriate drainage facilities and other utilities. Post development imperviousness will be 80% using proposed Land Use Development type (Apartment) per SBC Hydrology manual.

### **3.2 PROPOSED DRAINAGE FACILITY**

As mentioned earlier that per Master Plan of Drainage (MPD) this project lies within the drainage subbasin E12, draining to system EULD-VII-1 on the east and subbasin E15, draining to system FERN-VII-1 on the west. The proposed drainage improvement will have storm drain system which will mimic MPD drainage pattern as practically as possible. On site runoff will be intercepted by series of catch basins which then drain into the proposed underground Modular wetland (Proprietary Bioretention Systems to mitigate Water Quality requirements) and then into underground storm drain system. The drainage area DA-9 (Per Post-Development drainage Map, this report) will drain toward east into the proposed 24-inch SD system, an extension of EULD-VII-1, per MPD. The remaining site will drain to south into Walnut Street and then drain westward into the system FERN-VII-1 per MPD. Due to site's low infiltration capacity all the water quality runoff needs to be treated with proprietary Bioretention system. These systems are underground and therefore the storm drain system need to be underground. As there is no underground storm drain system on the south to receive runoff from drainage area draining toward south, therefore 100-year runoff generating from some of the drainage area needed to be pumped out to the street on the south. Therefore, it has been proposed to collect runoff generating from the drainage area as designated by DA-1 thru DA-3 as well as water quality flow from the drainage areas DA-4 to DA-8 temporarily into an underground detention facility and pump these out into Walnut Street. The pumping will begin as soon as the detention facility start to receive runoff from these drainage areas. The pumping capacity generally are far lower than the 100-year runoff rate. Therefore, an underground storage facility is required. It will be sized based on the delta flow between 100-years flow and the to be installed pumping capacity. A preliminary calculation using a pump system with 230-gpm (0.51cfs) pumping capacity will require a 1.08 acre-ft of onsite storage. The location and layout of the detention facility and pump system can be found in Post-Development Drainage Map in Appendix 4 of this report. The proposed storm drain system will be designed to capture 100yr storm events. Additionally, this specific project site is a HCOC Exempt area per County of San Bernardino Storm Water Facility Mapping Tool. Pre and Post development Maps are shown in the Hydrology Map in Appendix 4.

## 4.0 HYDROLOGY AND HYDRAULIC STUDY

### 4.1 METHODOLOGY

The hydrology study was performed under the guidelines of the San Bernardino County (SBC) Hydrology Manual. Rational method was used to calculate peak runoff rates as prescribed by the San Bernardino County Hydrology Manual.

Computer programs were used:

- Rational Method, Unit Hydrograph & Flood Hydrograph Routing; CIVILD

Results of the analysis are included in this report on Appendix 3.

## 5.0 RESULTS AND CONCLUSIONS

Based on the calculations, it was determined that the proposed development discharge rates for 100-year storm event decreased from 34.85 cfs to 25.86 due to the reduction of imperviousness and temporary detention. It is anticipated that there will be no flooding in the site due to this development and mitigation measures. Rational Method calculation, Unit Hydrograph calculation and Routing Calculation for pre and post development condition shown on Appendix 3.

### **PRE-DEVELOPED CONDITIONS 100 YEAR 24HR STORM EVENT**

Drainage Area	Remarks	Area (acre)	Soil Type	Q100Y 24H (cfs)
DA-1	Discharging to Location Node 1.02	6.8	A / B	25.06
DA-2	Discharging to Location Node 2.02	2.8	A / B	9.79
Total Site	Leaving site at S/W corner on Walnut St.	9.6	A / B	34.85

**POST-DEVELOPED CONDITIONS 100 YEAR 24HR STORM EVENT**  
**(BEFORE DETENTION)**

Drainage Area	Remarks	Area (acre)	Soil Type	Q100Y 24H (cfs)
DA-1 to DA-3	Discharging to Location Node 1.05	4.73	A / B	17.71
DA-4	Discharging to Location Node 4.02	1.32	B	4.63
DA-5	Discharging to Location Node 5.02	0.54	B	2.45
DA-6	Discharging to Location Node 6.02	0.41	B	1.85
DA-7.1	Discharging to Parkway Drain-4	0.75	B	3.44
DA-7.2	Discharging to Parkway Drain-5	0.19	B	0.92
DA-8	Discharging to Location Node 8.03	0.69	B	3.28
DA-9	Discharging to Location Node 9.04	0.97	A / B	4.18
Total Site		9.6	A / B	38.46

**POST-DEVELOPED CONDITIONS 100 YEAR 24HR STORM EVENT**  
**(AFTER DETENTION)**

Drainage Area	Remarks	Area (acre)	Soil Type	Q100Y 24H (cfs)
DA-1 to DA-3	Discharging to Location Node 1.05	4.73	A / B	5.11
DA-4	Discharging to Location Node 4.02	1.32	B	4.63
DA-5	Discharging to Location Node 5.02	0.54	B	2.45
DA-6	Discharging to Location Node 6.02	0.41	B	1.85
DA-7.1	Discharging to Parkway Drain-4	0.75	B	3.44
DA-7.2	Discharging to Parkway Drain-5	0.19	B	0.92
DA-8	Discharging to Location Node 8.03	0.69	B	3.28
DA-9	Discharging to Location Node 9.04	0.97	A / B	4.18
Total Site		9.6	A / B	25.86

**CONCLUSION:**

<b>PRE-CONSTRUCTION VS. POST-CONSTRUCTION FLOW SUMMARY</b>			
<b>Discharge Location</b>	<b>Pre-Development Flow rate, Q100Y-24H</b>	<b>Post-Development Flow rate Q100Y-24H</b>	<b>Conclusion</b>
<b>LEAVING SITE</b>	<b>34.85 cfs</b>		
<b>LEAVING SITE</b>		<b>25.86 cfs</b>	<b>Post Development flow decreased to 74% of Pre-Development</b>

**6.0 APPENDICES**

- Appendix 1      Soil Classification and Maps*
- Appendix 2      NOAA Precipitation Data*
- Appendix 3      Rational Method Pre and Post Development (Q100-24H & Q10-24H)*
- Appendix 4      Hydrology Maps Pre and Post Development Plan*
- Appendix 5      Unit Hydrograph and Routing Calculation and Proposed Temporary Detention system*
- Appendix 6      Supporting Documents (MPD Map)*
- Appendix 7      Soil's Report*

# APPENDIX 1

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## SOIL CLASSIFICATION AND MAPS

Hydrologic Soil Group—San Bernardino County Southwestern Part, California



Map Scale: 1:1,650 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84



Natural Resources  
Conservation Service

Web Soil Survey  
National Cooperative Soil Survey

3/20/2023  
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## APPENDIX 2

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### NOAA PRECIPITATION DATA



**POINT PRECIPITATION FREQUENCY ESTIMATES**

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

[PF\\_tabular](#) | [PF\\_graphical](#) | [Maps\\_&\\_aerials](#)

**PF tabular**

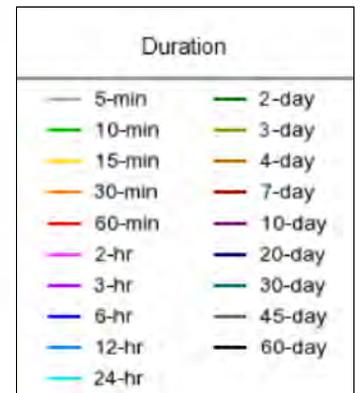
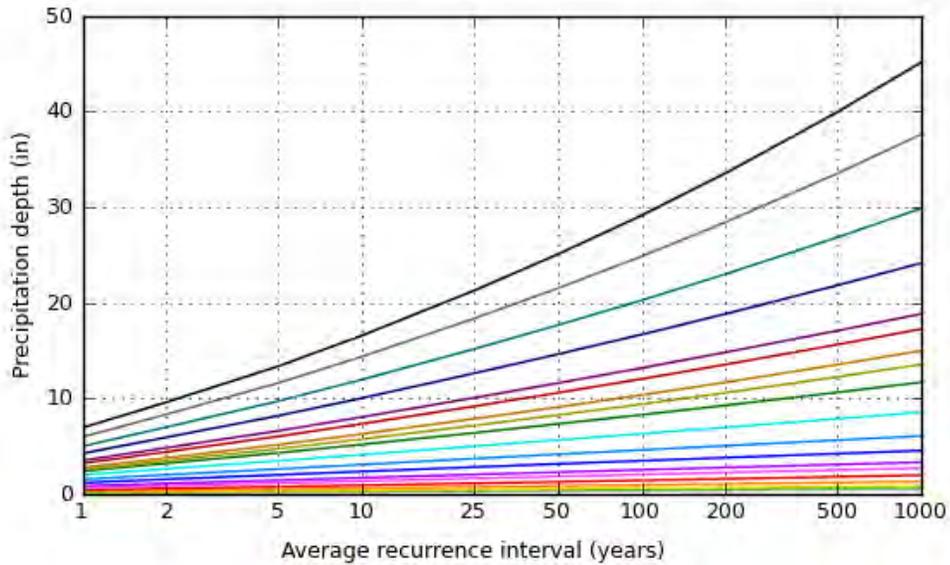
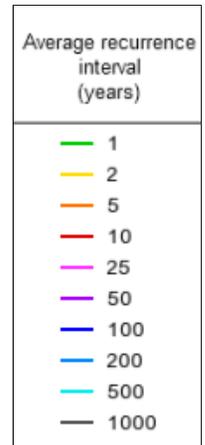
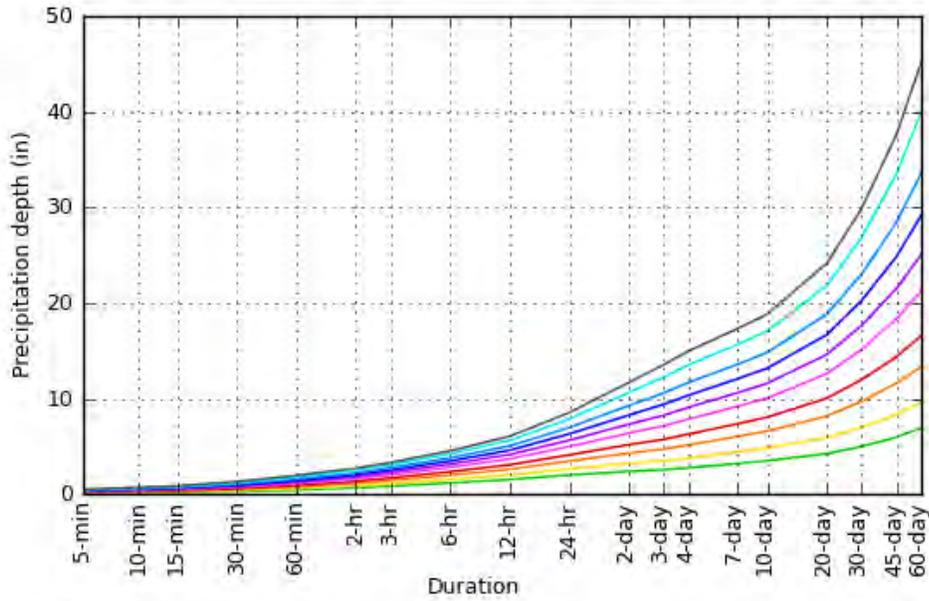
<b>PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)<sup>1</sup></b>										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.116 (0.097-0.141)	0.153 (0.127-0.185)	0.199 (0.166-0.242)	0.237 (0.196-0.291)	0.289 (0.230-0.366)	0.328 (0.255-0.425)	0.367 (0.279-0.489)	0.408 (0.301-0.559)	0.463 (0.327-0.663)	0.506 (0.345-0.751)
10-min	0.167 (0.139-0.202)	0.219 (0.182-0.265)	0.286 (0.238-0.347)	0.340 (0.280-0.417)	0.414 (0.329-0.525)	0.470 (0.366-0.609)	0.526 (0.400-0.701)	0.585 (0.431-0.802)	0.664 (0.469-0.950)	0.726 (0.494-1.08)
15-min	0.202 (0.168-0.244)	0.264 (0.220-0.320)	0.346 (0.287-0.420)	0.411 (0.339-0.504)	0.500 (0.398-0.635)	0.568 (0.442-0.737)	0.637 (0.483-0.847)	0.707 (0.521-0.969)	0.803 (0.567-1.15)	0.878 (0.598-1.30)
30-min	0.305 (0.255-0.370)	0.401 (0.334-0.485)	0.524 (0.435-0.636)	0.623 (0.514-0.764)	0.758 (0.603-0.961)	0.860 (0.670-1.12)	0.964 (0.732-1.28)	1.07 (0.790-1.47)	1.22 (0.859-1.74)	1.33 (0.905-1.97)
60-min	0.456 (0.381-0.552)	0.598 (0.498-0.724)	0.782 (0.650-0.950)	0.930 (0.767-1.14)	1.13 (0.900-1.44)	1.28 (1.00-1.67)	1.44 (1.09-1.92)	1.60 (1.18-2.19)	1.82 (1.28-2.60)	1.98 (1.35-2.94)
2-hr	0.682 (0.570-0.826)	0.894 (0.745-1.08)	1.16 (0.965-1.41)	1.37 (1.13-1.68)	1.65 (1.31-2.09)	1.85 (1.44-2.40)	2.06 (1.56-2.74)	2.26 (1.66-3.09)	2.52 (1.78-3.61)	2.72 (1.86-4.04)
3-hr	0.858 (0.716-1.04)	1.12 (0.936-1.36)	1.45 (1.21-1.77)	1.71 (1.41-2.10)	2.05 (1.63-2.60)	2.30 (1.79-2.98)	2.54 (1.93-3.38)	2.78 (2.05-3.81)	3.10 (2.19-4.43)	3.33 (2.27-4.94)
6-hr	1.19 (0.996-1.44)	1.56 (1.30-1.89)	2.01 (1.67-2.45)	2.37 (1.95-2.90)	2.83 (2.25-3.59)	3.16 (2.46-4.10)	3.49 (2.65-4.64)	3.82 (2.81-5.23)	4.24 (2.99-6.06)	4.55 (3.10-6.75)
12-hr	1.55 (1.29-1.88)	2.03 (1.69-2.45)	2.63 (2.18-3.19)	3.10 (2.55-3.79)	3.71 (2.95-4.71)	4.17 (3.24-5.40)	4.61 (3.50-6.14)	5.06 (3.73-6.94)	5.64 (3.98-8.08)	6.08 (4.14-9.02)
24-hr	2.02 (1.79-2.33)	2.65 (2.35-3.06)	3.47 (3.06-4.02)	4.13 (3.61-4.82)	5.00 (4.23-6.03)	5.66 (4.69-6.96)	6.32 (5.12-7.96)	6.98 (5.50-9.05)	7.88 (5.96-10.6)	8.56 (6.26-11.9)
2-day	2.41 (2.13-2.78)	3.23 (2.85-3.73)	4.31 (3.80-4.99)	5.19 (4.54-6.06)	6.40 (5.42-7.72)	7.34 (6.08-9.03)	8.29 (6.71-10.4)	9.28 (7.31-12.0)	10.6 (8.05-14.3)	11.7 (8.55-16.3)
3-day	2.58 (2.28-2.97)	3.50 (3.10-4.04)	4.73 (4.17-5.48)	5.75 (5.03-6.71)	7.16 (6.06-8.63)	8.27 (6.86-10.2)	9.40 (7.62-11.9)	10.6 (8.35-13.7)	12.3 (9.27-16.5)	13.6 (9.92-18.9)
4-day	2.77 (2.45-3.20)	3.80 (3.36-4.38)	5.16 (4.55-5.98)	6.30 (5.51-7.35)	7.86 (6.66-9.48)	9.09 (7.54-11.2)	10.4 (8.39-13.1)	11.7 (9.21-15.1)	13.5 (10.2-18.3)	15.0 (11.0-20.9)
7-day	3.22 (2.85-3.71)	4.43 (3.91-5.11)	6.03 (5.32-6.98)	7.35 (6.43-8.58)	9.17 (7.76-11.1)	10.6 (8.78-13.0)	12.0 (9.75-15.2)	13.6 (10.7-17.6)	15.6 (11.8-21.1)	17.3 (12.6-24.1)
10-day	3.51 (3.11-4.05)	4.85 (4.28-5.59)	6.61 (5.83-7.65)	8.06 (7.05-9.41)	10.1 (8.51-12.1)	11.6 (9.62-14.3)	13.2 (10.7-16.6)	14.8 (11.7-19.2)	17.1 (12.9-23.0)	18.8 (13.8-26.3)
20-day	4.26 (3.77-4.91)	5.94 (5.25-6.86)	8.19 (7.22-9.48)	10.0 (8.79-11.7)	12.6 (10.7-15.2)	14.6 (12.1-18.0)	16.7 (13.5-21.0)	18.8 (14.9-24.4)	21.8 (16.5-29.4)	24.2 (17.7-33.7)
30-day	5.00 (4.43-5.77)	7.01 (6.19-8.09)	9.72 (8.57-11.2)	12.0 (10.5-14.0)	15.2 (12.8-18.3)	17.7 (14.6-21.7)	20.3 (16.4-25.5)	23.0 (18.1-29.8)	26.8 (20.3-36.2)	29.9 (21.9-41.7)
45-day	5.97 (5.29-6.89)	8.35 (7.38-9.64)	11.6 (10.2-13.4)	14.4 (12.6-16.8)	18.3 (15.5-22.1)	21.5 (17.8-26.5)	24.9 (20.1-31.3)	28.4 (22.4-36.8)	33.5 (25.4-45.2)	37.6 (27.5-52.5)
60-day	6.94 (6.14-8.00)	9.62 (8.50-11.1)	13.4 (11.8-15.5)	16.6 (14.5-19.3)	21.2 (18.0-25.6)	25.1 (20.8-30.8)	29.1 (23.6-36.7)	33.6 (26.4-43.5)	39.9 (30.2-53.8)	45.2 (33.0-63.0)

<sup>1</sup> Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.

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**PF graphical**

PDS-based depth-duration-frequency (DDF) curves  
 Latitude: 34.0275°, Longitude: -117.6526°



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**ps & aerials**

Small scale terrain



Large scale terrain



Large scale map



Large scale aerial



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[National Weather Service](#)  
[National Water Center](#)  
1325 East West Highway  
Silver Spring, MD 20910  
Questions?: [HDSC.Questions@noaa.gov](mailto:HDSC.Questions@noaa.gov)

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## APPENDIX 3

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### RATIONAL METHOD: PRE AND POST DEVELOPMENT (Q100-24HR & Q10-24HR) PARKWAY CULVERT CALCULATION

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2005 Version 7.1  
Rational Hydrology Study Date: 04/19/23

-----  
RATIONAL, EUCLID AND WALNUT  
100-YEAR EVENT  
PRE CONSTRUCTION  
FUSCOE ENGINEERING  
-----

Program License Serial Number 6049

-----  
\*\*\*\*\* Hydrology Study Control Information \*\*\*\*\*

-----  
Rational hydrology study storm event year is 100.0  
Computed rainfall intensity:  
Storm year = 100.00 1 hour rainfall = 1.440 (In.)  
Slope used for rainfall intensity curve b = 0.6000  
Soil antecedent moisture condition (AMC) = 2

+++++  
Process from Point/Station 1.010 to Point/Station 1.020  
\*\*\*\* INITIAL AREA EVALUATION \*\*\*\*

-----  
Soil classification AP and SCS values input by user  
USER INPUT of soil data for subarea  
SCS curve number for soil(AMC 2) = 95.00  
Pervious ratio(Ap) = 0.0700 Max loss rate(Fm)= 0.007(In/Hr)  
Initial subarea data:  
Initial area flow distance = 898.000(Ft.)  
Top (of initial area) elevation = 824.100(Ft.)  
Bottom (of initial area) elevation = 812.000(Ft.)  
Difference in elevation = 12.100(Ft.)  
Slope = 0.01347 s(%)= 1.35  
TC = k(0.292)\*[(length^3)/(elevation change)]^0.2  
Initial area time of concentration = 10.482 min.  
Rainfall intensity = 4.102(In/Hr) for a 100.0 year storm  
Effective runoff coefficient used for area (Q=KCIA) is C = 0.898  
Subarea runoff = 25.062(CFS)  
Total initial stream area = 6.800(Ac.)  
Pervious area fraction = 0.070  
Initial area Fm value = 0.007(In/Hr)

+++++  
Process from Point/Station 2.010 to Point/Station 2.020  
\*\*\*\* INITIAL AREA EVALUATION \*\*\*\*

---

Soil classification AP and SCS values input by user  
USER INPUT of soil data for subarea  
SCS curve number for soil(AMC 2) = 95.00  
Pervious ratio(Ap) = 0.0500 Max loss rate(Fm)= 0.005(In/Hr)  
Initial subarea data:  
Initial area flow distance = 879.000(Ft.)  
Top (of initial area) elevation = 817.000(Ft.)  
Bottom (of initial area) elevation = 810.300(Ft.)  
Difference in elevation = 6.700(Ft.)  
Slope = 0.00762 s(%)= 0.76  
TC =  $k(0.287)*[(\text{length}^3)/(\text{elevation change})]^{0.2}$   
Initial area time of concentration = 11.450 min.  
Rainfall intensity = 3.890(In/Hr) for a 100.0 year storm  
Effective runoff coefficient used for area (Q=KCIA) is C = 0.899  
Subarea runoff = 9.791(CFS)  
Total initial stream area = 2.800(Ac.)  
Pervious area fraction = 0.050  
Initial area Fm value = 0.005(In/Hr)  
End of computations, Total Study Area = 9.60 (Ac.)  
The following figures may  
be used for a unit hydrograph study of the same area.  
Note: These figures do not consider reduced effective area  
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.064  
Area averaged SCS curve number = 95.0

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2005 Version 7.1  
Rational Hydrology Study Date: 04/25/23

-----  
RATIONAL, EUCLID AND WALNUT  
100-YEAR EVENT  
POST CONSTRUCTION  
FUSCOE ENGINEERING  
-----

Program License Serial Number 6049

-----  
\*\*\*\*\* Hydrology Study Control Information \*\*\*\*\*  
-----

Rational hydrology study storm event year is 100.0  
Computed rainfall intensity:  
Storm year = 100.00 1 hour rainfall = 1.440 (In.)  
Slope used for rainfall intensity curve b = 0.6000  
Soil antecedent moisture condition (AMC) = 2

+++++  
Process from Point/Station 1.010 to Point/Station 1.020  
\*\*\*\* INITIAL AREA EVALUATION \*\*\*\*

---

APARTMENT subarea type  
Decimal fraction soil group A = 0.480  
Decimal fraction soil group B = 0.520  
Decimal fraction soil group C = 0.000  
Decimal fraction soil group D = 0.000  
SCS curve number for soil(AMC 2) = 44.48  
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.174(In/Hr)  
Initial subarea data:  
Initial area flow distance = 595.000(Ft.)  
Top (of initial area) elevation = 821.000(Ft.)  
Bottom (of initial area) elevation = 814.800(Ft.)  
Difference in elevation = 6.200(Ft.)  
Slope = 0.01042 s(%)= 1.04  
TC = k(0.324)\*[(length^3)/(elevation change)]^0.2  
Initial area time of concentration = 10.394 min.  
Rainfall intensity = 4.123(In/Hr) for a 100.0 year storm  
Effective runoff coefficient used for area (Q=KCIA) is C = 0.862  
Subarea runoff = 6.290(CFS)

Total initial stream area = 1.770(Ac.)  
Pervious area fraction = 0.200  
Initial area Fm value = 0.174(In/Hr)

++++  
Process from Point/Station 1.020 to Point/Station 1.030  
\*\*\*\* PIPEFLOW TRAVEL TIME (User specified size) \*\*\*\*

---

Upstream point/station elevation = 810.700(Ft.)  
Downstream point/station elevation = 810.300(Ft.)  
Pipe length = 63.00(Ft.) Manning's N = 0.013  
No. of pipes = 1 Required pipe flow = 6.290(CFS)  
Given pipe size = 18.00(In.)  
Calculated individual pipe flow = 6.290(CFS)  
Normal flow depth in pipe = 11.65(In.)  
Flow top width inside pipe = 17.20(In.)  
Critical Depth = 11.63(In.)  
Pipe flow velocity = 5.20(Ft/s)  
Travel time through pipe = 0.20 min.  
Time of concentration (TC) = 10.60 min.

++++  
Process from Point/Station 1.030 to Point/Station 1.040  
\*\*\*\* PIPEFLOW TRAVEL TIME (User specified size) \*\*\*\*

---

Upstream point/station elevation = 809.000(Ft.)  
Downstream point/station elevation = 806.300(Ft.)  
Pipe length = 346.00(Ft.) Manning's N = 0.013  
No. of pipes = 1 Required pipe flow = 6.290(CFS)  
Given pipe size = 18.00(In.)  
Calculated individual pipe flow = 6.290(CFS)  
Normal flow depth in pipe = 10.86(In.)  
Flow top width inside pipe = 17.61(In.)  
Critical Depth = 11.63(In.)  
Pipe flow velocity = 5.64(Ft/s)  
Travel time through pipe = 1.02 min.  
Time of concentration (TC) = 11.62 min.

++++  
Process from Point/Station 1.030 to Point/Station 1.040  
\*\*\*\* CONFLUENCE OF MAIN STREAMS \*\*\*\*

---

The following data inside Main Stream is listed:  
In Main Stream number: 1  
Stream flow area = 1.770(Ac.)  
Runoff from this stream = 6.290(CFS)  
Time of concentration = 11.62 min.

Rainfall intensity = 3.856(In/Hr)  
Area averaged loss rate (Fm) = 0.1744(In/Hr)  
Area averaged Pervious ratio (Ap) = 0.2000  
Program is now starting with Main Stream No. 2

++++  
Process from Point/Station 2.010 to Point/Station 2.020  
\*\*\*\* INITIAL AREA EVALUATION \*\*\*\*

---

APARTMENT subarea type  
Decimal fraction soil group A = 0.000  
Decimal fraction soil group B = 1.000  
Decimal fraction soil group C = 0.000  
Decimal fraction soil group D = 0.000  
SCS curve number for soil(AMC 2) = 56.00  
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.147(In/Hr)  
Initial subarea data:  
Initial area flow distance = 376.000(Ft.)  
Top (of initial area) elevation = 820.100(Ft.)  
Bottom (of initial area) elevation = 815.600(Ft.)  
Difference in elevation = 4.500(Ft.)  
Slope = 0.01197 s(%)= 1.20  
TC =  $k(0.324)*[(\text{length}^3)/(\text{elevation change})]^{0.2}$   
Initial area time of concentration = 8.414 min.  
Rainfall intensity = 4.680(In/Hr) for a 100.0 year storm  
Effective runoff coefficient used for area (Q=KCIA) is C = 0.872  
Subarea runoff = 5.957(CFS)  
Total initial stream area = 1.460(Ac.)  
Pervious area fraction = 0.200  
Initial area Fm value = 0.147(In/Hr)

++++  
Process from Point/Station 2.020 to Point/Station 2.030  
\*\*\*\* PIPEFLOW TRAVEL TIME (User specified size) \*\*\*\*

---

Upstream point/station elevation = 809.600(Ft.)  
Downstream point/station elevation = 809.200(Ft.)  
Pipe length = 77.00(Ft.) Manning's N = 0.013  
No. of pipes = 1 Required pipe flow = 5.957(CFS)  
Given pipe size = 18.00(In.)  
Calculated individual pipe flow = 5.957(CFS)  
Normal flow depth in pipe = 12.02(In.)  
Flow top width inside pipe = 16.95(In.)  
Critical Depth = 11.31(In.)  
Pipe flow velocity = 4.74(Ft/s)  
Travel time through pipe = 0.27 min.  
Time of concentration (TC) = 8.68 min.

+++++  
Process from Point/Station 2.030 to Point/Station 2.040  
\*\*\*\* PIPEFLOW TRAVEL TIME (User specified size) \*\*\*\*

---

Upstream point/station elevation = 807.800(Ft.)  
Downstream point/station elevation = 806.500(Ft.)  
Pipe length = 262.00(Ft.) Manning's N = 0.013  
No. of pipes = 1 Required pipe flow = 5.957(CFS)  
Given pipe size = 18.00(In.)  
Calculated individual pipe flow = 5.957(CFS)  
Normal flow depth in pipe = 12.23(In.)  
Flow top width inside pipe = 16.80(In.)  
Critical Depth = 11.31(In.)  
Pipe flow velocity = 4.66(Ft/s)  
Travel time through pipe = 0.94 min.  
Time of concentration (TC) = 9.62 min.

+++++  
Process from Point/Station 2.030 to Point/Station 2.040  
\*\*\*\* CONFLUENCE OF MINOR STREAMS \*\*\*\*

---

Along Main Stream number: 2 in normal stream number 1  
Stream flow area = 1.460(Ac.)  
Runoff from this stream = 5.957(CFS)  
Time of concentration = 9.62 min.  
Rainfall intensity = 4.318(In/Hr)  
Area averaged loss rate (Fm) = 0.1468(In/Hr)  
Area averaged Pervious ratio (Ap) = 0.2000

+++++  
Process from Point/Station 3.010 to Point/Station 3.020  
\*\*\*\* INITIAL AREA EVALUATION \*\*\*\*

---

APARTMENT subarea type  
Decimal fraction soil group A = 0.000  
Decimal fraction soil group B = 1.000  
Decimal fraction soil group C = 0.000  
Decimal fraction soil group D = 0.000  
SCS curve number for soil(AMC 2) = 56.00  
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.147(In/Hr)  
Initial subarea data:  
Initial area flow distance = 293.000(Ft.)  
Top (of initial area) elevation = 817.700(Ft.)  
Bottom (of initial area) elevation = 815.100(Ft.)  
Difference in elevation = 2.600(Ft.)  
Slope = 0.00887 s(%)= 0.89  
TC =  $k(0.324)*[(\text{length}^3)/(\text{elevation change})]^{0.2}$

Initial area time of concentration = 8.085 min.  
Rainfall intensity = 4.793(In/Hr) for a 100.0 year storm  
Effective runoff coefficient used for area (Q=KCIA) is C = 0.872  
Subarea runoff = 6.273(CFS)  
Total initial stream area = 1.500(Ac.)  
Pervious area fraction = 0.200  
Initial area Fm value = 0.147(In/Hr)

++++  
Process from Point/Station 3.020 to Point/Station 3.030  
\*\*\*\* PIPEFLOW TRAVEL TIME (User specified size) \*\*\*\*

---

Upstream point/station elevation = 810.100(Ft.)  
Downstream point/station elevation = 809.200(Ft.)  
Pipe length = 181.00(Ft.) Manning's N = 0.013  
No. of pipes = 1 Required pipe flow = 6.273(CFS)  
Given pipe size = 18.00(In.)  
Calculated individual pipe flow = 6.273(CFS)  
Normal flow depth in pipe = 12.70(In.)  
Flow top width inside pipe = 16.41(In.)  
Critical Depth = 11.62(In.)  
Pipe flow velocity = 4.70(Ft/s)  
Travel time through pipe = 0.64 min.  
Time of concentration (TC) = 8.73 min.

++++  
Process from Point/Station 3.030 to Point/Station 2.040  
\*\*\*\* PIPEFLOW TRAVEL TIME (User specified size) \*\*\*\*

---

Upstream point/station elevation = 807.900(Ft.)  
Downstream point/station elevation = 806.500(Ft.)  
Pipe length = 16.00(Ft.) Manning's N = 0.013  
No. of pipes = 1 Required pipe flow = 6.273(CFS)  
Given pipe size = 18.00(In.)  
Calculated individual pipe flow = 6.273(CFS)  
Normal flow depth in pipe = 5.48(In.)  
Flow top width inside pipe = 16.57(In.)  
Critical Depth = 11.62(In.)  
Pipe flow velocity = 13.76(Ft/s)  
Travel time through pipe = 0.02 min.  
Time of concentration (TC) = 8.75 min.

++++  
Process from Point/Station 3.030 to Point/Station 2.040  
\*\*\*\* CONFLUENCE OF MINOR STREAMS \*\*\*\*

---

Along Main Stream number: 2 in normal stream number 2

Stream flow area = 1.500(Ac.)  
 Runoff from this stream = 6.273(CFS)  
 Time of concentration = 8.75 min.  
 Rainfall intensity = 4.573(In/Hr)  
 Area averaged loss rate (Fm) = 0.1468(In/Hr)  
 Area averaged Pervious ratio (Ap) = 0.2000  
 Summary of stream data:

Stream No.	Flow rate (CFS)	Area (Ac.)	TC (min)	Fm (In/Hr)	Rainfall Intensity (In/Hr)
1	5.96	1.460	9.62	0.147	4.318
2	6.27	1.500	8.75	0.147	4.573

Qmax(1) =  
 1.000 \* 1.000 \* 5.957) +  
 0.942 \* 1.000 \* 6.273) + = 11.869  
 Qmax(2) =  
 1.061 \* 0.909 \* 5.957) +  
 1.000 \* 1.000 \* 6.273) + = 12.018

Total of 2 streams to confluence:  
 Flow rates before confluence point:  
 5.957 6.273  
 Maximum flow rates at confluence using above data:  
 11.869 12.018  
 Area of streams before confluence:  
 1.460 1.500  
 Effective area values after confluence:  
 2.960 2.827

Results of confluence:  
 Total flow rate = 12.018(CFS)  
 Time of concentration = 8.746 min.  
 Effective stream area after confluence = 2.827(Ac.)  
 Study area average Pervious fraction(Ap) = 0.200  
 Study area average soil loss rate(Fm) = 0.147(In/Hr)  
 Study area total (this main stream) = 2.96(Ac.)

++++  
 Process from Point/Station 2.040 to Point/Station 1.040  
 \*\*\*\* PIPEFLOW TRAVEL TIME (User specified size) \*\*\*\*

---

Upstream point/station elevation = 806.500(Ft.)  
 Downstream point/station elevation = 806.300(Ft.)  
 Pipe length = 42.00(Ft.) Manning's N = 0.013  
 No. of pipes = 1 Required pipe flow = 12.018(CFS)  
 Given pipe size = 24.00(In.)  
 Calculated individual pipe flow = 12.018(CFS)  
 Normal flow depth in pipe = 15.80(In.)

Flow top width inside pipe = 22.77(In.)  
 Critical Depth = 14.94(In.)  
 Pipe flow velocity = 5.48(Ft/s)  
 Travel time through pipe = 0.13 min.  
 Time of concentration (TC) = 8.87 min.

++++  
 Process from Point/Station 2.040 to Point/Station 1.040  
 \*\*\*\* CONFLUENCE OF MAIN STREAMS \*\*\*\*

The following data inside Main Stream is listed:

In Main Stream number: 2  
 Stream flow area = 2.827(Ac.)  
 Runoff from this stream = 12.018(CFS)  
 Time of concentration = 8.87 min.  
 Rainfall intensity = 4.533(In/Hr)  
 Area averaged loss rate (Fm) = 0.1468(In/Hr)  
 Area averaged Pervious ratio (Ap) = 0.2000  
 Summary of stream data:

Stream No.	Flow rate (CFS)	Area (Ac.)	TC (min)	Fm (In/Hr)	Rainfall Intensity (In/Hr)
1	6.29	1.770	11.62	0.174	3.856
2	12.02	2.827	8.87	0.147	4.533
Qmax(1) =					
	1.000 *	1.000 *	6.290)	+	
	0.846 *	1.000 *	12.018)	+	16.453
Qmax(2) =					
	1.184 *	0.764 *	6.290)	+	
	1.000 *	1.000 *	12.018)	+	17.705

Total of 2 main streams to confluence:

Flow rates before confluence point:

7.290      13.018

Maximum flow rates at confluence using above data:

16.453      17.705

Area of streams before confluence:

1.770      2.827

Effective area values after confluence:

4.597      4.179

Results of confluence:

Total flow rate = 17.705(CFS)

Time of concentration = 8.874 min.

Effective stream area after confluence = 4.179(Ac.)

Study area average Pervious fraction(Ap) = 0.200

Study area average soil loss rate(Fm) = 0.157(In/Hr)  
Study area total = 4.60(Ac.)

++++  
Process from Point/Station 1.040 to Point/Station 1.050  
\*\*\*\* PIPEFLOW TRAVEL TIME (User specified size) \*\*\*\*

---

Upstream point/station elevation = 806.300(Ft.)  
Downstream point/station elevation = 805.800(Ft.)  
Pipe length = 100.00(Ft.) Manning's N = 0.013  
No. of pipes = 1 Required pipe flow = 17.705(CFS)  
Given pipe size = 30.00(In.)  
Calculated individual pipe flow = 17.705(CFS)  
Normal flow depth in pipe = 16.92(In.)  
Flow top width inside pipe = 29.75(In.)  
Critical Depth = 17.09(In.)  
Pipe flow velocity = 6.20(Ft/s)  
Travel time through pipe = 0.27 min.  
Time of concentration (TC) = 9.14 min.

++++  
Process from Point/Station 4.010 to Point/Station 4.020  
\*\*\*\* INITIAL AREA EVALUATION \*\*\*\*

---

APARTMENT subarea type  
Decimal fraction soil group A = 0.000  
Decimal fraction soil group B = 1.000  
Decimal fraction soil group C = 0.000  
Decimal fraction soil group D = 0.000  
SCS curve number for soil(AMC 2) = 56.00  
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.147(In/Hr)  
Initial subarea data:  
Initial area flow distance = 641.000(Ft.)  
Top (of initial area) elevation = 816.000(Ft.)  
Bottom (of initial area) elevation = 809.400(Ft.)  
Difference in elevation = 6.600(Ft.)  
Slope = 0.01030 s(%)= 1.03  
TC = k(0.324)\*[(length^3)/(elevation change)]^0.2  
Initial area time of concentration = 10.734 min.  
Rainfall intensity = 4.044(In/Hr) for a 100.0 year storm  
Effective runoff coefficient used for area (Q=KCIA) is C = 0.867  
Subarea runoff = 4.630(CFS)  
Total initial stream area = 1.320(Ac.)  
Pervious area fraction = 0.200  
Initial area Fm value = 0.147(In/Hr)

++++

Process from Point/Station 5.010 to Point/Station 5.020  
\*\*\*\* INITIAL AREA EVALUATION \*\*\*\*

---

APARTMENT subarea type  
Decimal fraction soil group A = 0.000  
Decimal fraction soil group B = 1.000  
Decimal fraction soil group C = 0.000  
Decimal fraction soil group D = 0.000  
SCS curve number for soil(AMC 2) = 56.00  
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.147(In/Hr)  
Initial subarea data:  
Initial area flow distance = 269.000(Ft.)  
Top (of initial area) elevation = 813.700(Ft.)  
Bottom (of initial area) elevation = 809.800(Ft.)  
Difference in elevation = 3.900(Ft.)  
Slope = 0.01450 s(%)= 1.45  
TC =  $k(0.324)*[(length^3)/(elevation\ change)]^{0.2}$   
Initial area time of concentration = 7.082 min.  
Rainfall intensity = 5.190(In/Hr) for a 100.0 year storm  
Effective runoff coefficient used for area (Q=KCIA) is C = 0.875  
Subarea runoff = 2.451(CFS)  
Total initial stream area = 0.540(Ac.)  
Pervious area fraction = 0.200  
Initial area Fm value = 0.147(In/Hr)

+++++  
Process from Point/Station 6.010 to Point/Station 6.020  
\*\*\*\* INITIAL AREA EVALUATION \*\*\*\*

---

APARTMENT subarea type  
Decimal fraction soil group A = 0.000  
Decimal fraction soil group B = 1.000  
Decimal fraction soil group C = 0.000  
Decimal fraction soil group D = 0.000  
SCS curve number for soil(AMC 2) = 56.00  
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.147(In/Hr)  
Initial subarea data:  
Initial area flow distance = 269.000(Ft.)  
Top (of initial area) elevation = 813.900(Ft.)  
Bottom (of initial area) elevation = 810.200(Ft.)  
Difference in elevation = 3.700(Ft.)  
Slope = 0.01375 s(%)= 1.38  
TC =  $k(0.324)*[(length^3)/(elevation\ change)]^{0.2}$   
Initial area time of concentration = 7.157 min.  
Rainfall intensity = 5.157(In/Hr) for a 100.0 year storm  
Effective runoff coefficient used for area (Q=KCIA) is C = 0.874  
Subarea runoff = 1.849(CFS)  
Total initial stream area = 0.410(Ac.)  
Pervious area fraction = 0.200

Initial area Fm value = 0.147(In/Hr)

++++  
Process from Point/Station 7.010 to Point/Station 7.020  
\*\*\*\* INITIAL AREA EVALUATION \*\*\*\*

---

APARTMENT subarea type  
Decimal fraction soil group A = 0.000  
Decimal fraction soil group B = 1.000  
Decimal fraction soil group C = 0.000  
Decimal fraction soil group D = 0.000  
SCS curve number for soil(AMC 2) = 56.00  
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.147(In/Hr)  
Initial subarea data:  
Initial area flow distance = 284.000(Ft.)  
Top (of initial area) elevation = 816.200(Ft.)  
Bottom (of initial area) elevation = 810.700(Ft.)  
Difference in elevation = 5.500(Ft.)  
Slope = 0.01937 s(%)= 1.94  
TC =  $k(0.324)*[(length^3)/(elevation\ change)]^{0.2}$   
Initial area time of concentration = 6.831 min.  
Rainfall intensity = 5.304(In/Hr) for a 100.0 year storm  
Effective runoff coefficient used for area (Q=KCIA) is C = 0.875  
Subarea runoff = 4.363(CFS)  
Total initial stream area = 0.940(Ac.)  
Pervious area fraction = 0.200  
Initial area Fm value = 0.147(In/Hr)

++++  
Process from Point/Station 8.010 to Point/Station 8.020  
\*\*\*\* INITIAL AREA EVALUATION \*\*\*\*

---

APARTMENT subarea type  
Decimal fraction soil group A = 0.000  
Decimal fraction soil group B = 1.000  
Decimal fraction soil group C = 0.000  
Decimal fraction soil group D = 0.000  
SCS curve number for soil(AMC 2) = 56.00  
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.147(In/Hr)  
Initial subarea data:  
Initial area flow distance = 204.000(Ft.)  
Top (of initial area) elevation = 817.400(Ft.)  
Bottom (of initial area) elevation = 814.900(Ft.)  
Difference in elevation = 2.500(Ft.)  
Slope = 0.01225 s(%)= 1.23  
TC =  $k(0.324)*[(length^3)/(elevation\ change)]^{0.2}$   
Initial area time of concentration = 6.557 min.  
Rainfall intensity = 5.435(In/Hr) for a 100.0 year storm

Effective runoff coefficient used for area (Q=KCIA) is C = 0.876  
Subarea runoff = 3.284(CFS)  
Total initial stream area = 0.690(Ac.)  
Pervious area fraction = 0.200  
Initial area Fm value = 0.147(In/Hr)

++++  
Process from Point/Station 8.020 to Point/Station 8.030  
\*\*\*\* PIPEFLOW TRAVEL TIME (User specified size) \*\*\*\*

---

Upstream point/station elevation = 812.700(Ft.)  
Downstream point/station elevation = 811.900(Ft.)  
Pipe length = 110.00(Ft.) Manning's N = 0.013  
No. of pipes = 1 Required pipe flow = 3.284(CFS)  
Given pipe size = 12.00(In.)  
NOTE: Normal flow is pressure flow in user selected pipe size.  
The approximate hydraulic grade line above the pipe invert is  
0.542(Ft.) at the headworks or inlet of the pipe(s)  
Pipe friction loss = 0.934(Ft.)  
Minor friction loss = 0.407(Ft.) K-factor = 1.50  
Pipe flow velocity = 4.18(Ft/s)  
Travel time through pipe = 0.44 min.  
Time of concentration (TC) = 7.00 min.

++++  
Process from Point/Station 9.010 to Point/Station 9.020  
\*\*\*\* INITIAL AREA EVALUATION \*\*\*\*

---

APARTMENT subarea type  
Decimal fraction soil group A = 0.850  
Decimal fraction soil group B = 0.150  
Decimal fraction soil group C = 0.000  
Decimal fraction soil group D = 0.000  
SCS curve number for soil(AMC 2) = 35.60  
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.191(In/Hr)  
Initial subarea data:  
Initial area flow distance = 340.000(Ft.)  
Top (of initial area) elevation = 824.000(Ft.)  
Bottom (of initial area) elevation = 818.400(Ft.)  
Difference in elevation = 5.600(Ft.)  
Slope = 0.01647 s(%)= 1.65  
TC = k(0.324)\*[(length^3)/(elevation change)]^0.2  
Initial area time of concentration = 7.582 min.  
Rainfall intensity = 4.982(In/Hr) for a 100.0 year storm  
Effective runoff coefficient used for area (Q=KCIA) is C = 0.866  
Subarea runoff = 4.182(CFS)  
Total initial stream area = 0.970(Ac.)  
Pervious area fraction = 0.200

Initial area Fm value = 0.191(In/Hr)

++++  
Process from Point/Station 9.020 to Point/Station 9.030  
\*\*\*\* PIPEFLOW TRAVEL TIME (User specified size) \*\*\*\*

---

Upstream point/station elevation = 815.300(Ft.)  
Downstream point/station elevation = 815.200(Ft.)  
Pipe length = 30.00(Ft.) Manning's N = 0.013  
No. of pipes = 1 Required pipe flow = 4.182(CFS)  
Given pipe size = 18.00(In.)  
Calculated individual pipe flow = 4.182(CFS)  
Normal flow depth in pipe = 10.99(In.)  
Flow top width inside pipe = 17.55(In.)  
Critical Depth = 9.41(In.)  
Pipe flow velocity = 3.70(Ft/s)  
Travel time through pipe = 0.14 min.  
Time of concentration (TC) = 7.72 min.

++++  
Process from Point/Station 9.030 to Point/Station 9.040  
\*\*\*\* PIPEFLOW TRAVEL TIME (User specified size) \*\*\*\*

---

Upstream point/station elevation = 813.800(Ft.)  
Downstream point/station elevation = 813.600(Ft.)  
Pipe length = 49.00(Ft.) Manning's N = 0.013  
No. of pipes = 1 Required pipe flow = 4.182(CFS)  
Given pipe size = 18.00(In.)  
Calculated individual pipe flow = 4.182(CFS)  
Normal flow depth in pipe = 10.29(In.)  
Flow top width inside pipe = 17.81(In.)  
Critical Depth = 9.41(In.)  
Pipe flow velocity = 4.00(Ft/s)  
Travel time through pipe = 0.20 min.  
Time of concentration (TC) = 7.92 min.  
End of computations, Total Study Area = 9.60 (Ac.)

The following figures may  
be used for a unit hydrograph study of the same area.  
Note: These figures do not consider reduced effective area  
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.200  
Area averaged SCS curve number = 51.8

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2005 Version 7.1  
Rational Hydrology Study Date: 04/26/23

-----  
RATIONAL, EUCLID AND WALNUT  
10-YEAR EVENT  
PRE CONSTRUCTION  
FUSCOE ENGINEERING  
-----

Program License Serial Number 6049

-----  
\*\*\*\*\* Hydrology Study Control Information \*\*\*\*\*  
-----

Rational hydrology study storm event year is 10.0  
Computed rainfall intensity:  
Storm year = 10.00 1 hour rainfall = 0.930 (In.)  
Slope used for rainfall intensity curve b = 0.6000  
Soil antecedent moisture condition (AMC) = 2

+++++  
Process from Point/Station 1.010 to Point/Station 1.020  
\*\*\*\* INITIAL AREA EVALUATION \*\*\*\*

-----  
Soil classification AP and SCS values input by user  
USER INPUT of soil data for subarea  
SCS curve number for soil(AMC 2) = 95.00  
Pervious ratio(Ap) = 0.0700 Max loss rate(Fm)= 0.007(In/Hr)  
Initial subarea data:  
Initial area flow distance = 898.000(Ft.)  
Top (of initial area) elevation = 824.100(Ft.)  
Bottom (of initial area) elevation = 812.000(Ft.)  
Difference in elevation = 12.100(Ft.)  
Slope = 0.01347 s(%)= 1.35  
TC = k(0.292)\*[(length^3)/(elevation change)]^0.2  
Initial area time of concentration = 10.482 min.  
Rainfall intensity = 2.649(In/Hr) for a 10.0 year storm  
Effective runoff coefficient used for area (Q=KCIA) is C = 0.898  
Subarea runoff = 16.171(CFS)  
Total initial stream area = 6.800(Ac.)  
Pervious area fraction = 0.070  
Initial area Fm value = 0.007(In/Hr)

+++++  
Process from Point/Station 2.010 to Point/Station 2.020  
\*\*\*\* INITIAL AREA EVALUATION \*\*\*\*

---

Soil classification AP and SCS values input by user  
USER INPUT of soil data for subarea  
SCS curve number for soil(AMC 2) = 95.00  
Pervious ratio(Ap) = 0.0500 Max loss rate(Fm)= 0.005(In/Hr)  
Initial subarea data:  
Initial area flow distance = 879.000(Ft.)  
Top (of initial area) elevation = 817.000(Ft.)  
Bottom (of initial area) elevation = 810.300(Ft.)  
Difference in elevation = 6.700(Ft.)  
Slope = 0.00762 s(%)= 0.76  
TC =  $k(0.287)*[(\text{length}^3)/(\text{elevation change})]^{0.2}$   
Initial area time of concentration = 11.450 min.  
Rainfall intensity = 2.512(In/Hr) for a 10.0 year storm  
Effective runoff coefficient used for area (Q=KCIA) is C = 0.898  
Subarea runoff = 6.319(CFS)  
Total initial stream area = 2.800(Ac.)  
Pervious area fraction = 0.050  
Initial area Fm value = 0.005(In/Hr)  
End of computations, Total Study Area = 9.60 (Ac.)  
The following figures may  
be used for a unit hydrograph study of the same area.  
Note: These figures do not consider reduced effective area  
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.064  
Area averaged SCS curve number = 95.0

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2005 Version 7.1  
Rational Hydrology Study Date: 04/26/23

-----  
RATIONAL, EUCLID AND WALNUT  
10-YEAR EVENT  
POST CONSTRUCTION  
FUSCOE ENGINEERING  
-----

Program License Serial Number 6049

-----  
\*\*\*\*\* Hydrology Study Control Information \*\*\*\*\*

-----  
Rational hydrology study storm event year is 10.0  
Computed rainfall intensity:  
Storm year = 10.00 1 hour rainfall = 0.930 (In.)  
Slope used for rainfall intensity curve b = 0.6000  
Soil antecedent moisture condition (AMC) = 2

++++  
Process from Point/Station 1.010 to Point/Station 1.020  
\*\*\*\* INITIAL AREA EVALUATION \*\*\*\*

-----  
APARTMENT subarea type  
Decimal fraction soil group A = 0.480  
Decimal fraction soil group B = 0.520  
Decimal fraction soil group C = 0.000  
Decimal fraction soil group D = 0.000  
SCS curve number for soil(AMC 2) = 44.48  
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.174(In/Hr)  
Initial subarea data:  
Initial area flow distance = 595.000(Ft.)  
Top (of initial area) elevation = 821.000(Ft.)  
Bottom (of initial area) elevation = 814.800(Ft.)  
Difference in elevation = 6.200(Ft.)  
Slope = 0.01042 s(%)= 1.04  
TC = k(0.324)\*[(length^3)/(elevation change)]^0.2  
Initial area time of concentration = 10.394 min.  
Rainfall intensity = 2.663(In/Hr) for a 10.0 year storm  
Effective runoff coefficient used for area (Q=KCIA) is C = 0.841  
Subarea runoff = 3.964(CFS)

Total initial stream area = 1.770(Ac.)  
Pervious area fraction = 0.200  
Initial area Fm value = 0.174(In/Hr)

++++  
Process from Point/Station 1.020 to Point/Station 1.030  
\*\*\*\* PIPEFLOW TRAVEL TIME (User specified size) \*\*\*\*

---

Upstream point/station elevation = 810.700(Ft.)  
Downstream point/station elevation = 810.300(Ft.)  
Pipe length = 63.00(Ft.) Manning's N = 0.013  
No. of pipes = 1 Required pipe flow = 3.964(CFS)  
Given pipe size = 18.00(In.)  
Calculated individual pipe flow = 3.964(CFS)  
Normal flow depth in pipe = 8.72(In.)  
Flow top width inside pipe = 17.99(In.)  
Critical Depth = 9.14(In.)  
Pipe flow velocity = 4.67(Ft/s)  
Travel time through pipe = 0.22 min.  
Time of concentration (TC) = 10.62 min.

++++  
Process from Point/Station 1.030 to Point/Station 1.040  
\*\*\*\* PIPEFLOW TRAVEL TIME (User specified size) \*\*\*\*

---

Upstream point/station elevation = 809.000(Ft.)  
Downstream point/station elevation = 806.300(Ft.)  
Pipe length = 346.00(Ft.) Manning's N = 0.013  
No. of pipes = 1 Required pipe flow = 3.964(CFS)  
Given pipe size = 18.00(In.)  
Calculated individual pipe flow = 3.964(CFS)  
Normal flow depth in pipe = 8.21(In.)  
Flow top width inside pipe = 17.93(In.)  
Critical Depth = 9.14(In.)  
Pipe flow velocity = 5.04(Ft/s)  
Travel time through pipe = 1.14 min.  
Time of concentration (TC) = 11.76 min.

++++  
Process from Point/Station 1.030 to Point/Station 1.040  
\*\*\*\* CONFLUENCE OF MAIN STREAMS \*\*\*\*

---

The following data inside Main Stream is listed:

In Main Stream number: 1  
Stream flow area = 1.770(Ac.)  
Runoff from this stream = 3.964(CFS)  
Time of concentration = 11.76 min.

Rainfall intensity = 2.472(In/Hr)  
Area averaged loss rate (Fm) = 0.1744(In/Hr)  
Area averaged Pervious ratio (Ap) = 0.2000  
Program is now starting with Main Stream No. 2

++++  
Process from Point/Station 2.010 to Point/Station 2.020  
\*\*\*\* INITIAL AREA EVALUATION \*\*\*\*

---

APARTMENT subarea type  
Decimal fraction soil group A = 0.000  
Decimal fraction soil group B = 1.000  
Decimal fraction soil group C = 0.000  
Decimal fraction soil group D = 0.000  
SCS curve number for soil(AMC 2) = 56.00  
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.147(In/Hr)  
Initial subarea data:  
Initial area flow distance = 376.000(Ft.)  
Top (of initial area) elevation = 820.100(Ft.)  
Bottom (of initial area) elevation = 815.600(Ft.)  
Difference in elevation = 4.500(Ft.)  
Slope = 0.01197 s(%)= 1.20  
TC =  $k(0.324)*[(\text{length}^3)/(\text{elevation change})]^{0.2}$   
Initial area time of concentration = 8.414 min.  
Rainfall intensity = 3.022(In/Hr) for a 10.0 year storm  
Effective runoff coefficient used for area (Q=KCIA) is C = 0.856  
Subarea runoff = 3.779(CFS)  
Total initial stream area = 1.460(Ac.)  
Pervious area fraction = 0.200  
Initial area Fm value = 0.147(In/Hr)

++++  
Process from Point/Station 2.020 to Point/Station 2.030  
\*\*\*\* PIPEFLOW TRAVEL TIME (User specified size) \*\*\*\*

---

Upstream point/station elevation = 809.600(Ft.)  
Downstream point/station elevation = 809.200(Ft.)  
Pipe length = 77.00(Ft.) Manning's N = 0.013  
No. of pipes = 1 Required pipe flow = 3.779(CFS)  
Given pipe size = 18.00(In.)  
Calculated individual pipe flow = 3.779(CFS)  
Normal flow depth in pipe = 8.99(In.)  
Flow top width inside pipe = 18.00(In.)  
Critical Depth = 8.92(In.)  
Pipe flow velocity = 4.28(Ft/s)  
Travel time through pipe = 0.30 min.  
Time of concentration (TC) = 8.71 min.

+++++  
Process from Point/Station 2.030 to Point/Station 2.040  
\*\*\*\* PIPEFLOW TRAVEL TIME (User specified size) \*\*\*\*

---

Upstream point/station elevation = 807.800(Ft.)  
Downstream point/station elevation = 806.500(Ft.)  
Pipe length = 262.00(Ft.) Manning's N = 0.013  
No. of pipes = 1 Required pipe flow = 3.779(CFS)  
Given pipe size = 18.00(In.)  
Calculated individual pipe flow = 3.779(CFS)  
Normal flow depth in pipe = 9.12(In.)  
Flow top width inside pipe = 18.00(In.)  
Critical Depth = 8.92(In.)  
Pipe flow velocity = 4.21(Ft/s)  
Travel time through pipe = 1.04 min.  
Time of concentration (TC) = 9.75 min.

+++++  
Process from Point/Station 2.030 to Point/Station 2.040  
\*\*\*\* CONFLUENCE OF MINOR STREAMS \*\*\*\*

---

Along Main Stream number: 2 in normal stream number 1  
Stream flow area = 1.460(Ac.)  
Runoff from this stream = 3.779(CFS)  
Time of concentration = 9.75 min.  
Rainfall intensity = 2.767(In/Hr)  
Area averaged loss rate (Fm) = 0.1468(In/Hr)  
Area averaged Pervious ratio (Ap) = 0.2000

+++++  
Process from Point/Station 3.010 to Point/Station 3.020  
\*\*\*\* INITIAL AREA EVALUATION \*\*\*\*

---

APARTMENT subarea type  
Decimal fraction soil group A = 0.000  
Decimal fraction soil group B = 1.000  
Decimal fraction soil group C = 0.000  
Decimal fraction soil group D = 0.000  
SCS curve number for soil(AMC 2) = 56.00  
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.147(In/Hr)  
Initial subarea data:  
Initial area flow distance = 293.000(Ft.)  
Top (of initial area) elevation = 817.700(Ft.)  
Bottom (of initial area) elevation = 815.100(Ft.)  
Difference in elevation = 2.600(Ft.)  
Slope = 0.00887 s(%)= 0.89  
TC =  $k(0.324)*[(\text{length}^3)/(\text{elevation change})]^{0.2}$

Initial area time of concentration = 8.085 min.  
Rainfall intensity = 3.096(In/Hr) for a 10.0 year storm  
Effective runoff coefficient used for area (Q=KCIA) is C = 0.857  
Subarea runoff = 3.981(CFS)  
Total initial stream area = 1.500(Ac.)  
Pervious area fraction = 0.200  
Initial area Fm value = 0.147(In/Hr)

++++  
Process from Point/Station 3.020 to Point/Station 3.030  
\*\*\*\* PIPEFLOW TRAVEL TIME (User specified size) \*\*\*\*

---

Upstream point/station elevation = 810.100(Ft.)  
Downstream point/station elevation = 809.200(Ft.)  
Pipe length = 181.00(Ft.) Manning's N = 0.013  
No. of pipes = 1 Required pipe flow = 3.981(CFS)  
Given pipe size = 18.00(In.)  
Calculated individual pipe flow = 3.981(CFS)  
Normal flow depth in pipe = 9.40(In.)  
Flow top width inside pipe = 17.98(In.)  
Critical Depth = 9.15(In.)  
Pipe flow velocity = 4.27(Ft/s)  
Travel time through pipe = 0.71 min.  
Time of concentration (TC) = 8.79 min.

++++  
Process from Point/Station 3.030 to Point/Station 2.040  
\*\*\*\* PIPEFLOW TRAVEL TIME (User specified size) \*\*\*\*

---

Upstream point/station elevation = 807.900(Ft.)  
Downstream point/station elevation = 806.500(Ft.)  
Pipe length = 16.00(Ft.) Manning's N = 0.013  
No. of pipes = 1 Required pipe flow = 3.981(CFS)  
Given pipe size = 18.00(In.)  
Calculated individual pipe flow = 3.981(CFS)  
Normal flow depth in pipe = 4.35(In.)  
Flow top width inside pipe = 15.41(In.)  
Critical Depth = 9.15(In.)  
Pipe flow velocity = 12.08(Ft/s)  
Travel time through pipe = 0.02 min.  
Time of concentration (TC) = 8.81 min.

++++  
Process from Point/Station 3.030 to Point/Station 2.040  
\*\*\*\* CONFLUENCE OF MINOR STREAMS \*\*\*\*

---

Along Main Stream number: 2 in normal stream number 2

Stream flow area = 1.500(Ac.)  
 Runoff from this stream = 3.981(CFS)  
 Time of concentration = 8.81 min.  
 Rainfall intensity = 2.940(In/Hr)  
 Area averaged loss rate (Fm) = 0.1468(In/Hr)  
 Area averaged Pervious ratio (Ap) = 0.2000  
 Summary of stream data:

Stream No.	Flow rate (CFS)	Area (Ac.)	TC (min)	Fm (In/Hr)	Rainfall Intensity (In/Hr)
1	3.78	1.460	9.75	0.147	2.767
2	3.98	1.500	8.81	0.147	2.940

Qmax(1) =  
 1.000 \* 1.000 \* 3.779) +  
 0.938 \* 1.000 \* 3.981) + = 7.513

Qmax(2) =  
 1.066 \* 0.904 \* 3.779) +  
 1.000 \* 1.000 \* 3.981) + = 7.622

Total of 2 streams to confluence:  
 Flow rates before confluence point:  
 3.779          3.981  
 Maximum flow rates at confluence using above data:  
 7.513          7.622  
 Area of streams before confluence:  
 1.460          1.500  
 Effective area values after confluence:  
 2.960          2.820

Results of confluence:  
 Total flow rate = 7.622(CFS)  
 Time of concentration = 8.814 min.  
 Effective stream area after confluence = 2.820(Ac.)  
 Study area average Pervious fraction(Ap) = 0.200  
 Study area average soil loss rate(Fm) = 0.147(In/Hr)  
 Study area total (this main stream) = 2.96(Ac.)

++++  
 Process from Point/Station 2.040 to Point/Station 1.040  
 \*\*\*\* PIPEFLOW TRAVEL TIME (User specified size) \*\*\*\*

---

Upstream point/station elevation = 806.500(Ft.)  
 Downstream point/station elevation = 806.300(Ft.)  
 Pipe length = 42.00(Ft.) Manning's N = 0.013  
 No. of pipes = 1 Required pipe flow = 7.622(CFS)  
 Given pipe size = 24.00(In.)  
 Calculated individual pipe flow = 7.622(CFS)  
 Normal flow depth in pipe = 11.84(In.)

Flow top width inside pipe = 24.00(In.)  
 Critical Depth = 11.78(In.)  
 Pipe flow velocity = 4.94(Ft/s)  
 Travel time through pipe = 0.14 min.  
 Time of concentration (TC) = 8.96 min.

++++  
 Process from Point/Station 2.040 to Point/Station 1.040  
 \*\*\*\* CONFLUENCE OF MAIN STREAMS \*\*\*\*

The following data inside Main Stream is listed:

In Main Stream number: 2  
 Stream flow area = 2.820(Ac.)  
 Runoff from this stream = 7.622(CFS)  
 Time of concentration = 8.96 min.  
 Rainfall intensity = 2.912(In/Hr)  
 Area averaged loss rate (Fm) = 0.1468(In/Hr)  
 Area averaged Pervious ratio (Ap) = 0.2000  
 Summary of stream data:

Stream No.	Flow rate (CFS)	Area (Ac.)	TC (min)	Fm (In/Hr)	Rainfall Intensity (In/Hr)
1	3.96	1.770	11.76	0.174	2.472
2	7.62	2.820	8.96	0.147	2.912
Qmax(1) =					
	1.000 *	1.000 *		3.964) +	
	0.841 *	1.000 *		7.622) + =	10.375
Qmax(2) =					
	1.191 *	0.761 *		3.964) +	
	1.000 *	1.000 *		7.622) + =	11.217

Total of 2 main streams to confluence:

Flow rates before confluence point:

4.964            8.622

Maximum flow rates at confluence using above data:

10.375            11.217

Area of streams before confluence:

1.770            2.820

Effective area values after confluence:

4.590            4.167

Results of confluence:

Total flow rate = 11.217(CFS)

Time of concentration = 8.955 min.

Effective stream area after confluence = 4.167(Ac.)

Study area average Pervious fraction(Ap) = 0.200

Study area average soil loss rate(Fm) = 0.157(In/Hr)  
Study area total = 4.59(Ac.)

++++  
Process from Point/Station 1.040 to Point/Station 1.050  
\*\*\*\* PIPEFLOW TRAVEL TIME (User specified size) \*\*\*\*

---

Upstream point/station elevation = 806.300(Ft.)  
Downstream point/station elevation = 805.800(Ft.)  
Pipe length = 100.00(Ft.) Manning's N = 0.013  
No. of pipes = 1 Required pipe flow = 11.217(CFS)  
Given pipe size = 30.00(In.)  
Calculated individual pipe flow = 11.217(CFS)  
Normal flow depth in pipe = 12.95(In.)  
Flow top width inside pipe = 29.72(In.)  
Critical Depth = 13.45(In.)  
Pipe flow velocity = 5.53(Ft/s)  
Travel time through pipe = 0.30 min.  
Time of concentration (TC) = 9.26 min.

++++  
Process from Point/Station 4.010 to Point/Station 4.020  
\*\*\*\* INITIAL AREA EVALUATION \*\*\*\*

---

APARTMENT subarea type  
Decimal fraction soil group A = 0.000  
Decimal fraction soil group B = 1.000  
Decimal fraction soil group C = 0.000  
Decimal fraction soil group D = 0.000  
SCS curve number for soil(AMC 2) = 56.00  
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.147(In/Hr)  
Initial subarea data:  
Initial area flow distance = 641.000(Ft.)  
Top (of initial area) elevation = 816.000(Ft.)  
Bottom (of initial area) elevation = 809.400(Ft.)  
Difference in elevation = 6.600(Ft.)  
Slope = 0.01030 s(%)= 1.03  
TC = k(0.324)\*[(length^3)/(elevation change)]^0.2  
Initial area time of concentration = 10.734 min.  
Rainfall intensity = 2.612(In/Hr) for a 10.0 year storm  
Effective runoff coefficient used for area (Q=KCIA) is C = 0.849  
Subarea runoff = 2.928(CFS)  
Total initial stream area = 1.320(Ac.)  
Pervious area fraction = 0.200  
Initial area Fm value = 0.147(In/Hr)

++++

Process from Point/Station 5.010 to Point/Station 5.020  
\*\*\*\* INITIAL AREA EVALUATION \*\*\*\*

---

APARTMENT subarea type  
Decimal fraction soil group A = 0.000  
Decimal fraction soil group B = 1.000  
Decimal fraction soil group C = 0.000  
Decimal fraction soil group D = 0.000  
SCS curve number for soil(AMC 2) = 56.00  
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.147(In/Hr)  
Initial subarea data:  
Initial area flow distance = 269.000(Ft.)  
Top (of initial area) elevation = 813.700(Ft.)  
Bottom (of initial area) elevation = 809.800(Ft.)  
Difference in elevation = 3.900(Ft.)  
Slope = 0.01450 s(%)= 1.45  
TC =  $k(0.324)*[(length^3)/(elevation\ change)]^{0.2}$   
Initial area time of concentration = 7.082 min.  
Rainfall intensity = 3.352(In/Hr) for a 10.0 year storm  
Effective runoff coefficient used for area (Q=KCIA) is C = 0.861  
Subarea runoff = 1.558(CFS)  
Total initial stream area = 0.540(Ac.)  
Pervious area fraction = 0.200  
Initial area Fm value = 0.147(In/Hr)

+++++  
Process from Point/Station 6.010 to Point/Station 6.020  
\*\*\*\* INITIAL AREA EVALUATION \*\*\*\*

---

APARTMENT subarea type  
Decimal fraction soil group A = 0.000  
Decimal fraction soil group B = 1.000  
Decimal fraction soil group C = 0.000  
Decimal fraction soil group D = 0.000  
SCS curve number for soil(AMC 2) = 56.00  
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.147(In/Hr)  
Initial subarea data:  
Initial area flow distance = 269.000(Ft.)  
Top (of initial area) elevation = 813.900(Ft.)  
Bottom (of initial area) elevation = 810.200(Ft.)  
Difference in elevation = 3.700(Ft.)  
Slope = 0.01375 s(%)= 1.38  
TC =  $k(0.324)*[(length^3)/(elevation\ change)]^{0.2}$   
Initial area time of concentration = 7.157 min.  
Rainfall intensity = 3.331(In/Hr) for a 10.0 year storm  
Effective runoff coefficient used for area (Q=KCIA) is C = 0.860  
Subarea runoff = 1.175(CFS)  
Total initial stream area = 0.410(Ac.)  
Pervious area fraction = 0.200

Initial area Fm value = 0.147(In/Hr)

++++  
Process from Point/Station 7.010 to Point/Station 7.020  
\*\*\*\* INITIAL AREA EVALUATION \*\*\*\*

---

APARTMENT subarea type  
Decimal fraction soil group A = 0.000  
Decimal fraction soil group B = 1.000  
Decimal fraction soil group C = 0.000  
Decimal fraction soil group D = 0.000  
SCS curve number for soil(AMC 2) = 56.00  
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.147(In/Hr)  
Initial subarea data:  
Initial area flow distance = 284.000(Ft.)  
Top (of initial area) elevation = 816.200(Ft.)  
Bottom (of initial area) elevation = 810.700(Ft.)  
Difference in elevation = 5.500(Ft.)  
Slope = 0.01937 s(%)= 1.94  
TC = k(0.324)\*[(length^3)/(elevation change)]^0.2  
Initial area time of concentration = 6.831 min.  
Rainfall intensity = 3.425(In/Hr) for a 10.0 year storm  
Effective runoff coefficient used for area (Q=KCIA) is C = 0.861  
Subarea runoff = 2.774(CFS)  
Total initial stream area = 0.940(Ac.)  
Pervious area fraction = 0.200  
Initial area Fm value = 0.147(In/Hr)

++++  
Process from Point/Station 8.010 to Point/Station 8.020  
\*\*\*\* INITIAL AREA EVALUATION \*\*\*\*

---

APARTMENT subarea type  
Decimal fraction soil group A = 0.000  
Decimal fraction soil group B = 1.000  
Decimal fraction soil group C = 0.000  
Decimal fraction soil group D = 0.000  
SCS curve number for soil(AMC 2) = 56.00  
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.147(In/Hr)  
Initial subarea data:  
Initial area flow distance = 204.000(Ft.)  
Top (of initial area) elevation = 817.400(Ft.)  
Bottom (of initial area) elevation = 814.900(Ft.)  
Difference in elevation = 2.500(Ft.)  
Slope = 0.01225 s(%)= 1.23  
TC = k(0.324)\*[(length^3)/(elevation change)]^0.2  
Initial area time of concentration = 6.557 min.  
Rainfall intensity = 3.510(In/Hr) for a 10.0 year storm

Effective runoff coefficient used for area (Q=KCIA) is C = 0.862  
Subarea runoff = 2.089(CFS)  
Total initial stream area = 0.690(Ac.)  
Pervious area fraction = 0.200  
Initial area Fm value = 0.147(In/Hr)

++++  
Process from Point/Station 8.020 to Point/Station 8.030  
\*\*\*\* PIPEFLOW TRAVEL TIME (User specified size) \*\*\*\*

---

Upstream point/station elevation = 812.700(Ft.)  
Downstream point/station elevation = 811.900(Ft.)  
Pipe length = 110.00(Ft.) Manning's N = 0.013  
No. of pipes = 1 Required pipe flow = 2.089(CFS)  
Given pipe size = 12.00(In.)  
Calculated individual pipe flow = 2.089(CFS)  
Normal flow depth in pipe = 7.31(In.)  
Flow top width inside pipe = 11.71(In.)  
Critical Depth = 7.41(In.)  
Pipe flow velocity = 4.17(Ft/s)  
Travel time through pipe = 0.44 min.  
Time of concentration (TC) = 7.00 min.

++++  
Process from Point/Station 9.010 to Point/Station 9.020  
\*\*\*\* INITIAL AREA EVALUATION \*\*\*\*

---

APARTMENT subarea type  
Decimal fraction soil group A = 0.850  
Decimal fraction soil group B = 0.150  
Decimal fraction soil group C = 0.000  
Decimal fraction soil group D = 0.000  
SCS curve number for soil(AMC 2) = 35.60  
Pervious ratio(Ap) = 0.2000 Max loss rate(Fm)= 0.191(In/Hr)  
Initial subarea data:  
Initial area flow distance = 340.000(Ft.)  
Top (of initial area) elevation = 824.000(Ft.)  
Bottom (of initial area) elevation = 818.400(Ft.)  
Difference in elevation = 5.600(Ft.)  
Slope = 0.01647 s(%)= 1.65  
TC = k(0.324)\*[(length^3)/(elevation change)]^0.2  
Initial area time of concentration = 7.582 min.  
Rainfall intensity = 3.217(In/Hr) for a 10.0 year storm  
Effective runoff coefficient used for area (Q=KCIA) is C = 0.847  
Subarea runoff = 2.642(CFS)  
Total initial stream area = 0.970(Ac.)  
Pervious area fraction = 0.200  
Initial area Fm value = 0.191(In/Hr)

+++++  
Process from Point/Station 9.020 to Point/Station 9.030  
\*\*\*\* PIPEFLOW TRAVEL TIME (User specified size) \*\*\*\*

---

Upstream point/station elevation = 815.300(Ft.)  
Downstream point/station elevation = 815.200(Ft.)  
Pipe length = 30.00(Ft.) Manning's N = 0.013  
No. of pipes = 1 Required pipe flow = 2.642(CFS)  
Given pipe size = 18.00(In.)  
Calculated individual pipe flow = 2.642(CFS)  
Normal flow depth in pipe = 8.31(In.)  
Flow top width inside pipe = 17.95(In.)  
Critical Depth = 7.38(In.)  
Pipe flow velocity = 3.31(Ft/s)  
Travel time through pipe = 0.15 min.  
Time of concentration (TC) = 7.73 min.

+++++  
Process from Point/Station 9.030 to Point/Station 9.040  
\*\*\*\* PIPEFLOW TRAVEL TIME (User specified size) \*\*\*\*

---

Upstream point/station elevation = 813.800(Ft.)  
Downstream point/station elevation = 813.600(Ft.)  
Pipe length = 49.00(Ft.) Manning's N = 0.013  
No. of pipes = 1 Required pipe flow = 2.642(CFS)  
Given pipe size = 18.00(In.)  
Calculated individual pipe flow = 2.642(CFS)  
Normal flow depth in pipe = 7.85(In.)  
Flow top width inside pipe = 17.85(In.)  
Critical Depth = 7.38(In.)  
Pipe flow velocity = 3.57(Ft/s)  
Travel time through pipe = 0.23 min.  
Time of concentration (TC) = 7.96 min.

End of computations, Total Study Area = 9.60 (Ac.)

The following figures may  
be used for a unit hydrograph study of the same area.  
Note: These figures do not consider reduced effective area  
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.200  
Area averaged SCS curve number = 51.8

## Worksheet for PARKWAY DRAIN-1

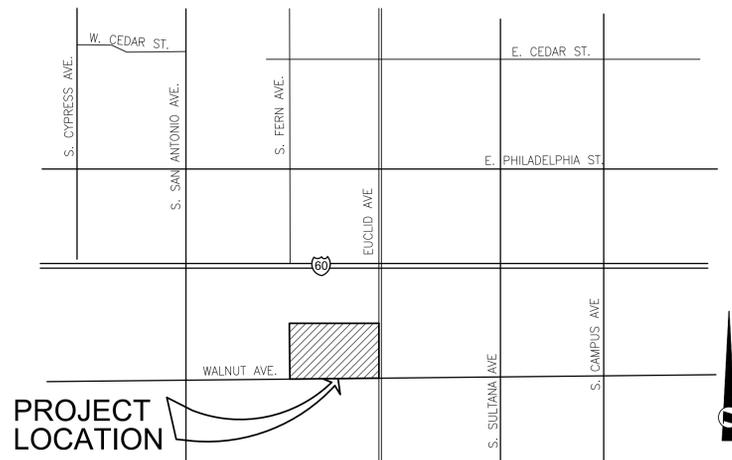
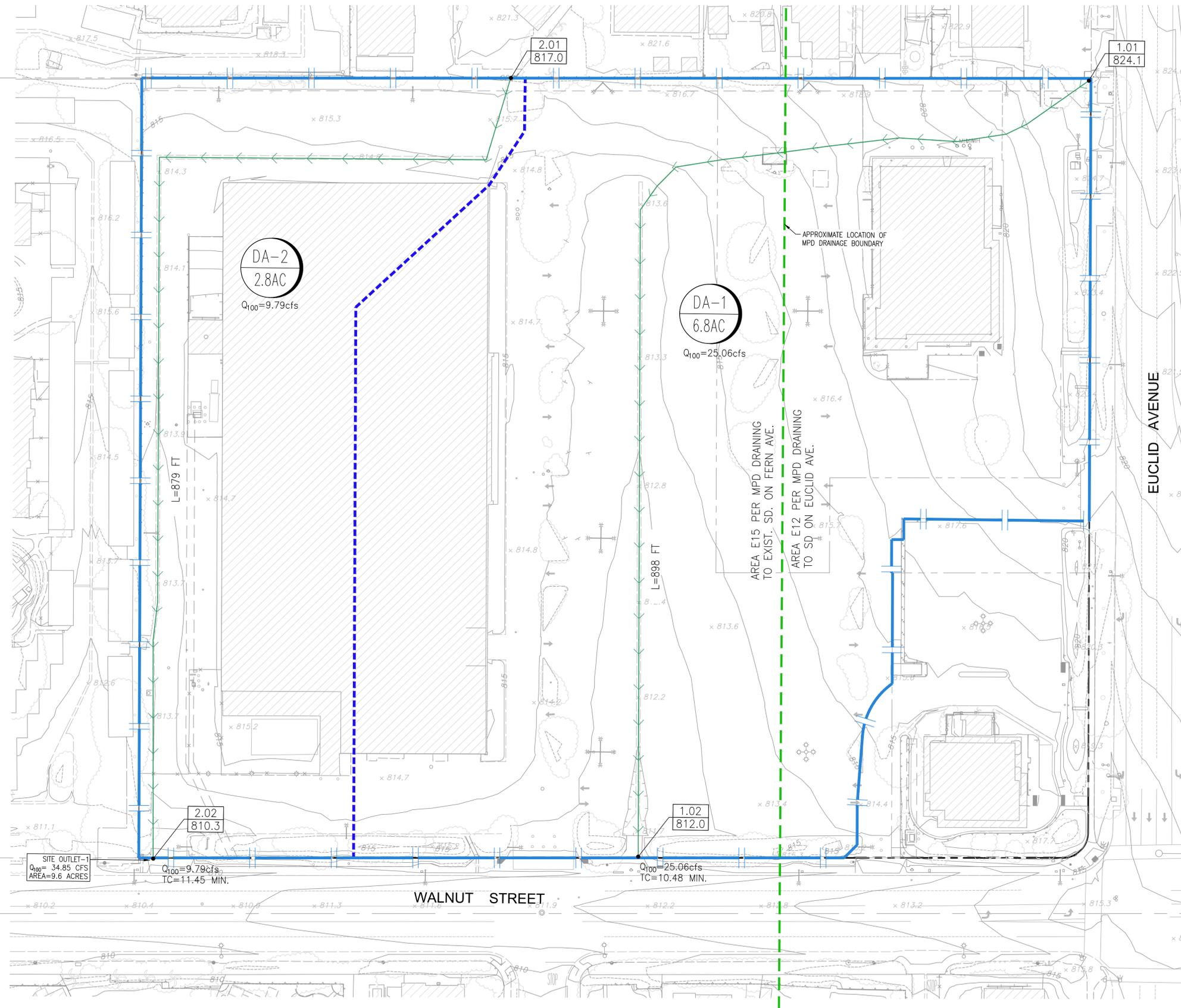
Project Description	
Friction Method	Manning Formula
Solve For	Full Flow Capacity
Input Data	
Roughness Coefficient	0.015
Channel Slope	0.020 ft/ft
Normal Depth	3.0 in
Height	0.3 ft
Bottom Width	6.00 ft
Discharge	5.11 cfs
Results	
Flow Area	1.5 ft <sup>2</sup>
Wetted Perimeter	12.5 ft
Hydraulic Radius	1.4 in
Top Width	6.00 ft
Critical Depth	3.0 in
Percent Full	100.0 %
Critical Slope	0.020 ft/ft
Velocity	3.41 ft/s
Velocity Head	0.18 ft
Specific Energy	0.43 ft
Froude Number	1.202
Discharge Full	5.11 cfs
Slope Full	0.020 ft/ft
Flow Type	Critical
GVF Input Data	
Downstream Depth	0.0 in
Length	0.0 ft
Number Of Steps	0
GVF Output Data	
Upstream Depth	0.0 in
Profile Description	N/A
Profile Headloss	0.00 ft
Average End Depth Over Rise	0.0 %
Normal Depth Over Rise	100.0 %
Downstream Velocity	Infinity ft/s
Upstream Velocity	Infinity ft/s
Normal Depth	3.0 in
Critical Depth	3.0 in
Channel Slope	0.020 ft/ft
Critical Slope	0.020 ft/ft

## APPENDIX 4

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### HYDROLOGY MAPS: PRE AND POST DEVELOPMENT PLANS

# PRE DEVELOPMENT DRAINAGE MAP WALNUT & EUCLID MIXED USE ONTARIO, CA

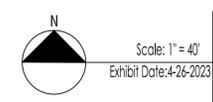


**VICINITY MAP**  
NOT TO SCALE

**LEGEND**

- PROJECT BOUNDARY
- DRAINAGE AREA BOUNDARY
- AREA-E15
- AREA-E12
- DA#  
X AC
- SUB-AREA (ACRES)
- SUB AREA
- #  
EL
- NODE#
- POINT ELEVATION
- RUNOFF CONVEYANCE LINE (SURFACE)
- L=XXX'
- RUNOFF CONVEYANCE LENGTH

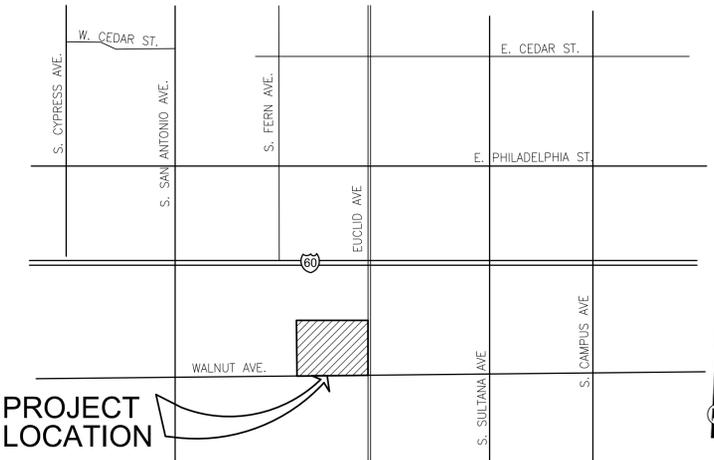
PRE CONSTRUCTION FLOW CALCULATION		
DRAINAGE AREA ID	ACRE	Q100 (cfs)
DA-1	6.8	25.06
DA-2	2.8	9.79
<b>TOTAL AT OUTLET -1 DRAINING TO SYSTEM "FERN-VII-1" PER MPD</b>		
9.6	34.85	
<b>TOTAL FLOW LEAVING SITE AT PRE CONSTRUCTION =</b>		
9.6	34.85	



PROJECT SITE  
EUCLID AND WALNUT MIXED USE  
NW CORNER OF E. EUCLID  
AND WALNUT STREET  
ONTARIO, CA



# POST DEVELOPMENT DRAINAGE MAP WALNUT & EUCLID MIXED USE ONTARIO, CA



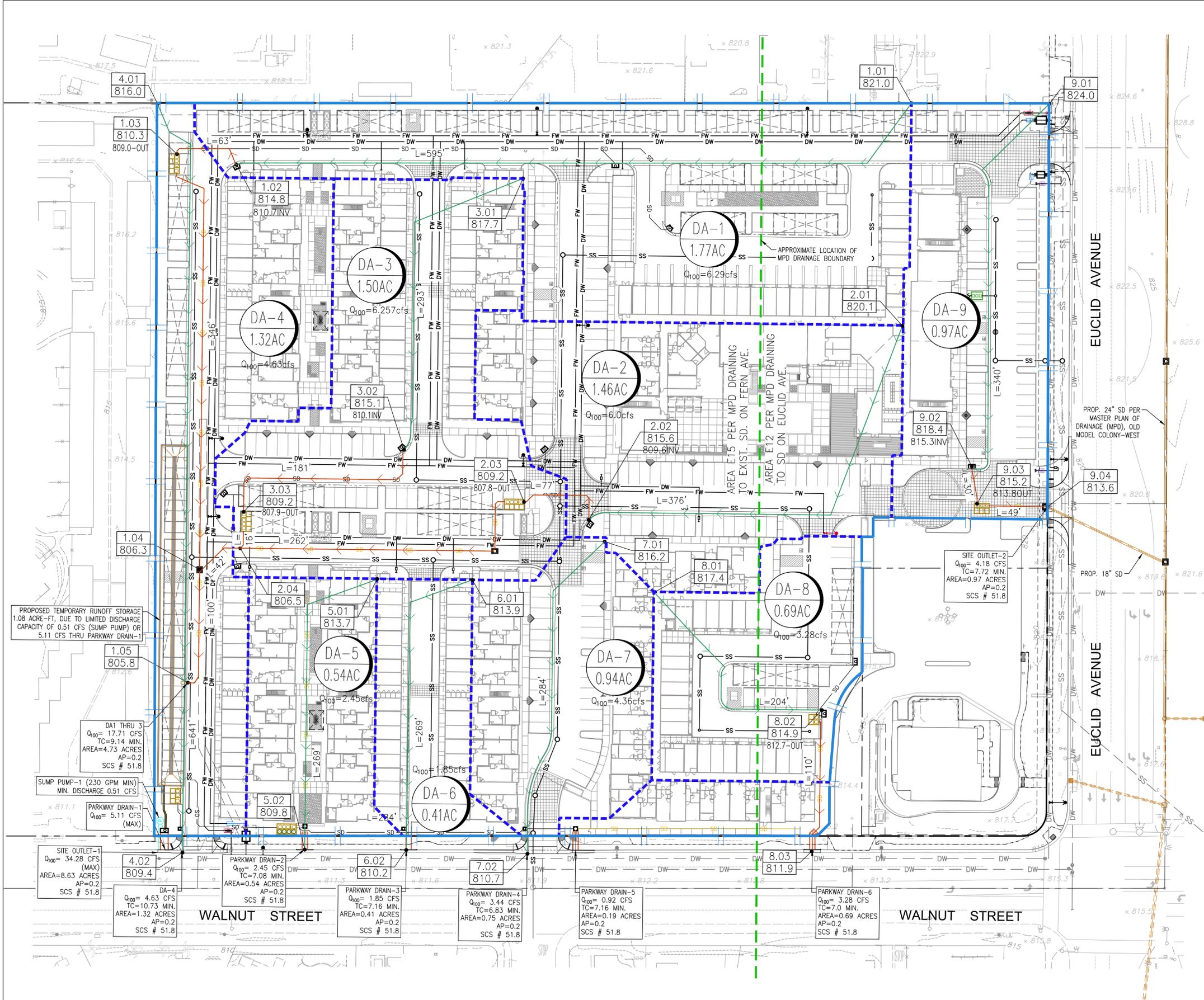
VICINITY MAP  
NOT TO SCALE

## LEGEND

- PROJECT BOUNDARY
- DRAINAGE AREA BOUNDARY
- AREA-E15
- AREA-E12
- SUB-AREA (ACRES)
- SUB AREA
- NODE#
- POINT ELEVATION
- RUNOFF CONVEYANCE LINE (SURFACE)
- RUNOFF CONVEYANCE LINE (SD PIPE)
- RUNOFF CONVEYANCE LENGTH
- TEMPORARY UNDERGROUND STORAGE CHAMBER TO ATTENUATE ONSITE FLOODING
- MODULAR WETLAND TO MITIGATE PROJECT WATER QUALITY REQUIREMENTS

POST CONSTRUCTION FLOW CALCULATION							
DRAINAGE AREA ID	ACRE	Q100 (cfs)	Q100 (cfs) LEAVING SITE	DRAINAGE AREA ID	ACRE	Q100 (cfs)	Q100 (cfs) LEAVING SITE
DA-1 TO DA-3	4.73	17.71	5.11*	DA-9	0.97	4.18	4.18
DA-4	1.32	4.63	4.63				
DA-5	0.54	2.45	2.45				
DA-6	0.41	1.85	1.85				
DA-7.1	0.75	3.44	3.44				
DA-7.2	0.19	0.92	0.92				
DA-8	0.69	3.28	3.28				
<b>TOTAL AT OUTLET-1 DRAINING TO SYSTEM "FERN-VII-1" PER MPD</b>	<b>8.63</b>	<b>34.28</b>	<b>21.68</b>	<b>TOTAL AT OUTLET-2 DRAINING TO SYSTEM "EUCLID-VII-1" PER MPD</b>	<b>0.97</b>	<b>4.18</b>	<b>4.18</b>
<b>TOTAL FLOW LEAVING SITE AT POST CONSTRUCTION =</b>	<b>9.6</b>	<b>25.86</b>					

\* THE HIGHER FLOW 5.11 cfs IS TAKEN INTO CONSIDERATION. OUT OF FLOW CAPACITY OF THE PROPOSED PUMP SYSTEM (0.51 cfs) OR FLOW CAPACITY OF THE PARKWAY DRAIN-1 (5.11 cfs).



PROJECT SITE  
EUCLID AND WALNUT MIXED USE  
NW CORNER OF E. EUCLID  
AND WALNUT STREET  
ONTARIO, CA



## APPENDIX 5

---

### UNIT HYDROGRAPH, ROUTING CALCULATION AND TEMPORARY DETENTION SYSTEM

U n i t   H y d r o g r a p h   A n a l y s i s

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0

Study date 04/25/23

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San Bernardino County Synthetic Unit Hydrology Method  
Manual date - August 1986

Program License Serial Number 6049

-----  
UNIT HYDROGRAPH, DRAIN-1  
100-YEAR EVENT  
POST CONSTRUCTION  
EUCLID AND WALNUT  
-----

Storm Event Year = 100

Antecedent Moisture Condition = 2

English (in-lb) Input Units Used

English Rainfall Data (Inches) Input Values Used

English Units used in output format

Area averaged rainfall intensity isohyetal data:

Sub-Area (Ac.)	Duration (hours)	Isohyetal (In)
Rainfall data for year 100		
4.73	1	1.44
-----		
Rainfall data for year 100		
4.73	6	3.49
-----		
Rainfall data for year 100		
4.73	24	6.32

+++++

\*\*\*\*\* Area-averaged max loss rate, Fm \*\*\*\*\*

SCS curve No.(AMCII)	SCS curve NO.(AMC 2)	Area (Ac.)	Area Fraction	Fp(Fig C6) (In/Hr)	Ap (dec.)	Fm (In/Hr)
51.8	51.8	4.73	1.000	0.788	0.200	0.158

Area-averaged adjusted loss rate Fm (In/Hr) = 0.158

\*\*\*\*\* Area-Averaged low loss rate fraction, Yb \*\*\*\*\*

Area (Ac.)	Area Fract	SCS CN (AMC2)	SCS CN (AMC2)	S	Pervious Yield Fr
0.95	0.200	51.8	51.8	9.31	0.229
3.78	0.800	98.0	98.0	0.20	0.962

Area-averaged catchment yield fraction, Y = 0.816

Area-averaged low loss fraction, Yb = 0.184

User entry of time of concentration = 0.145 (hours)

+++++

Watershed area = 4.73(Ac.)

Catchment Lag time = 0.116 hours

Unit interval = 5.000 minutes

Unit interval percentage of lag time = 71.8391

Hydrograph baseflow = 0.00(CFS)

Average maximum watershed loss rate(Fm) = 0.158(In/Hr)

Average low loss rate fraction (Yb) = 0.184 (decimal)

VALLEY DEVELOPED S-Graph Selected

Computed peak 5-minute rainfall = 0.533(In)

Computed peak 30-minute rainfall = 1.091(In)

Specified peak 1-hour rainfall = 1.440(In)

Computed peak 3-hour rainfall = 2.478(In)

Specified peak 6-hour rainfall = 3.490(In)

Specified peak 24-hour rainfall = 6.320(In)

Rainfall depth area reduction factors:

Using a total area of 4.73(Ac.) (Ref: fig. E-4)

5-minute factor = 1.000 Adjusted rainfall = 0.533(In)

30-minute factor = 1.000 Adjusted rainfall = 1.091(In)

1-hour factor = 1.000 Adjusted rainfall = 1.440(In)

3-hour factor = 1.000 Adjusted rainfall = 2.478(In)

6-hour factor = 1.000 Adjusted rainfall = 3.490(In)

24-hour factor = 1.000 Adjusted rainfall = 6.320(In)

-----

Unit Hydrograph

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Interval Number	'S' Graph Mean values	Unit Hydrograph ((CFS))
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(K = 57.20 (CFS))		
1	9.222	5.275
2	55.464	26.452
3	90.385	19.976
4	98.145	4.439
5	100.000	1.061

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)
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1	0.5328	0.5328
2	0.7031	0.1702
3	0.8269	0.1238
4	0.9277	0.1008
5	1.0143	0.0866
6	1.0911	0.0767
7	1.1605	0.0694
8	1.2241	0.0637
9	1.2832	0.0591
10	1.3384	0.0552
11	1.3904	0.0520
12	1.4397	0.0492
13	1.4978	0.0581
14	1.5537	0.0559
15	1.6075	0.0539
16	1.6597	0.0521
17	1.7101	0.0505
18	1.7591	0.0490
19	1.8068	0.0476
20	1.8532	0.0464
21	1.8984	0.0452
22	1.9426	0.0442
23	1.9857	0.0432
24	2.0279	0.0422
25	2.0692	0.0413
26	2.1097	0.0405
27	2.1495	0.0397
28	2.1885	0.0390
29	2.2267	0.0383
30	2.2644	0.0376
31	2.3014	0.0370
32	2.3378	0.0364
33	2.3736	0.0358
34	2.4089	0.0353
35	2.4436	0.0348
36	2.4779	0.0343
37	2.5117	0.0338

38	2.5450	0.0333
39	2.5779	0.0329
40	2.6103	0.0324
41	2.6423	0.0320
42	2.6740	0.0316
43	2.7053	0.0313
44	2.7362	0.0309
45	2.7667	0.0306
46	2.7969	0.0302
47	2.8268	0.0299
48	2.8564	0.0296
49	2.8856	0.0292
50	2.9146	0.0289
51	2.9432	0.0287
52	2.9716	0.0284
53	2.9997	0.0281
54	3.0275	0.0278
55	3.0551	0.0276
56	3.0824	0.0273
57	3.1095	0.0271
58	3.1363	0.0268
59	3.1629	0.0266
60	3.1893	0.0264
61	3.2155	0.0262
62	3.2414	0.0259
63	3.2671	0.0257
64	3.2926	0.0255
65	3.3180	0.0253
66	3.3431	0.0251
67	3.3680	0.0249
68	3.3928	0.0247
69	3.4173	0.0246
70	3.4417	0.0244
71	3.4659	0.0242
72	3.4899	0.0240
73	3.5106	0.0207
74	3.5311	0.0205
75	3.5515	0.0204
76	3.5717	0.0202
77	3.5918	0.0201
78	3.6117	0.0199
79	3.6314	0.0198
80	3.6511	0.0196
81	3.6705	0.0195
82	3.6899	0.0193
83	3.7091	0.0192
84	3.7282	0.0191
85	3.7471	0.0189
86	3.7659	0.0188
87	3.7846	0.0187

88	3.8032	0.0186
89	3.8217	0.0185
90	3.8400	0.0183
91	3.8582	0.0182
92	3.8763	0.0181
93	3.8943	0.0180
94	3.9122	0.0179
95	3.9300	0.0178
96	3.9476	0.0177
97	3.9652	0.0176
98	3.9827	0.0175
99	4.0000	0.0174
100	4.0173	0.0173
101	4.0344	0.0172
102	4.0515	0.0171
103	4.0685	0.0170
104	4.0853	0.0169
105	4.1021	0.0168
106	4.1188	0.0167
107	4.1354	0.0166
108	4.1519	0.0165
109	4.1683	0.0164
110	4.1847	0.0163
111	4.2009	0.0163
112	4.2171	0.0162
113	4.2332	0.0161
114	4.2492	0.0160
115	4.2651	0.0159
116	4.2810	0.0158
117	4.2967	0.0158
118	4.3124	0.0157
119	4.3281	0.0156
120	4.3436	0.0155
121	4.3591	0.0155
122	4.3745	0.0154
123	4.3898	0.0153
124	4.4050	0.0153
125	4.4202	0.0152
126	4.4353	0.0151
127	4.4504	0.0150
128	4.4653	0.0150
129	4.4803	0.0149
130	4.4951	0.0148
131	4.5099	0.0148
132	4.5246	0.0147
133	4.5392	0.0147
134	4.5538	0.0146
135	4.5684	0.0145
136	4.5828	0.0145
137	4.5972	0.0144

138	4.6116	0.0143
139	4.6259	0.0143
140	4.6401	0.0142
141	4.6543	0.0142
142	4.6684	0.0141
143	4.6824	0.0141
144	4.6964	0.0140
145	4.7104	0.0139
146	4.7242	0.0139
147	4.7381	0.0138
148	4.7519	0.0138
149	4.7656	0.0137
150	4.7793	0.0137
151	4.7929	0.0136
152	4.8065	0.0136
153	4.8200	0.0135
154	4.8334	0.0135
155	4.8469	0.0134
156	4.8602	0.0134
157	4.8736	0.0133
158	4.8868	0.0133
159	4.9001	0.0132
160	4.9132	0.0132
161	4.9264	0.0131
162	4.9394	0.0131
163	4.9525	0.0130
164	4.9655	0.0130
165	4.9784	0.0129
166	4.9913	0.0129
167	5.0042	0.0129
168	5.0170	0.0128
169	5.0298	0.0128
170	5.0425	0.0127
171	5.0552	0.0127
172	5.0678	0.0126
173	5.0804	0.0126
174	5.0930	0.0126
175	5.1055	0.0125
176	5.1180	0.0125
177	5.1304	0.0124
178	5.1428	0.0124
179	5.1552	0.0124
180	5.1675	0.0123
181	5.1798	0.0123
182	5.1920	0.0122
183	5.2042	0.0122
184	5.2164	0.0122
185	5.2285	0.0121
186	5.2406	0.0121
187	5.2526	0.0121

188	5.2646	0.0120
189	5.2766	0.0120
190	5.2886	0.0119
191	5.3005	0.0119
192	5.3123	0.0119
193	5.3242	0.0118
194	5.3360	0.0118
195	5.3477	0.0118
196	5.3595	0.0117
197	5.3712	0.0117
198	5.3828	0.0117
199	5.3944	0.0116
200	5.4060	0.0116
201	5.4176	0.0116
202	5.4291	0.0115
203	5.4406	0.0115
204	5.4521	0.0115
205	5.4635	0.0114
206	5.4749	0.0114
207	5.4863	0.0114
208	5.4976	0.0113
209	5.5089	0.0113
210	5.5202	0.0113
211	5.5315	0.0112
212	5.5427	0.0112
213	5.5539	0.0112
214	5.5650	0.0112
215	5.5761	0.0111
216	5.5872	0.0111
217	5.5983	0.0111
218	5.6093	0.0110
219	5.6203	0.0110
220	5.6313	0.0110
221	5.6423	0.0110
222	5.6532	0.0109
223	5.6641	0.0109
224	5.6749	0.0109
225	5.6858	0.0108
226	5.6966	0.0108
227	5.7074	0.0108
228	5.7181	0.0108
229	5.7289	0.0107
230	5.7396	0.0107
231	5.7502	0.0107
232	5.7609	0.0106
233	5.7715	0.0106
234	5.7821	0.0106
235	5.7927	0.0106
236	5.8032	0.0105
237	5.8138	0.0105

238	5.8243	0.0105
239	5.8347	0.0105
240	5.8452	0.0104
241	5.8556	0.0104
242	5.8660	0.0104
243	5.8764	0.0104
244	5.8867	0.0103
245	5.8970	0.0103
246	5.9073	0.0103
247	5.9176	0.0103
248	5.9278	0.0103
249	5.9381	0.0102
250	5.9483	0.0102
251	5.9585	0.0102
252	5.9686	0.0102
253	5.9787	0.0101
254	5.9889	0.0101
255	5.9989	0.0101
256	6.0090	0.0101
257	6.0191	0.0100
258	6.0291	0.0100
259	6.0391	0.0100
260	6.0491	0.0100
261	6.0590	0.0100
262	6.0689	0.0099
263	6.0789	0.0099
264	6.0887	0.0099
265	6.0986	0.0099
266	6.1085	0.0098
267	6.1183	0.0098
268	6.1281	0.0098
269	6.1379	0.0098
270	6.1476	0.0098
271	6.1574	0.0097
272	6.1671	0.0097
273	6.1768	0.0097
274	6.1865	0.0097
275	6.1961	0.0097
276	6.2058	0.0096
277	6.2154	0.0096
278	6.2250	0.0096
279	6.2346	0.0096
280	6.2442	0.0096
281	6.2537	0.0095
282	6.2632	0.0095
283	6.2727	0.0095
284	6.2822	0.0095
285	6.2917	0.0095
286	6.3011	0.0094
287	6.3106	0.0094

288

6.3200

0.0094

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0094	0.0017	0.0077
2	0.0094	0.0017	0.0077
3	0.0095	0.0017	0.0077
4	0.0095	0.0017	0.0077
5	0.0095	0.0018	0.0078
6	0.0095	0.0018	0.0078
7	0.0096	0.0018	0.0078
8	0.0096	0.0018	0.0078
9	0.0096	0.0018	0.0079
10	0.0097	0.0018	0.0079
11	0.0097	0.0018	0.0079
12	0.0097	0.0018	0.0079
13	0.0098	0.0018	0.0080
14	0.0098	0.0018	0.0080
15	0.0098	0.0018	0.0080
16	0.0098	0.0018	0.0080
17	0.0099	0.0018	0.0081
18	0.0099	0.0018	0.0081
19	0.0100	0.0018	0.0081
20	0.0100	0.0018	0.0081
21	0.0100	0.0018	0.0082
22	0.0100	0.0019	0.0082
23	0.0101	0.0019	0.0082
24	0.0101	0.0019	0.0082
25	0.0102	0.0019	0.0083
26	0.0102	0.0019	0.0083
27	0.0102	0.0019	0.0083
28	0.0103	0.0019	0.0084
29	0.0103	0.0019	0.0084
30	0.0103	0.0019	0.0084
31	0.0104	0.0019	0.0085
32	0.0104	0.0019	0.0085
33	0.0104	0.0019	0.0085
34	0.0105	0.0019	0.0085
35	0.0105	0.0019	0.0086
36	0.0105	0.0019	0.0086
37	0.0106	0.0020	0.0086
38	0.0106	0.0020	0.0087
39	0.0107	0.0020	0.0087
40	0.0107	0.0020	0.0087
41	0.0108	0.0020	0.0088
42	0.0108	0.0020	0.0088
43	0.0108	0.0020	0.0088
44	0.0109	0.0020	0.0089

45	0.0109	0.0020	0.0089
46	0.0110	0.0020	0.0089
47	0.0110	0.0020	0.0090
48	0.0110	0.0020	0.0090
49	0.0111	0.0020	0.0090
50	0.0111	0.0021	0.0091
51	0.0112	0.0021	0.0091
52	0.0112	0.0021	0.0091
53	0.0113	0.0021	0.0092
54	0.0113	0.0021	0.0092
55	0.0114	0.0021	0.0093
56	0.0114	0.0021	0.0093
57	0.0115	0.0021	0.0093
58	0.0115	0.0021	0.0094
59	0.0116	0.0021	0.0094
60	0.0116	0.0021	0.0095
61	0.0117	0.0022	0.0095
62	0.0117	0.0022	0.0095
63	0.0118	0.0022	0.0096
64	0.0118	0.0022	0.0096
65	0.0119	0.0022	0.0097
66	0.0119	0.0022	0.0097
67	0.0120	0.0022	0.0098
68	0.0120	0.0022	0.0098
69	0.0121	0.0022	0.0099
70	0.0121	0.0022	0.0099
71	0.0122	0.0023	0.0100
72	0.0122	0.0023	0.0100
73	0.0123	0.0023	0.0100
74	0.0124	0.0023	0.0101
75	0.0124	0.0023	0.0101
76	0.0125	0.0023	0.0102
77	0.0126	0.0023	0.0102
78	0.0126	0.0023	0.0103
79	0.0127	0.0023	0.0103
80	0.0127	0.0023	0.0104
81	0.0128	0.0024	0.0105
82	0.0129	0.0024	0.0105
83	0.0129	0.0024	0.0106
84	0.0130	0.0024	0.0106
85	0.0131	0.0024	0.0107
86	0.0131	0.0024	0.0107
87	0.0132	0.0024	0.0108
88	0.0133	0.0024	0.0108
89	0.0134	0.0025	0.0109
90	0.0134	0.0025	0.0109
91	0.0135	0.0025	0.0110
92	0.0136	0.0025	0.0111
93	0.0137	0.0025	0.0112
94	0.0137	0.0025	0.0112

95	0.0138	0.0026	0.0113
96	0.0139	0.0026	0.0113
97	0.0140	0.0026	0.0114
98	0.0141	0.0026	0.0115
99	0.0142	0.0026	0.0116
100	0.0142	0.0026	0.0116
101	0.0143	0.0026	0.0117
102	0.0144	0.0027	0.0117
103	0.0145	0.0027	0.0118
104	0.0146	0.0027	0.0119
105	0.0147	0.0027	0.0120
106	0.0148	0.0027	0.0121
107	0.0149	0.0028	0.0122
108	0.0150	0.0028	0.0122
109	0.0151	0.0028	0.0123
110	0.0152	0.0028	0.0124
111	0.0153	0.0028	0.0125
112	0.0154	0.0028	0.0126
113	0.0155	0.0029	0.0127
114	0.0156	0.0029	0.0127
115	0.0158	0.0029	0.0129
116	0.0158	0.0029	0.0129
117	0.0160	0.0030	0.0131
118	0.0161	0.0030	0.0131
119	0.0163	0.0030	0.0133
120	0.0163	0.0030	0.0133
121	0.0165	0.0030	0.0135
122	0.0166	0.0031	0.0135
123	0.0168	0.0031	0.0137
124	0.0169	0.0031	0.0138
125	0.0171	0.0031	0.0139
126	0.0172	0.0032	0.0140
127	0.0174	0.0032	0.0142
128	0.0175	0.0032	0.0142
129	0.0177	0.0033	0.0144
130	0.0178	0.0033	0.0145
131	0.0180	0.0033	0.0147
132	0.0181	0.0033	0.0148
133	0.0183	0.0034	0.0150
134	0.0185	0.0034	0.0150
135	0.0187	0.0034	0.0152
136	0.0188	0.0035	0.0153
137	0.0191	0.0035	0.0156
138	0.0192	0.0035	0.0157
139	0.0195	0.0036	0.0159
140	0.0196	0.0036	0.0160
141	0.0199	0.0037	0.0162
142	0.0201	0.0037	0.0164
143	0.0204	0.0038	0.0166
144	0.0205	0.0038	0.0167

145	0.0240	0.0044	0.0196
146	0.0242	0.0045	0.0197
147	0.0246	0.0045	0.0200
148	0.0247	0.0046	0.0202
149	0.0251	0.0046	0.0205
150	0.0253	0.0047	0.0206
151	0.0257	0.0047	0.0210
152	0.0259	0.0048	0.0212
153	0.0264	0.0049	0.0215
154	0.0266	0.0049	0.0217
155	0.0271	0.0050	0.0221
156	0.0273	0.0050	0.0223
157	0.0278	0.0051	0.0227
158	0.0281	0.0052	0.0229
159	0.0287	0.0053	0.0234
160	0.0289	0.0053	0.0236
161	0.0296	0.0055	0.0241
162	0.0299	0.0055	0.0244
163	0.0306	0.0056	0.0249
164	0.0309	0.0057	0.0252
165	0.0316	0.0058	0.0258
166	0.0320	0.0059	0.0261
167	0.0329	0.0061	0.0268
168	0.0333	0.0061	0.0272
169	0.0343	0.0063	0.0279
170	0.0348	0.0064	0.0283
171	0.0358	0.0066	0.0292
172	0.0364	0.0067	0.0297
173	0.0376	0.0069	0.0307
174	0.0383	0.0071	0.0312
175	0.0397	0.0073	0.0324
176	0.0405	0.0075	0.0330
177	0.0422	0.0078	0.0344
178	0.0432	0.0080	0.0352
179	0.0452	0.0083	0.0369
180	0.0464	0.0086	0.0378
181	0.0490	0.0090	0.0400
182	0.0505	0.0093	0.0412
183	0.0539	0.0099	0.0440
184	0.0559	0.0103	0.0456
185	0.0492	0.0091	0.0402
186	0.0520	0.0096	0.0424
187	0.0591	0.0109	0.0482
188	0.0637	0.0117	0.0519
189	0.0767	0.0131	0.0636
190	0.0866	0.0131	0.0735
191	0.1238	0.0131	0.1107
192	0.1702	0.0131	0.1571
193	0.5328	0.0131	0.5197
194	0.1008	0.0131	0.0877

195	0.0694	0.0128	0.0566
196	0.0552	0.0102	0.0450
197	0.0581	0.0107	0.0474
198	0.0521	0.0096	0.0425
199	0.0476	0.0088	0.0389
200	0.0442	0.0081	0.0360
201	0.0413	0.0076	0.0337
202	0.0390	0.0072	0.0318
203	0.0370	0.0068	0.0302
204	0.0353	0.0065	0.0288
205	0.0338	0.0062	0.0275
206	0.0324	0.0060	0.0265
207	0.0313	0.0058	0.0255
208	0.0302	0.0056	0.0246
209	0.0292	0.0054	0.0239
210	0.0284	0.0052	0.0231
211	0.0276	0.0051	0.0225
212	0.0268	0.0050	0.0219
213	0.0262	0.0048	0.0213
214	0.0255	0.0047	0.0208
215	0.0249	0.0046	0.0203
216	0.0244	0.0045	0.0199
217	0.0207	0.0038	0.0169
218	0.0202	0.0037	0.0165
219	0.0198	0.0036	0.0161
220	0.0193	0.0036	0.0158
221	0.0189	0.0035	0.0155
222	0.0186	0.0034	0.0151
223	0.0182	0.0034	0.0149
224	0.0179	0.0033	0.0146
225	0.0176	0.0032	0.0143
226	0.0173	0.0032	0.0141
227	0.0170	0.0031	0.0138
228	0.0167	0.0031	0.0136
229	0.0164	0.0030	0.0134
230	0.0162	0.0030	0.0132
231	0.0159	0.0029	0.0130
232	0.0157	0.0029	0.0128
233	0.0155	0.0029	0.0126
234	0.0153	0.0028	0.0124
235	0.0150	0.0028	0.0123
236	0.0148	0.0027	0.0121
237	0.0147	0.0027	0.0119
238	0.0145	0.0027	0.0118
239	0.0143	0.0026	0.0116
240	0.0141	0.0026	0.0115
241	0.0139	0.0026	0.0114
242	0.0138	0.0025	0.0112
243	0.0136	0.0025	0.0111
244	0.0135	0.0025	0.0110

245	0.0133	0.0025	0.0109
246	0.0132	0.0024	0.0107
247	0.0130	0.0024	0.0106
248	0.0129	0.0024	0.0105
249	0.0128	0.0024	0.0104
250	0.0126	0.0023	0.0103
251	0.0125	0.0023	0.0102
252	0.0124	0.0023	0.0101
253	0.0123	0.0023	0.0100
254	0.0122	0.0022	0.0099
255	0.0121	0.0022	0.0098
256	0.0119	0.0022	0.0097
257	0.0118	0.0022	0.0097
258	0.0117	0.0022	0.0096
259	0.0116	0.0021	0.0095
260	0.0115	0.0021	0.0094
261	0.0114	0.0021	0.0093
262	0.0113	0.0021	0.0092
263	0.0112	0.0021	0.0092
264	0.0112	0.0021	0.0091
265	0.0111	0.0020	0.0090
266	0.0110	0.0020	0.0090
267	0.0109	0.0020	0.0089
268	0.0108	0.0020	0.0088
269	0.0107	0.0020	0.0088
270	0.0106	0.0020	0.0087
271	0.0106	0.0020	0.0086
272	0.0105	0.0019	0.0086
273	0.0104	0.0019	0.0085
274	0.0103	0.0019	0.0084
275	0.0103	0.0019	0.0084
276	0.0102	0.0019	0.0083
277	0.0101	0.0019	0.0083
278	0.0101	0.0019	0.0082
279	0.0100	0.0018	0.0082
280	0.0099	0.0018	0.0081
281	0.0099	0.0018	0.0080
282	0.0098	0.0018	0.0080
283	0.0097	0.0018	0.0079
284	0.0097	0.0018	0.0079
285	0.0096	0.0018	0.0078
286	0.0096	0.0018	0.0078
287	0.0095	0.0018	0.0078
288	0.0094	0.0017	0.0077

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Total soil rain loss = 1.04(In)  
Total effective rainfall = 5.28(In)  
Peak flow rate in flood hydrograph = 17.92(CFS)  
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24 - H O U R S T O R M  
 R u n o f f H y d r o g r a p h

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 Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume	Ac.Ft	Q(CFS)	0	5.0	10.0	15.0	20.0
0+ 5	0.0003		0.04	Q				
0+10	0.0020		0.24	Q				
0+15	0.0047		0.40	Q				
0+20	0.0077		0.43	Q				
0+25	0.0107		0.44	Q				
0+30	0.0138		0.44	Q				
0+35	0.0168		0.44	Q				
0+40	0.0199		0.45	Q				
0+45	0.0230		0.45	Q				
0+50	0.0261		0.45	Q				
0+55	0.0292		0.45	Q				
1+ 0	0.0323		0.45	Q				
1+ 5	0.0354		0.45	Q				
1+10	0.0385		0.45	Q				
1+15	0.0417		0.46	Q				
1+20	0.0448		0.46	Q				
1+25	0.0480		0.46	Q				
1+30	0.0512		0.46	Q				
1+35	0.0543		0.46	QV				
1+40	0.0575		0.46	QV				
1+45	0.0607		0.46	QV				
1+50	0.0640		0.47	QV				
1+55	0.0672		0.47	QV				
2+ 0	0.0704		0.47	QV				
2+ 5	0.0737		0.47	QV				
2+10	0.0769		0.47	QV				
2+15	0.0802		0.47	QV				
2+20	0.0835		0.48	QV				
2+25	0.0868		0.48	QV				
2+30	0.0901		0.48	QV				
2+35	0.0934		0.48	QV				
2+40	0.0967		0.48	QV				
2+45	0.1000		0.48	QV				
2+50	0.1034		0.49	QV				
2+55	0.1067		0.49	Q V				
3+ 0	0.1101		0.49	Q V				
3+ 5	0.1135		0.49	Q V				
3+10	0.1169		0.49	Q V				
3+15	0.1203		0.50	Q V				
3+20	0.1237		0.50	Q V				
3+25	0.1272		0.50	Q V				

3+30	0.1306	0.50	QV
3+35	0.1341	0.50	QV
3+40	0.1375	0.50	QV
3+45	0.1410	0.51	QV
3+50	0.1445	0.51	QV
3+55	0.1480	0.51	QV
4+ 0	0.1516	0.51	QV
4+ 5	0.1551	0.51	QV
4+10	0.1587	0.52	Q V
4+15	0.1622	0.52	Q V
4+20	0.1658	0.52	Q V
4+25	0.1694	0.52	Q V
4+30	0.1730	0.52	Q V
4+35	0.1767	0.53	Q V
4+40	0.1803	0.53	Q V
4+45	0.1840	0.53	Q V
4+50	0.1876	0.53	Q V
4+55	0.1913	0.54	Q V
5+ 0	0.1950	0.54	Q V
5+ 5	0.1987	0.54	Q V
5+10	0.2025	0.54	Q V
5+15	0.2062	0.54	Q V
5+20	0.2100	0.55	Q V
5+25	0.2138	0.55	Q V
5+30	0.2176	0.55	Q V
5+35	0.2214	0.55	Q V
5+40	0.2253	0.56	Q V
5+45	0.2291	0.56	Q V
5+50	0.2330	0.56	Q V
5+55	0.2369	0.56	Q V
6+ 0	0.2408	0.57	Q V
6+ 5	0.2447	0.57	Q V
6+10	0.2487	0.57	Q V
6+15	0.2526	0.58	Q V
6+20	0.2566	0.58	Q V
6+25	0.2606	0.58	Q V
6+30	0.2646	0.58	Q V
6+35	0.2687	0.59	Q V
6+40	0.2727	0.59	Q V
6+45	0.2768	0.59	Q V
6+50	0.2809	0.60	Q V
6+55	0.2850	0.60	Q V
7+ 0	0.2892	0.60	Q V
7+ 5	0.2934	0.61	Q V
7+10	0.2975	0.61	Q V
7+15	0.3018	0.61	Q V
7+20	0.3060	0.61	Q V
7+25	0.3102	0.62	Q V
7+30	0.3145	0.62	Q V
7+35	0.3188	0.62	Q V

7+40	0.3232	0.63	Q	V				
7+45	0.3275	0.63	Q	V				
7+50	0.3319	0.64	Q	V				
7+55	0.3363	0.64	Q	V				
8+ 0	0.3407	0.64	Q	V				
8+ 5	0.3452	0.65	Q	V				
8+10	0.3497	0.65	Q	V				
8+15	0.3542	0.65	Q	V				
8+20	0.3587	0.66	Q	V				
8+25	0.3633	0.66	Q	V				
8+30	0.3679	0.67	Q	V				
8+35	0.3725	0.67	Q	V				
8+40	0.3771	0.68	Q	V				
8+45	0.3818	0.68	Q	V				
8+50	0.3865	0.68	Q	V				
8+55	0.3912	0.69	Q	V				
9+ 0	0.3960	0.69	Q	V				
9+ 5	0.4008	0.70	Q	V				
9+10	0.4057	0.70	Q	V				
9+15	0.4105	0.71	Q	V				
9+20	0.4154	0.71	Q	V				
9+25	0.4204	0.72	Q	V				
9+30	0.4253	0.72	Q	V				
9+35	0.4303	0.73	Q	V				
9+40	0.4354	0.73	Q	V				
9+45	0.4405	0.74	Q	V				
9+50	0.4456	0.74	Q	V				
9+55	0.4507	0.75	Q	V				
10+ 0	0.4559	0.75	Q	V				
10+ 5	0.4612	0.76	Q	V				
10+10	0.4665	0.77	Q	V				
10+15	0.4718	0.77	Q	V				
10+20	0.4771	0.78	Q	V				
10+25	0.4825	0.79	Q	V				
10+30	0.4880	0.79	Q	V				
10+35	0.4935	0.80	Q	V				
10+40	0.4990	0.81	Q	V				
10+45	0.5046	0.81	Q	V				
10+50	0.5103	0.82	Q	V				
10+55	0.5160	0.83	Q	V				
11+ 0	0.5217	0.83	Q	V				
11+ 5	0.5275	0.84	Q	V				
11+10	0.5334	0.85	Q	V				
11+15	0.5393	0.86	Q	V				
11+20	0.5453	0.87	Q	V				
11+25	0.5513	0.88	Q	V				
11+30	0.5574	0.88	Q	V				
11+35	0.5635	0.89	Q	V				
11+40	0.5698	0.90	Q	V				
11+45	0.5760	0.91	Q	V				

11+50	0.5824	0.92	Q	V		
11+55	0.5888	0.93	Q	V		
12+ 0	0.5953	0.94	Q	V		
12+ 5	0.6020	0.97	Q	V		
12+10	0.6092	1.05	Q	V		
12+15	0.6168	1.11	Q	V		
12+20	0.6247	1.14	Q	V		
12+25	0.6326	1.15	Q	V		
12+30	0.6406	1.16	Q	V		
12+35	0.6487	1.18	Q	V		
12+40	0.6569	1.19	Q	V		
12+45	0.6652	1.21	Q	V		
12+50	0.6736	1.22	Q	V		
12+55	0.6821	1.24	Q	V		
13+ 0	0.6908	1.25	Q	V		
13+ 5	0.6995	1.27	Q	V		
13+10	0.7084	1.29	Q	V		
13+15	0.7174	1.31	Q	V		
13+20	0.7265	1.32	Q	V		
13+25	0.7357	1.34	Q	V		
13+30	0.7452	1.37	Q	V		
13+35	0.7547	1.39	Q	V		
13+40	0.7644	1.41	Q	V		
13+45	0.7743	1.43	Q	V		
13+50	0.7844	1.46	Q	V		
13+55	0.7946	1.49	Q	V		
14+ 0	0.8050	1.52	Q	V		
14+ 5	0.8157	1.54	Q	V		
14+10	0.8265	1.58	Q	V		
14+15	0.8376	1.61	Q	V		
14+20	0.8490	1.65	Q	V		
14+25	0.8606	1.69	Q	V		
14+30	0.8725	1.73	Q	V		
14+35	0.8847	1.77	Q	V		
14+40	0.8973	1.82	Q	V		
14+45	0.9102	1.87	Q	V		
14+50	0.9235	1.93	Q	V		
14+55	0.9372	1.99	Q	V		
15+ 0	0.9515	2.07	Q	V		
15+ 5	0.9662	2.14	Q	V		
15+10	0.9816	2.23	Q	V		
15+15	0.9976	2.33	Q	V		
15+20	1.0144	2.44	Q	V		
15+25	1.0318	2.52	Q	V		
15+30	1.0485	2.44	Q	V		
15+35	1.0653	2.43	Q	V		
15+40	1.0833	2.62	Q	V		
15+45	1.1033	2.90	Q	V		
15+50	1.1265	3.37	Q	V		
15+55	1.1546	4.08	Q	V		

16+ 0	1.1929	5.56		Q		V		
16+ 5	1.2583	9.50			Q	V		
16+10	1.3817	17.92				V		Q
16+15	1.4769	13.82				QV		
16+20	1.5179	5.96		Q		V		
16+25	1.5421	3.51			Q	V		
16+30	1.5609	2.72			Q	V		
16+35	1.5783	2.54			Q	V		
16+40	1.5943	2.32			Q	V		
16+45	1.6091	2.15			Q	V		
16+50	1.6229	2.00		Q		V		
16+55	1.6358	1.87		Q		V		
17+ 0	1.6480	1.77		Q		V		
17+ 5	1.6596	1.69		Q		V		
17+10	1.6707	1.61		Q		V		
17+15	1.6813	1.54		Q		V		
17+20	1.6916	1.49		Q		V		
17+25	1.7014	1.43		Q		V		
17+30	1.7110	1.39		Q		V		
17+35	1.7202	1.34		Q		V		
17+40	1.7292	1.30		Q		V		
17+45	1.7380	1.27		Q		V		
17+50	1.7465	1.24		Q		V		
17+55	1.7548	1.20		Q		V		
18+ 0	1.7629	1.18		Q		V		
18+ 5	1.7707	1.14		Q		V		
18+10	1.7779	1.04		Q		V		
18+15	1.7845	0.97		Q		V		
18+20	1.7910	0.93		Q		V		
18+25	1.7973	0.91		Q		V		
18+30	1.8034	0.89		Q		V		
18+35	1.8094	0.87		Q		V		
18+40	1.8153	0.86		Q		V		
18+45	1.8211	0.84		Q		V		
18+50	1.8268	0.83		Q		V		
18+55	1.8324	0.81		Q		V		
19+ 0	1.8379	0.80		Q		V		
19+ 5	1.8433	0.78		Q		V		
19+10	1.8486	0.77		Q		V		
19+15	1.8539	0.76		Q		V		
19+20	1.8590	0.75		Q		V		
19+25	1.8641	0.74		Q		V		
19+30	1.8691	0.73		Q		V		
19+35	1.8740	0.72		Q		V		
19+40	1.8789	0.71		Q		V		
19+45	1.8837	0.70		Q		V		
19+50	1.8884	0.69		Q		V		
19+55	1.8931	0.68		Q		V		
20+ 0	1.8977	0.67		Q		V		
20+ 5	1.9023	0.66		Q		V		

20+10	1.9068	0.65	Q	V
20+15	1.9112	0.65	Q	V
20+20	1.9156	0.64	Q	V
20+25	1.9200	0.63	Q	V
20+30	1.9243	0.62	Q	V
20+35	1.9286	0.62	Q	V
20+40	1.9328	0.61	Q	V
20+45	1.9369	0.60	Q	V
20+50	1.9411	0.60	Q	V
20+55	1.9451	0.59	Q	V
21+ 0	1.9492	0.59	Q	V
21+ 5	1.9532	0.58	Q	V
21+10	1.9571	0.58	Q	V
21+15	1.9611	0.57	Q	V
21+20	1.9650	0.56	Q	V
21+25	1.9688	0.56	Q	V
21+30	1.9726	0.55	Q	V
21+35	1.9764	0.55	Q	V
21+40	1.9802	0.54	Q	V
21+45	1.9839	0.54	Q	V
21+50	1.9876	0.54	Q	V
21+55	1.9912	0.53	Q	V
22+ 0	1.9949	0.53	Q	V
22+ 5	1.9985	0.52	Q	V
22+10	2.0020	0.52	Q	V
22+15	2.0056	0.51	Q	V
22+20	2.0091	0.51	Q	V
22+25	2.0126	0.51	Q	V
22+30	2.0160	0.50	Q	V
22+35	2.0195	0.50	Q	V
22+40	2.0229	0.49	Q	V
22+45	2.0262	0.49	Q	V
22+50	2.0296	0.49	Q	V
22+55	2.0329	0.48	Q	V
23+ 0	2.0363	0.48	Q	V
23+ 5	2.0395	0.48	Q	V
23+10	2.0428	0.47	Q	V
23+15	2.0461	0.47	Q	V
23+20	2.0493	0.47	Q	V
23+25	2.0525	0.46	Q	V
23+30	2.0557	0.46	Q	V
23+35	2.0588	0.46	Q	V
23+40	2.0620	0.46	Q	V
23+45	2.0651	0.45	Q	V
23+50	2.0682	0.45	Q	V
23+55	2.0713	0.45	Q	V
24+ 0	2.0743	0.44	Q	V
24+ 5	2.0771	0.40	Q	V
24+10	2.0784	0.20	Q	V
24+15	2.0787	0.04	Q	V

24+20

2.0788

0.01 Q

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FLOOD HYDROGRAPH ROUTING PROGRAM  
Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2005  
Study date: 04/25/23

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ROUTING CALCULATION  
DA-1 TO DA-3  
PUMP CAPACITY 0.51 CFS  
EUCLID AND WALNUT  
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Program License Serial Number 6049

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\*\*\*\*\* HYDROGRAPH INFORMATION \*\*\*\*\*

From study/file name: 424027UHPOST1.rte  
\*\*\*\*\*HYDROGRAPH DATA\*\*\*\*\*  
Number of intervals = 292  
Time interval = 5.0 (Min.)  
Maximum/Peak flow rate = 17.918 (CFS)  
Total volume = 2.079 (Ac.Ft)  
Status of hydrographs being held in storage  
Stream 1 Stream 2 Stream 3 Stream 4 Stream 5  
Peak (CFS) 0.000 0.000 0.000 0.000 0.000  
Vol (Ac.Ft) 0.000 0.000 0.000 0.000 0.000  
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Process from Point/Station 1.050 to Point/Station 1.060  
\*\*\*\* FLOWBY BASIN ROUTING OR SPLIT FLOW \*\*\*\*

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All flow in excess of 0.51(CFS) is diverted  
into stream number 1  
Total volume of excess flow diverted into flowby  
basin (stream number 1 ) is 1.08(Ac.Ft)

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P R I N T O F S T O R M  
R u n o f f H y d r o g r a p h  
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Hydrograph in 5 Minute intervals (CFS)

Time(h+m)	Volume(Ac.Ft)	Q(CFS)	0	0.1	0.3	0.4	0.5
0+ 5	0.0003	0.04	V Q				
0+10	0.0020	0.24	V		Q		
0+15	0.0047	0.40	V			Q	
0+20	0.0077	0.43	V			Q	
0+25	0.0107	0.44	V			Q	
0+30	0.0138	0.44	V			Q	
0+35	0.0168	0.44	V			Q	
0+40	0.0199	0.45	V			Q	
0+45	0.0230	0.45	V			Q	
0+50	0.0261	0.45	V			Q	
0+55	0.0292	0.45	V			Q	
1+ 0	0.0323	0.45	V			Q	
1+ 5	0.0354	0.45	V			Q	
1+10	0.0385	0.45	V			Q	
1+15	0.0417	0.46	V			Q	
1+20	0.0448	0.46	V			Q	
1+25	0.0480	0.46	V			Q	
1+30	0.0512	0.46	V			Q	
1+35	0.0543	0.46	V			Q	
1+40	0.0575	0.46	V			Q	
1+45	0.0607	0.46	V			Q	
1+50	0.0640	0.47	V			Q	
1+55	0.0672	0.47	V			Q	
2+ 0	0.0704	0.47	V			Q	
2+ 5	0.0737	0.47	V			Q	
2+10	0.0769	0.47	V			Q	
2+15	0.0802	0.47	V			Q	
2+20	0.0835	0.48	V			Q	
2+25	0.0868	0.48	V			Q	
2+30	0.0901	0.48	V			Q	
2+35	0.0934	0.48	V			Q	
2+40	0.0967	0.48	V			Q	
2+45	0.1000	0.48	V			Q	
2+50	0.1034	0.49	V			Q	
2+55	0.1067	0.49	V			Q	
3+ 0	0.1101	0.49	V			Q	
3+ 5	0.1135	0.49	V			Q	
3+10	0.1169	0.49	V			Q	
3+15	0.1203	0.50	V			Q	
3+20	0.1237	0.50	V			Q	
3+25	0.1272	0.50	V			Q	
3+30	0.1306	0.50	V			Q	
3+35	0.1341	0.50	V			Q	
3+40	0.1375	0.50	V			Q	
3+45	0.1410	0.51	V			Q	
3+50	0.1445	0.51	V			Q	
3+55	0.1480	0.51	V			Q	
4+ 0	0.1516	0.51	V			Q	

4+ 5	0.1551	0.51	V			Q
4+10	0.1586	0.51	V			Q
4+15	0.1621	0.51	V			Q
4+20	0.1656	0.51	V			Q
4+25	0.1691	0.51	V			Q
4+30	0.1726	0.51	V			Q
4+35	0.1761	0.51	V			Q
4+40	0.1797	0.51	V			Q
4+45	0.1832	0.51	V			Q
4+50	0.1867	0.51	V			Q
4+55	0.1902	0.51	V			Q
5+ 0	0.1937	0.51	V			Q
5+ 5	0.1972	0.51	V			Q
5+10	0.2007	0.51	V			Q
5+15	0.2042	0.51	V			Q
5+20	0.2077	0.51	V			Q
5+25	0.2113	0.51	V			Q
5+30	0.2148	0.51	V			Q
5+35	0.2183	0.51	V			Q
5+40	0.2218	0.51	V			Q
5+45	0.2253	0.51	V			Q
5+50	0.2288	0.51	V			Q
5+55	0.2323	0.51	V			Q
6+ 0	0.2358	0.51	V			Q
6+ 5	0.2394	0.51	V			Q
6+10	0.2429	0.51	V			Q
6+15	0.2464	0.51	V			Q
6+20	0.2499	0.51	V			Q
6+25	0.2534	0.51	V			Q
6+30	0.2569	0.51	V			Q
6+35	0.2604	0.51	V			Q
6+40	0.2639	0.51	V			Q
6+45	0.2675	0.51	V			Q
6+50	0.2710	0.51	V			Q
6+55	0.2745	0.51	V			Q
7+ 0	0.2780	0.51	V			Q
7+ 5	0.2815	0.51	V			Q
7+10	0.2850	0.51	V			Q
7+15	0.2885	0.51	V			Q
7+20	0.2920	0.51	V			Q
7+25	0.2956	0.51	V			Q
7+30	0.2991	0.51	V			Q
7+35	0.3026	0.51	V			Q
7+40	0.3061	0.51	V			Q
7+45	0.3096	0.51	V			Q
7+50	0.3131	0.51	V			Q
7+55	0.3166	0.51	V			Q
8+ 0	0.3201	0.51	V			Q
8+ 5	0.3237	0.51	V			Q
8+10	0.3272	0.51	V			Q

8+15	0.3307	0.51	V	Q
8+20	0.3342	0.51	V	Q
8+25	0.3377	0.51	V	Q
8+30	0.3412	0.51	V	Q
8+35	0.3447	0.51	V	Q
8+40	0.3482	0.51	V	Q
8+45	0.3518	0.51	V	Q
8+50	0.3553	0.51	V	Q
8+55	0.3588	0.51	V	Q
9+ 0	0.3623	0.51	V	Q
9+ 5	0.3658	0.51	V	Q
9+10	0.3693	0.51	V	Q
9+15	0.3728	0.51	V	Q
9+20	0.3763	0.51	V	Q
9+25	0.3799	0.51	V	Q
9+30	0.3834	0.51	V	Q
9+35	0.3869	0.51	V	Q
9+40	0.3904	0.51	V	Q
9+45	0.3939	0.51	V	Q
9+50	0.3974	0.51	V	Q
9+55	0.4009	0.51	V	Q
10+ 0	0.4044	0.51	V	Q
10+ 5	0.4080	0.51	V	Q
10+10	0.4115	0.51	V	Q
10+15	0.4150	0.51	V	Q
10+20	0.4185	0.51	V	Q
10+25	0.4220	0.51	V	Q
10+30	0.4255	0.51	V	Q
10+35	0.4290	0.51	V	Q
10+40	0.4325	0.51	V	Q
10+45	0.4361	0.51	V	Q
10+50	0.4396	0.51	V	Q
10+55	0.4431	0.51	V	Q
11+ 0	0.4466	0.51	V	Q
11+ 5	0.4501	0.51	V	Q
11+10	0.4536	0.51	V	Q
11+15	0.4571	0.51	V	Q
11+20	0.4606	0.51	V	Q
11+25	0.4642	0.51	V	Q
11+30	0.4677	0.51	V	Q
11+35	0.4712	0.51	V	Q
11+40	0.4747	0.51	V	Q
11+45	0.4782	0.51	V	Q
11+50	0.4817	0.51	V	Q
11+55	0.4852	0.51	V	Q
12+ 0	0.4887	0.51	V	Q
12+ 5	0.4923	0.51	V	Q
12+10	0.4958	0.51	V	Q
12+15	0.4993	0.51	V	Q
12+20	0.5028	0.51	V	Q

12+25	0.5063	0.51	V	Q
12+30	0.5098	0.51	V	Q
12+35	0.5133	0.51	V	Q
12+40	0.5168	0.51	V	Q
12+45	0.5204	0.51	V	Q
12+50	0.5239	0.51	V	Q
12+55	0.5274	0.51	V	Q
13+ 0	0.5309	0.51	V	Q
13+ 5	0.5344	0.51	V	Q
13+10	0.5379	0.51	V	Q
13+15	0.5414	0.51	V	Q
13+20	0.5449	0.51	V	Q
13+25	0.5485	0.51	V	Q
13+30	0.5520	0.51	V	Q
13+35	0.5555	0.51	V	Q
13+40	0.5590	0.51	V	Q
13+45	0.5625	0.51	V	Q
13+50	0.5660	0.51	V	Q
13+55	0.5695	0.51	V	Q
14+ 0	0.5730	0.51	V	Q
14+ 5	0.5766	0.51	V	Q
14+10	0.5801	0.51	V	Q
14+15	0.5836	0.51	V	Q
14+20	0.5871	0.51	V	Q
14+25	0.5906	0.51	V	Q
14+30	0.5941	0.51	V	Q
14+35	0.5976	0.51	V	Q
14+40	0.6011	0.51	V	Q
14+45	0.6047	0.51	V	Q
14+50	0.6082	0.51	V	Q
14+55	0.6117	0.51	V	Q
15+ 0	0.6152	0.51	V	Q
15+ 5	0.6187	0.51	V	Q
15+10	0.6222	0.51	V	Q
15+15	0.6257	0.51	V	Q
15+20	0.6292	0.51	V	Q
15+25	0.6327	0.51	V	Q
15+30	0.6363	0.51	V	Q
15+35	0.6398	0.51	V	Q
15+40	0.6433	0.51	V	Q
15+45	0.6468	0.51	V	Q
15+50	0.6503	0.51	V	Q
15+55	0.6538	0.51	V	Q
16+ 0	0.6573	0.51	V	Q
16+ 5	0.6608	0.51	V	Q
16+10	0.6644	0.51	V	Q
16+15	0.6679	0.51	V	Q
16+20	0.6714	0.51	V	Q
16+25	0.6749	0.51	V	Q
16+30	0.6784	0.51	V	Q

16+35	0.6819	0.51			V	Q
16+40	0.6854	0.51			V	Q
16+45	0.6889	0.51			V	Q
16+50	0.6925	0.51			V	Q
16+55	0.6960	0.51			V	Q
17+ 0	0.6995	0.51			V	Q
17+ 5	0.7030	0.51			V	Q
17+10	0.7065	0.51			V	Q
17+15	0.7100	0.51			V	Q
17+20	0.7135	0.51			V	Q
17+25	0.7170	0.51			V	Q
17+30	0.7206	0.51			V	Q
17+35	0.7241	0.51			V	Q
17+40	0.7276	0.51			V	Q
17+45	0.7311	0.51			V	Q
17+50	0.7346	0.51			V	Q
17+55	0.7381	0.51			V	Q
18+ 0	0.7416	0.51			V	Q
18+ 5	0.7451	0.51			V	Q
18+10	0.7487	0.51			V	Q
18+15	0.7522	0.51			V	Q
18+20	0.7557	0.51			V	Q
18+25	0.7592	0.51			V	Q
18+30	0.7627	0.51			V	Q
18+35	0.7662	0.51			V	Q
18+40	0.7697	0.51			V	Q
18+45	0.7732	0.51			V	Q
18+50	0.7768	0.51			V	Q
18+55	0.7803	0.51			V	Q
19+ 0	0.7838	0.51			V	Q
19+ 5	0.7873	0.51			V	Q
19+10	0.7908	0.51			V	Q
19+15	0.7943	0.51			V	Q
19+20	0.7978	0.51			V	Q
19+25	0.8013	0.51			V	Q
19+30	0.8049	0.51			V	Q
19+35	0.8084	0.51			V	Q
19+40	0.8119	0.51			V	Q
19+45	0.8154	0.51			V	Q
19+50	0.8189	0.51			V	Q
19+55	0.8224	0.51			V	Q
20+ 0	0.8259	0.51			V	Q
20+ 5	0.8294	0.51			V	Q
20+10	0.8330	0.51			V	Q
20+15	0.8365	0.51			V	Q
20+20	0.8400	0.51			V	Q
20+25	0.8435	0.51			V	Q
20+30	0.8470	0.51			V	Q
20+35	0.8505	0.51			V	Q
20+40	0.8540	0.51			V	Q

20+45	0.8575	0.51				V	Q
20+50	0.8611	0.51				V	Q
20+55	0.8646	0.51				V	Q
21+ 0	0.8681	0.51				V	Q
21+ 5	0.8716	0.51				V	Q
21+10	0.8751	0.51				V	Q
21+15	0.8786	0.51				V	Q
21+20	0.8821	0.51				V	Q
21+25	0.8856	0.51				V	Q
21+30	0.8892	0.51				V	Q
21+35	0.8927	0.51				V	Q
21+40	0.8962	0.51				V	Q
21+45	0.8997	0.51				V	Q
21+50	0.9032	0.51				V	Q
21+55	0.9067	0.51				V	Q
22+ 0	0.9102	0.51				V	Q
22+ 5	0.9137	0.51				V	Q
22+10	0.9173	0.51				V	Q
22+15	0.9208	0.51				V	Q
22+20	0.9243	0.51				V	Q
22+25	0.9278	0.51				V	Q
22+30	0.9312	0.50				V	Q
22+35	0.9347	0.50				V	Q
22+40	0.9381	0.49				V	Q
22+45	0.9414	0.49				V	Q
22+50	0.9448	0.49				Q	
22+55	0.9481	0.48				Q	V
23+ 0	0.9515	0.48				Q	V
23+ 5	0.9547	0.48				Q	V
23+10	0.9580	0.47				Q	V
23+15	0.9613	0.47				Q	V
23+20	0.9645	0.47				Q	V
23+25	0.9677	0.46				Q	V
23+30	0.9709	0.46				Q	V
23+35	0.9740	0.46				Q	V
23+40	0.9772	0.46				Q	V
23+45	0.9803	0.45				Q	V
23+50	0.9834	0.45				Q	V
23+55	0.9865	0.45				Q	V
24+ 0	0.9895	0.44				Q	V
24+ 5	0.9923	0.40			Q		V
24+10	0.9936	0.20		Q			V
24+15	0.9939	0.04	Q				V
24+20	0.9940	0.01	Q				V

\*\*\*\*\*HYDROGRAPH DATA\*\*\*\*\*

Number of intervals = 292  
Time interval = 5.0 (Min.)  
Maximum/Peak flow rate = 0.510 (CFS)  
Total volume = 0.994 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	17.408	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	1.085	0.000	0.000	0.000	0.000

\*\*\*\*\*

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# PROJECT SUMMARY

## CALCULATION DETAILS

- LOADING = HS20/HS25
- APPROX. LINEAR FOOTAGE = 576 LF

## STORAGE SUMMARY

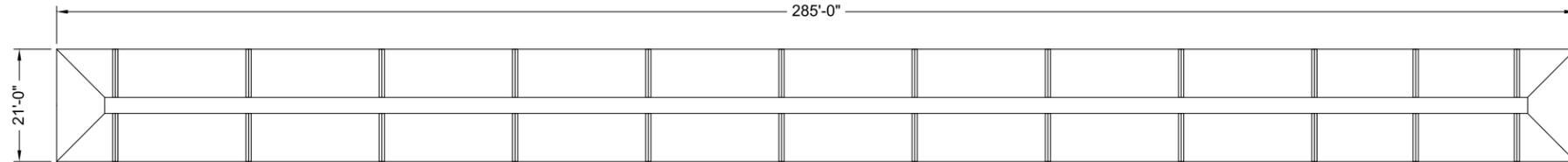
- STORAGE VOLUME REQUIRED = 48,000 CF
- PIPE STORAGE VOLUME = 36,644 CF
- BACKFILL STORAGE VOLUME = 11,433 CF
- TOTAL STORAGE PROVIDED = 48,077 CF

## PIPE DETAILS

- DIAMETER = 108"
- CORRUGATION = 5x1
- GAGE = 14
- COATING = ALT2
- WALL TYPE = PERFORATED
- BARREL SPACING = 36"

## BACKFILL DETAILS

- WIDTH AT ENDS = 12"
- ABOVE PIPE = 12"
- WIDTH AT SIDES = 12"
- BELOW PIPE = 6"



## NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE 2<sup>2</sup>/<sub>3</sub>" x 1<sup>1</sup>/<sub>2</sub>" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

**ASSEMBLY**  
SCALE: 1" = 30'

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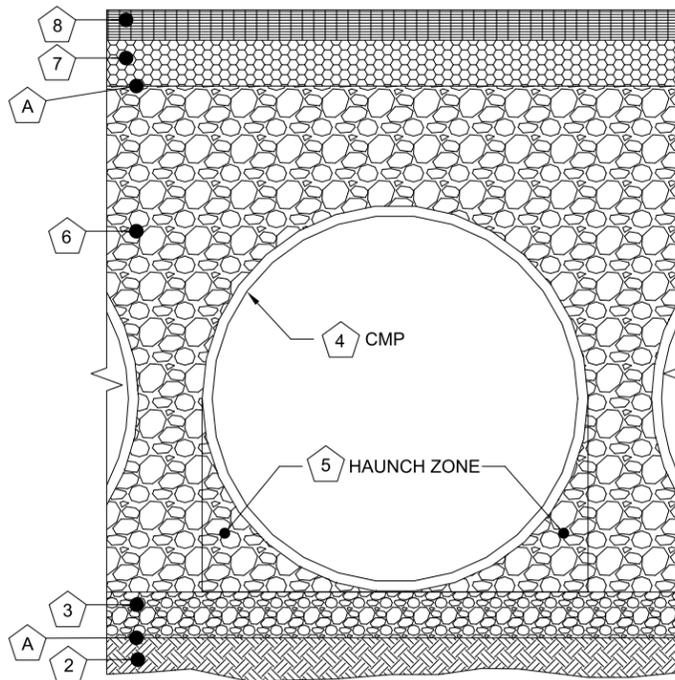
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DATE	REVISION DESCRIPTION	BY


  
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**CMP DETENTION SYSTEMS**  
 CONTECH  
**DYODS**  
 DRAWING

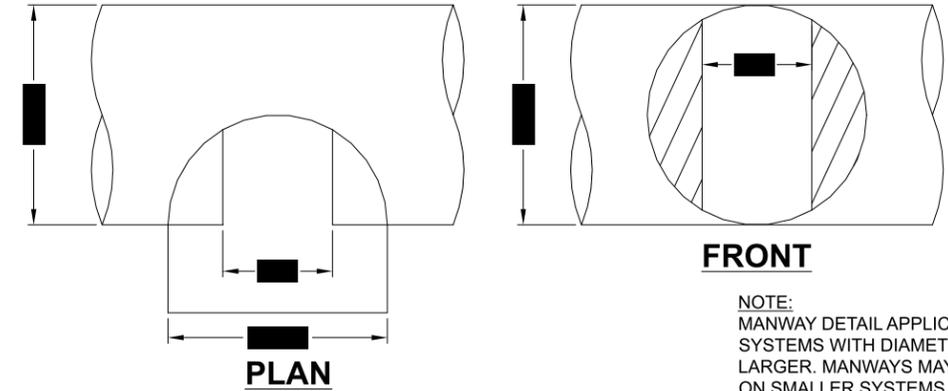
DYO30787 Euclid and Walnut  
 Underground Detention  
 Ontario, CA  
**DETENTION SYSTEM**

PROJECT No.: 20769	SEQ. No.: 30787	DATE: 4/26/2023
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.:		<b>1</b>



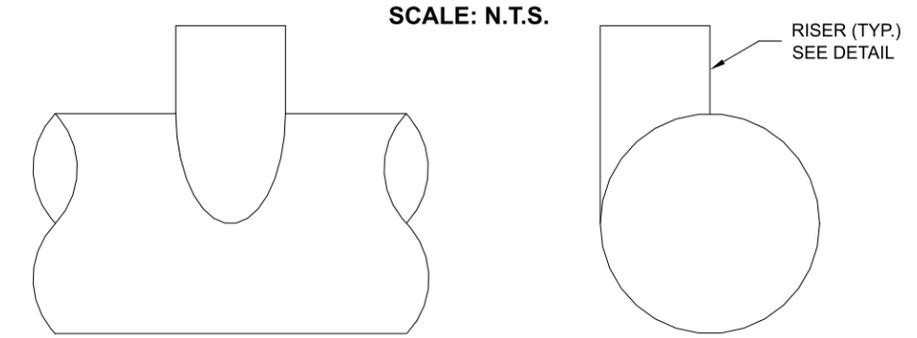
Infiltration Systems - CMP Infiltration & CMP Perforated Drainage Pipe			
Material Location	Description	Material Designation	Designation
8	Rigid or Flexible Pavement (if applicable)		
7	Road Base (if applicable)		
A	Geotextile Layer	Non-Woven Geotextile CONTECH C-40 or C-45	Engineer Decision for consideration to prevent soil migration into varying soil types. Wrap the trench only.
6	Backfill	Infiltration pipe systems have a pipe perforation sized of 3/8" diameter. An open graded, free draining stone, with a particle size of 1/2" - 2 1/2" diameter is recommended.	AASHTO M 145-A-1 or AASHTO M 43 - 3, 4 Material shall be worked into the pipe haunches by means of shovel-slicing, rodding, air-tamper, vibratory rod, or other effective methods. Compaction of all placed fill material is necessary and shall be considered adequate when no further yielding of the material is observed under the compactor, or under foot, and the Project Engineer or his representative is satisfied with the level of compaction*
3	Bedding Stone	Well graded granular bedding material w/maximum particle size of 3"	AASHTO M43 - 3,357,4,467, 5, 56, 57 For soil aggregates larger than 3/8" a dedicated bedding layer is not required for CMP. Pipe may be placed on the trench bottom comprised of native suitable well graded & granular material. For Arch pipes it is recommended to be shaped to a relatively flat bottom or fine-grade the foundation to a slight v-shape. Soil aggregates less than 3/8" and unsuitable material should be over-excavated and re-placed with a 4"-6" layer of well graded & granular stone per the material designation.
A	Geotextile Layer	None	None Contech does not recommend geotextiles be placed under the invert of infiltration systems due to the propensity for geotextiles to clog over time.

\* Note: The listed AASHTO designations are for gradation only. The stone must also be angular and clean.



TYPICAL MANWAY DETAIL

NOTE: MANWAY DETAIL APPLICABLE FOR CMP SYSTEMS WITH DIAMETERS 48" AND LARGER. MANWAYS MAY BE REQUIRED ON SMALLER SYSTEMS DEPENDING ON ACTUAL SITE SPECIFIC CONDITIONS.



TYPICAL RISER DETAIL

NOTE: LADDERS ARE OPTIONAL AND ARE NOT REQUIRED FOR ALL SYSTEMS.

1 MINIMUM WIDTH DEPENDS ON SITE CONDITIONS AND ENGINEERING JUDGEMENT.

FOUNDATION/BEDDING PREPARATION

2 PRIOR TO PLACING THE BEDDING, THE FOUNDATION MUST BE CONSTRUCTED TO A UNIFORM AND STABLE GRADE. IN THE EVENT THAT UNSUITABLE FOUNDATION MATERIALS ARE ENCOUNTERED DURING EXCAVATION, THEY SHALL BE REMOVED AND BROUGHT BACK TO THE GRADE WITH A FILL MATERIAL AS APPROVED BY THE ENGINEER.

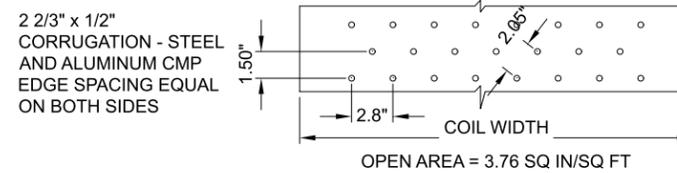
5 HAUNCH ZONE MATERIAL SHALL BE PLACED AND UNIFORMLY COMPACTED WITHOUT SOFT SPOTS.

BACKFILL

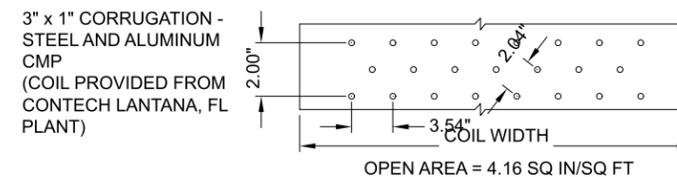
MATERIAL SHALL BE PLACED IN 8"-10" MAXIMUM LIFTS. INADEQUATE COMPACTION CAN LEAD TO EXCESSIVE DEFLECTIONS WITHIN THE SYSTEM AND SETTLEMENT OF THE SOILS OVER THE SYSTEM. BACKFILL SHALL BE PLACED SUCH THAT THERE IS NO MORE THAN A TWO-LIFT DIFFERENTIAL BETWEEN THE SIDES OF ANY PIPE IN THE SYSTEM AT ALL TIMES DURING THE BACKFILL PROCESS. BACKFILL SHALL BE ADVANCED ALONG THE LENGTH OF THE SYSTEM AT THE SAME RATE TO AVOID DIFFERENTIAL LOADING ON ANY PIPES IN THE SYSTEM.

EQUIPMENT USED TO PLACE AND COMPACT THE BACKFILL SHALL BE OF A SIZE AND TYPE SO AS NOT TO DISTORT, DAMAGE, OR DISPLACE THE PIPE. ATTENTION MUST BE GIVEN TO PROVIDING ADEQUATE MINIMUM COVER FOR SUCH EQUIPMENT. MAINTAIN BALANCED LOADING ON ALL PIPES IN THE SYSTEM DURING ALL SUCH OPERATIONS.

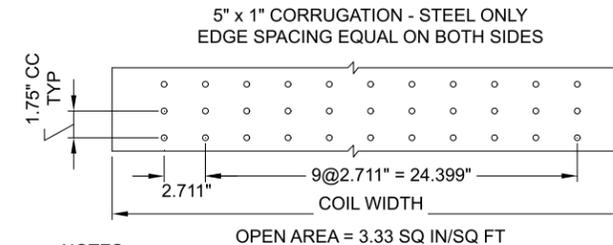
OTHER ALTERNATE BACKFILL MATERIAL MAY BE ALLOWED DEPENDING ON SITE SPECIFIC CONDITIONS. REFER TO TYPICAL BACKFILL DETAIL FOR MATERIAL REQUIRED.



OPEN AREA = 3.76 SQ IN/SQ FT



OPEN AREA = 4.16 SQ IN/SQ FT



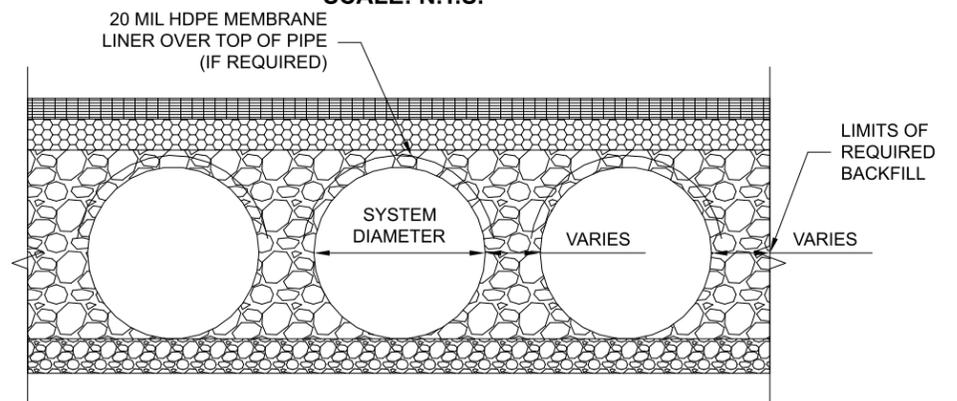
OPEN AREA = 3.33 SQ IN/SQ FT

NOTES:

- PERFORATIONS MEET AASHTO AND ASTM SPECIFICATIONS.
- PERFORATION OPEN AREA PER SQUARE FOOT OF PIPE IS BASED ON THE NOMINAL DIAMETER AND LENGTH OF PIPE.
- ALL DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
- ALL HOLES  $\varnothing$ 3/8".

TYPICAL PERFORATION DETAIL

SCALE: N.T.S.



TYPICAL SECTION VIEW

LINER OVER ROWS  
SCALE: N.T.S.

NOTE: IF SALTING AGENTS FOR SNOW AND ICE REMOVAL ARE USED ON OR NEAR THE PROJECT, AN HDPE MEMBRANE LINER IS RECOMMENDED WITH THE SYSTEM. THE IMPERMEABLE LINER IS INTENDED TO HELP PROTECT THE SYSTEM FROM THE POTENTIAL ADVERSE EFFECTS THAT MAY RESULT FROM A CHANGE IN THE SURROUNDING ENVIRONMENT OVER A PERIOD OF TIME. PLEASE REFER TO THE CORRUGATED METAL PIPE DETENTION DESIGN GUIDE FOR ADDITIONAL INFORMATION.

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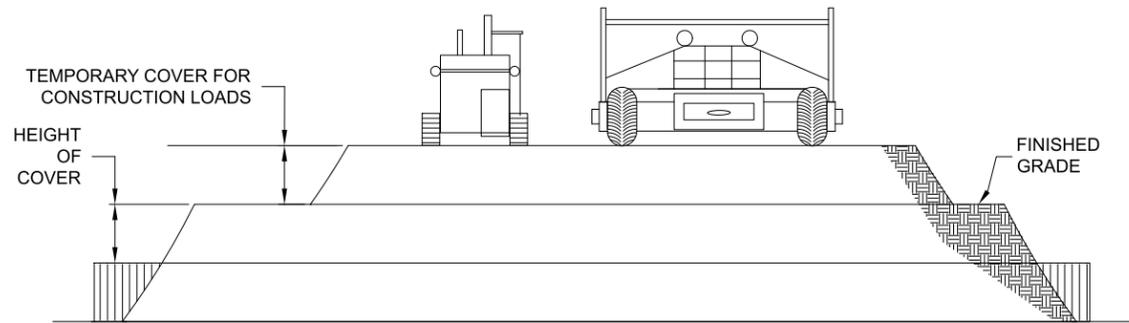
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CMP DETENTION SYSTEMS  
CONTECH  
DYODS  
DRAWING

DYO30787 Euclid and Walnut  
Underground Detention  
Ontario, CA  
DETENTION SYSTEM

PROJECT No.: 20769	SEQ. No.: 30787	DATE: 4/26/2023
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.:		1



**CONSTRUCTION LOADS**

FOR TEMPORARY CONSTRUCTION VEHICLE LOADS, AN EXTRA AMOUNT OF COMPACTED COVER MAY BE REQUIRED OVER THE TOP OF THE PIPE. THE HEIGHT-OF-COVER SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THE TABLE BELOW. THE USE OF HEAVY CONSTRUCTION EQUIPMENT NECESSITATES GREATER PROTECTION FOR THE PIPE THAN FINISHED GRADE COVER MINIMUMS FOR NORMAL HIGHWAY TRAFFIC.

PIPE SPAN, INCHES	AXLE LOADS (kips)			
	18-50	50-75	75-110	110-150
	MINIMUM COVER (FT)			
12-42	2.0	2.5	3.0	3.0
48-72	3.0	3.0	3.5	4.0
78-120	3.0	3.5	4.0	4.0
126-144	3.5	4.0	4.5	4.5

\*MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.

**CONSTRUCTION LOADING DIAGRAM**

SCALE: N.T.S.

**SPECIFICATION FOR DESIGNED DETENTION SYSTEM:**

**SCOPE**  
THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE DESIGNED DETENTION SYSTEM DETAILED IN THE PROJECT PLANS.

**MATERIAL**  
THE MATERIAL SHALL CONFORM TO THE APPLICABLE REQUIREMENTS LISTED BELOW:

ALUMINIZED TYPE 2 STEEL COILS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-274 OR ASTM A-92.

THE GALVANIZED STEEL COILS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-218 OR ASTM A-929.

THE POLYMER COATED STEEL COILS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-246 OR ASTM A-742.

THE ALUMINUM COILS SHALL CONFORM TO THE APPLICABLE OF AASHTO M-197 OR ASTM B-744.

**CONSTRUCTION LOADS**  
CONSTRUCTION LOADS MAY BE HIGHER THAN FINAL LOADS. FOLLOW THE MANUFACTURER'S OR NCSPE GUIDELINES.

**PIPE**  
THE PIPE SHALL BE MANUFACTURED IN ACCORDANCE TO THE APPLICABLE REQUIREMENTS LISTED BELOW:

ALUMINIZED TYPE 2: AASHTO M-36 OR ASTM A-760

GALVANIZED: AASHTO M-36 OR ASTM A-760

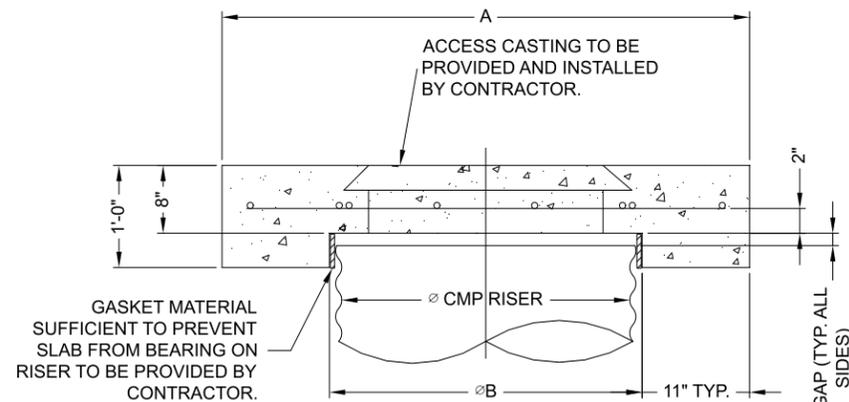
POLYMER COATED: AASHTO M-245 OR ASTM A-762

ALUMINUM: AASHTO M-196 OR ASTM B-745

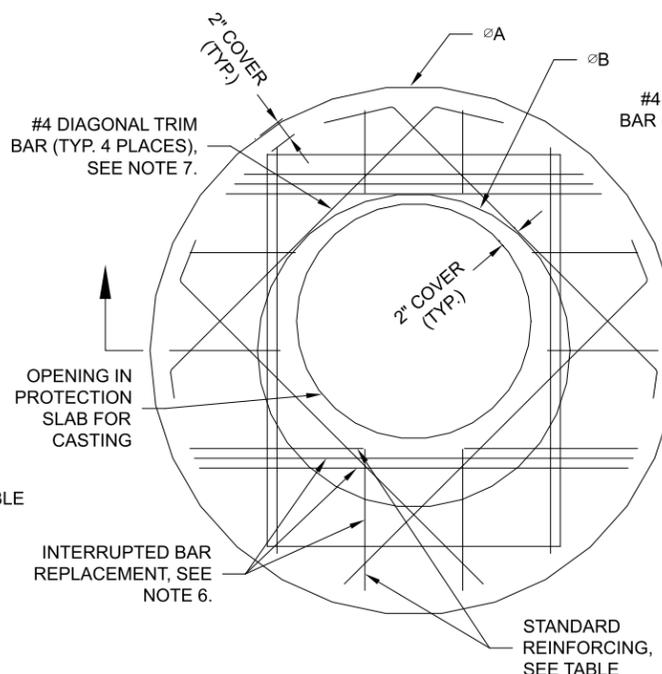
**HANDLING AND ASSEMBLY**  
SHALL BE IN ACCORDANCE WITH NCSP'S (NATIONAL CORRUGATED STEEL ASSOCIATION) FOR ALUMINIZED TYPE 2, GALVANIZED OR POLYMER COATED STEEL. SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR ALUMINUM PIPE.

**INSTALLATION**  
SHALL BE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 26, DIVISION II DIVISION II OR ASTM A-798 (FOR ALUMINIZED TYPE 2, GALVANIZED OR POLYMER COATED STEEL) OR ASTM B-788 (FOR ALUMINUM PIPE) AND IN CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. IF THERE ARE ANY INCONSISTENCIES OR CONFLICTS THE CONTRACTOR SHOULD DISCUSS AND RESOLVE WITH THE SITE ENGINEER.

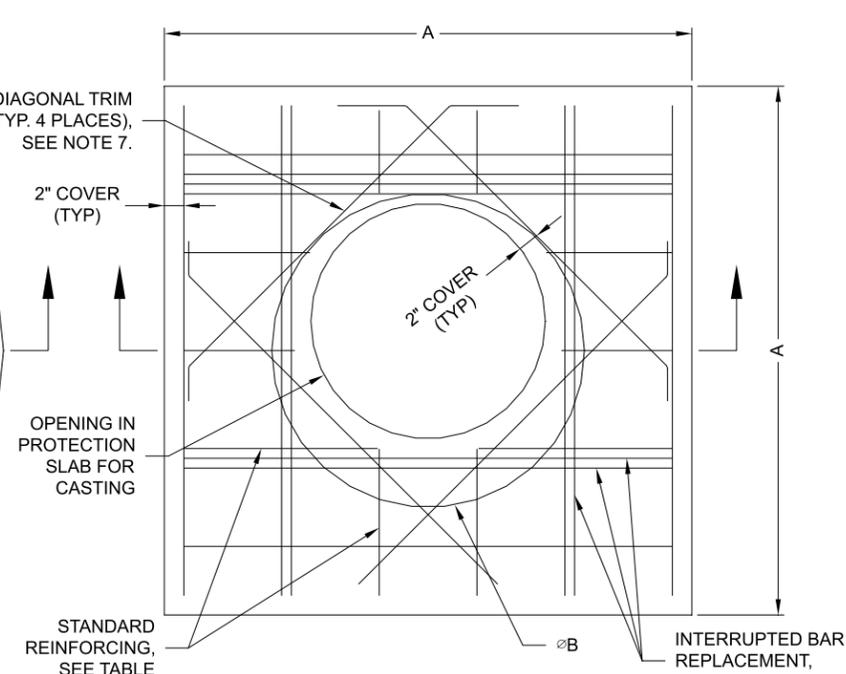
IT IS ALWAYS THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW OSHA GUIDELINES FOR SAFE PRACTICES.



**SECTION VIEW**



**ROUND OPTION PLAN VIEW**



**SQUARE OPTION PLAN VIEW**

**NOTES:**

- DESIGN IN ACCORDANCE WITH AASHTO, 17th EDITION.
- DESIGN LOAD HS25.
- EARTH COVER = 1' MAX.
- CONCRETE STRENGTH = 3,500 psi
- REINFORCING STEEL = ASTM A615, GRADE 60.
- PROVIDE ADDITIONAL REINFORCING AROUND OPENINGS EQUAL TO THE BARS INTERRUPTED, HALF EACH SIDE. ADDITIONAL BARS TO BE IN THE SAME PLANE.
- TRIM OPENING WITH DIAGONAL #4 BARS, EXTEND BARS A MINIMUM OF 12" BEYOND OPENING, BEND BARS AS REQUIRED TO MAINTAIN BAR COVER.
- PROTECTION SLAB AND ALL MATERIALS TO BE PROVIDED AND INSTALLED BY CONTRACTOR.
- DETAIL DESIGN BY DELTA ENGINEERING, BINGHAMTON, NY.

**MANHOLE CAP DETAIL**

SCALE: N.T.S.

REINFORCING TABLE				
Ø CMP RISER	A	Ø B	REINFORCING	**BEARING PRESSURE (PSF)
24"	Ø 4' 4'X4'	26"	#5 @ 12" OCEW #5 @ 12" OCEW	2,410 1,780
30"	Ø 4'-6" 4'-6" X 4'-6"	32"	#5 @ 12" OCEW #5 @ 12" OCEW	2,120 1,530
36"	Ø 5' X 5'	38"	#5 @ 10" OCEW #5 @ 10" OCEW	1,890 1,350
42"	Ø 5'-6" 5'-6" X 5'-6"	44"	#5 @ 10" OCEW #5 @ 9" OCEW	1,720 1,210
48"	Ø 6' X 6'	50"	#5 @ 9" OCEW #5 @ 8" OCEW	1,600 1,100

\*\* ASSUMED SOIL BEARING CAPACITY

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**CONTECH**  
CMP DETENTION SYSTEMS  
CONTECH  
DYODS  
DRAWING

DYO30787 Euclid and Walnut  
Underground Detention  
Ontario, CA  
DETENTION SYSTEM

PROJECT No.: 20769	SEQ. No.: 30787	DATE: 4/26/2023
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.:		1

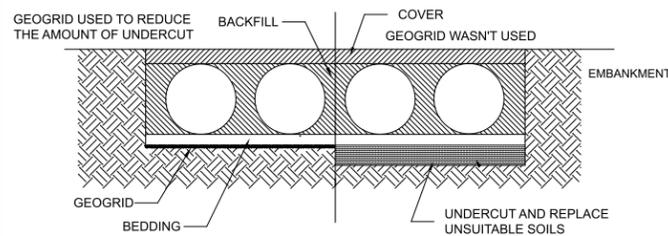
## CMP DETENTION INSTALLATION GUIDE

PROPER INSTALLATION OF A FLEXIBLE UNDERGROUND DETENTION SYSTEM WILL ENSURE LONG-TERM PERFORMANCE. THE CONFIGURATION OF THESE SYSTEMS OFTEN REQUIRES SPECIAL CONSTRUCTION PRACTICES THAT DIFFER FROM CONVENTIONAL FLEXIBLE PIPE CONSTRUCTION. CONTECH ENGINEERED SOLUTIONS STRONGLY SUGGESTS SCHEDULING A PRE-CONSTRUCTION MEETING WITH YOUR LOCAL SALES ENGINEER TO DETERMINE IF ADDITIONAL MEASURES, NOT COVERED IN THIS GUIDE, ARE APPROPRIATE FOR YOUR SITE.

## FOUNDATION

CONSTRUCT A FOUNDATION THAT CAN SUPPORT THE DESIGN LOADING APPLIED BY THE PIPE AND ADJACENT BACKFILL WEIGHT AS WELL AS MAINTAIN ITS INTEGRITY DURING CONSTRUCTION.

IF SOFT OR UNSUITABLE SOILS ARE ENCOUNTERED, REMOVE THE POOR SOILS DOWN TO A SUITABLE DEPTH AND THEN BUILD UP TO THE APPROPRIATE ELEVATION WITH A COMPETENT BACKFILL MATERIAL. THE STRUCTURAL FILL MATERIAL GRADATION SHOULD NOT ALLOW THE MIGRATION OF FINES, WHICH CAN CAUSE SETTLEMENT OF THE DETENTION SYSTEM OR PAVEMENT ABOVE. IF THE STRUCTURAL FILL MATERIAL IS NOT COMPATIBLE WITH THE UNDERLYING SOILS AN ENGINEERING FABRIC SHOULD BE USED AS A SEPARATOR. IN SOME CASES, USING A STIFF REINFORCING GEOGRID REDUCES OVER EXCAVATION AND REPLACEMENT FILL QUANTITIES.

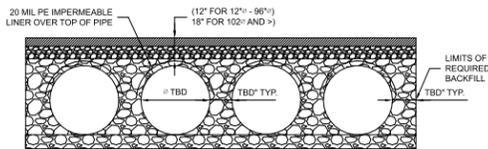


GRADE THE FOUNDATION SUBGRADE TO A UNIFORM OR SLIGHTLY SLOPING GRADE. IF THE SUBGRADE IS CLAY OR RELATIVELY NON-POROUS AND THE CONSTRUCTION SEQUENCE WILL LAST FOR AN EXTENDED PERIOD OF TIME, IT IS BEST TO SLOPE THE GRADE TO ONE END OF THE SYSTEM. THIS WILL ALLOW EXCESS WATER TO DRAIN QUICKLY, PREVENTING SATURATION OF THE SUBGRADE.

## GEOMEMBRANE BARRIER

A SITE'S RESISTIVITY MAY CHANGE OVER TIME WHEN VARIOUS TYPES OF SALTING AGENTS ARE USED, SUCH AS ROAD SALTS FOR DEICING AGENTS. IF SALTING AGENTS ARE USED ON OR NEAR THE PROJECT SITE, A GEOMEMBRANE BARRIER IS RECOMMENDED WITH THE SYSTEM. THE GEOMEMBRANE LINER IS INTENDED TO HELP PROTECT THE SYSTEM FROM THE POTENTIAL ADVERSE EFFECTS THAT MAY RESULT FROM THE USE OF SUCH AGENTS INCLUDING PREMATURE CORROSION AND REDUCED ACTUAL SERVICE LIFE.

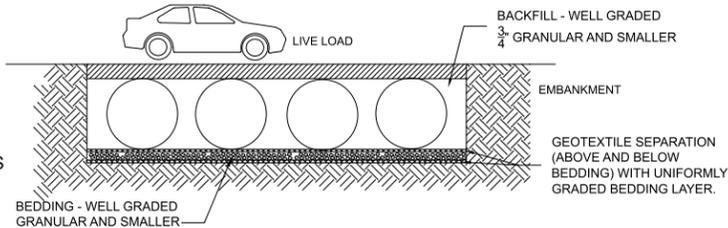
THE PROJECT'S ENGINEER OF RECORD IS TO EVALUATE WHETHER SALTING AGENTS WILL BE USED ON OR NEAR THE PROJECT SITE, AND USE HIS/HER BEST JUDGEMENT TO DETERMINE IF ANY ADDITIONAL PROTECTIVE MEASURES ARE REQUIRED. BELOW IS A TYPICAL DETAIL SHOWING THE PLACEMENT OF A GEOMEMBRANE BARRIER FOR PROJECTS WHERE SALTING AGENTS ARE USED ON OR NEAR THE PROJECT SITE.



## IN-SITU TRENCH WALL

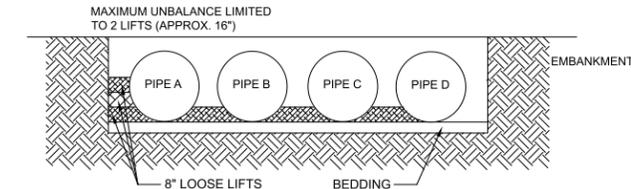
IF EXCAVATION IS REQUIRED, THE TRENCH WALL NEEDS TO BE CAPABLE OF SUPPORTING THE LOAD THAT THE PIPE SHEDS AS THE SYSTEM IS LOADED. IF SOILS ARE NOT CAPABLE OF SUPPORTING THESE LOADS, THE PIPE CAN DEFLECT. PERFORM A SIMPLE SOIL PRESSURE CHECK USING THE APPLIED LOADS TO DETERMINE THE LIMITS OF EXCAVATION BEYOND THE SPRING LINE OF THE OUTER MOST PIPES.

IN MOST CASES THE REQUIREMENTS FOR A SAFE WORK ENVIRONMENT AND PROPER BACKFILL PLACEMENT AND COMPACTION TAKE CARE OF THIS CONCERN.



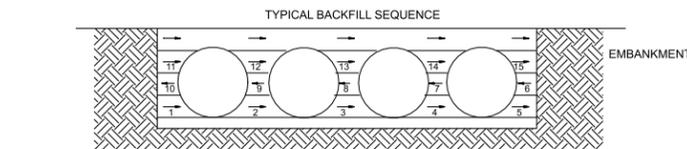
## BACKFILL PLACEMENT

MATERIAL SHALL BE WORKED INTO THE PIPE HAUNCHES BY MEANS OF SHOVEL-SLICING, RODDING, AIR TAMPER, VIBRATORY ROD, OR OTHER EFFECTIVE METHODS.

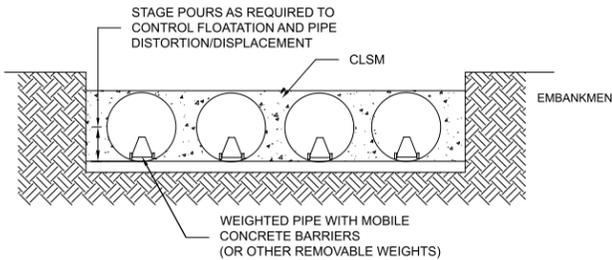


IF AASHTO T99 PROCEDURES ARE DETERMINED INFEASIBLE BY THE GEOTECHNICAL ENGINEER OF RECORD, COMPACTION IS CONSIDERED ADEQUATE WHEN NO FURTHER YIELDING OF THE MATERIAL IS OBSERVED UNDER THE COMPACTOR, OR UNDER FOOT, AND THE GEOTECHNICAL ENGINEER OF RECORD (OR REPRESENTATIVE THEREOF) IS SATISFIED WITH THE LEVEL OF COMPACTION.

FOR LARGE SYSTEMS, CONVEYOR SYSTEMS, BACKHOES WITH LONG REACHES OR DRAGLINES WITH STONE BUCKETS MAY BE USED TO PLACE BACKFILL. ONCE MINIMUM COVER FOR CONSTRUCTION LOADING ACROSS THE ENTIRE WIDTH OF THE SYSTEM IS REACHED, ADVANCE THE EQUIPMENT TO THE END OF THE RECENTLY PLACED FILL, AND BEGIN THE SEQUENCE AGAIN UNTIL THE SYSTEM IS COMPLETELY BACKFILLED. THIS TYPE OF CONSTRUCTION SEQUENCE PROVIDES ROOM FOR STOCKPILED BACKFILL DIRECTLY BEHIND THE BACKHOE, AS WELL AS THE MOVEMENT OF CONSTRUCTION TRAFFIC. MATERIAL STOCKPILES ON TOP OF THE BACKFILLED DETENTION SYSTEM SHOULD BE LIMITED TO 8- TO 10- FEET HIGH AND MUST PROVIDE BALANCED LOADING ACROSS ALL BARRELS. TO DETERMINE THE PROPER COVER OVER THE PIPES TO ALLOW THE MOVEMENT OF CONSTRUCTION EQUIPMENT SEE TABLE 1, OR CONTACT YOUR LOCAL CONTECH SALES ENGINEER.



WHEN FLOWABLE FILL IS USED, YOU MUST PREVENT PIPE FLOATATION. TYPICALLY, SMALL LIFTS ARE PLACED BETWEEN THE PIPES AND THEN ALLOWED TO SET-UP PRIOR TO THE PLACEMENT OF THE NEXT LIFT. THE ALLOWABLE THICKNESS OF THE CLSM LIFT IS A FUNCTION OF A PROPER BALANCE BETWEEN THE UPLIFT FORCE OF THE CLSM, THE OPPOSING WEIGHT OF THE PIPE, AND THE EFFECT OF OTHER RESTRAINING MEASURES. THE PIPE CAN CARRY LIMITED FLUID PRESSURE WITHOUT PIPE DISTORTION OR DISPLACEMENT, WHICH ALSO AFFECTS THE CLSM LIFT THICKNESS. YOUR LOCAL CONTECH SALES ENGINEER CAN HELP DETERMINE THE PROPER LIFT THICKNESS.

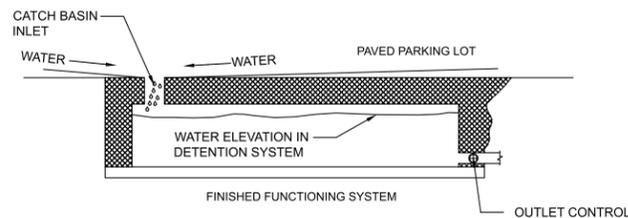


## CONSTRUCTION LOADING

TYPICALLY, THE MINIMUM COVER SPECIFIED FOR A PROJECT ASSUMES H-20 LIVE LOAD. BECAUSE CONSTRUCTION LOADS OFTEN EXCEED DESIGN LIVE LOADS, INCREASED TEMPORARY MINIMUM COVER REQUIREMENTS ARE NECESSARY. SINCE CONSTRUCTION EQUIPMENT VARIES FROM JOB TO JOB, IT IS BEST TO ADDRESS EQUIPMENT SPECIFIC MINIMUM COVER REQUIREMENTS WITH YOUR LOCAL CONTECH SALES ENGINEER DURING YOUR PRE-CONSTRUCTION MEETING.

## ADDITIONAL CONSIDERATIONS

BECAUSE MOST SYSTEMS ARE CONSTRUCTED BELOW-GRADE, RAINFALL CAN RAPIDLY FILL THE EXCAVATION; POTENTIALLY CAUSING FLOATATION AND MOVEMENT OF THE PREVIOUSLY PLACED PIPES. TO HELP MITIGATE POTENTIAL PROBLEMS, IT IS BEST TO START THE INSTALLATION AT THE DOWNSTREAM END WITH THE OUTLET ALREADY CONSTRUCTED TO ALLOW A ROUTE FOR THE WATER TO ESCAPE. TEMPORARY DIVERSION MEASURES MAY BE REQUIRED FOR HIGH FLOWS DUE TO THE RESTRICTED NATURE OF THE OUTLET PIPE.



## CMP DETENTION SYSTEM INSPECTION AND MAINTENANCE

UNDERGROUND STORMWATER DETENTION AND INFILTRATION SYSTEMS MUST BE INSPECTED AND MAINTAINED AT REGULAR INTERVALS FOR PURPOSES OF PERFORMANCE AND LONGEVITY.

### INSPECTION

INSPECTION IS THE KEY TO EFFECTIVE MAINTENANCE OF CMP DETENTION SYSTEMS AND IS EASILY PERFORMED. CONTECH RECOMMENDS ONGOING, ANNUAL INSPECTIONS. SITES WITH HIGH TRASH LOAD OR SMALL OUTLET CONTROL ORIFICES MAY NEED MORE FREQUENT INSPECTIONS. THE RATE AT WHICH THE SYSTEM COLLECTS POLLUTANTS WILL DEPEND MORE ON SITE SPECIFIC ACTIVITIES RATHER THAN THE SIZE OR CONFIGURATION OF THE SYSTEM.

INSPECTIONS SHOULD BE PERFORMED MORE OFTEN IN EQUIPMENT WASHDOWN AREAS, IN CLIMATES WHERE SANDING AND/OR SALTING OPERATIONS TAKE PLACE, AND IN OTHER VARIOUS INSTANCES IN WHICH ONE WOULD EXPECT HIGHER ACCUMULATIONS OF SEDIMENT OR ABRASIVE/CORROSIVE CONDITIONS. A RECORD OF EACH INSPECTION IS TO BE MAINTAINED FOR THE LIFE OF THE SYSTEM

### MAINTENANCE

CMP DETENTION SYSTEMS SHOULD BE CLEANED WHEN AN INSPECTION REVEALS ACCUMULATED SEDIMENT OR TRASH IS CLOGGING THE DISCHARGE ORIFICE.

ACCUMULATED SEDIMENT AND TRASH CAN TYPICALLY BE EVACUATED THROUGH THE MANHOLE OVER THE OUTLET ORIFICE. IF MAINTENANCE IS NOT PERFORMED AS RECOMMENDED, SEDIMENT AND TRASH MAY ACCUMULATE IN FRONT OF THE OUTLET ORIFICE. MANHOLE COVERS SHOULD BE SECURELY SEATED FOLLOWING CLEANING ACTIVITIES. CONTECH SUGGESTS THAT ALL SYSTEMS BE DESIGNED WITH AN ACCESS/INSPECTION MANHOLE SITUATED AT OR NEAR THE INLET AND THE OUTLET ORIFICE. SHOULD IT BE NECESSARY TO GET INSIDE THE SYSTEM TO PERFORM MAINTENANCE ACTIVITIES, ALL APPROPRIATE PRECAUTIONS REGARDING CONFINED SPACE ENTRY AND OSHA REGULATIONS SHOULD BE FOLLOWED.

ANNUAL INSPECTIONS ARE BEST PRACTICE FOR ALL UNDERGROUND SYSTEMS. DURING THIS INSPECTION, IF EVIDENCE OF SALTING/DE-ICING AGENTS IS OBSERVED WITHIN THE SYSTEM, IT IS BEST PRACTICE FOR THE SYSTEM TO BE RINSED, INCLUDING ABOVE THE SPRING LINE SOON AFTER THE SPRING THAW AS PART OF THE MAINTENANCE PROGRAM FOR THE SYSTEM.

MAINTAINING AN UNDERGROUND DETENTION OR INFILTRATION SYSTEM IS EASIEST WHEN THERE IS NO FLOW ENTERING THE SYSTEM. FOR THIS REASON, IT IS A GOOD IDEA TO SCHEDULE THE CLEANOUT DURING DRY WEATHER.

THE FOREGOING INSPECTION AND MAINTENANCE EFFORTS HELP ENSURE UNDERGROUND PIPE SYSTEMS USED FOR STORMWATER STORAGE CONTINUE TO FUNCTION AS INTENDED BY IDENTIFYING RECOMMENDED REGULAR INSPECTION AND MAINTENANCE PRACTICES. INSPECTION AND MAINTENANCE RELATED TO THE STRUCTURAL INTEGRITY OF THE PIPE OR THE SOUNDNESS OF PIPE JOINT CONNECTIONS IS BEYOND THE SCOPE OF THIS GUIDE.

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CMP DETENTION SYSTEMS

CONTECH  
**DYODS**  
DRAWING

DYO30787 Euclid and Walnut  
Underground Detention  
Ontario, CA  
DETENTION SYSTEM

PROJECT No.: 20769	SEQ. No.: 30787	DATE: 4/26/2023
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.:		1

## APPENDIX 6

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### SUPPORTING DOCUMENT (MPD MAP)



# APPENDIX 7

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## SOILS REPORT



**GEOTECHNICAL EXPLORATION REPORT**

**PROPOSED EUCLID AND WALNUT  
MIXED-USE DEVELOPMENT**

**112 WALNUT STREET, 2502 AND 2530 EUCLID AVENUE  
ONTARIO, CALIFORNIA**

**Prepared For** LEGACY/COLLIER RESIDENTIAL, LLC  
5154 CALIFORNIA AVENUE  
IRVINE, CALIFORNIA 92617

**Prepared By** LEIGHTON AND ASSOCIATES, INC.  
17781 COWAN  
IRVINE, CALIFORNIA 92614

Project No. 13493.001

May 13, 2022

May 13, 2022

Project No. 13493.001

Legacy/Collier Residential, LLC  
5154 California Avenue  
Irvine, California 92617

Attention: Mr. David Pinto

**Subject: Geotechnical Exploration Report  
Proposed "Euclid and Walnut Mixed Use" Development  
112 Walnut Street, 2502 and 2530 Euclid Avenue  
Ontario, San Bernardino County, California**

In accordance with our March 30, 2022 proposal, Leighton and Associates, Inc. submits this geotechnical engineering report for the proposed Euclid and Walnut Mixed-Use Development located at 112 Walnut Street, 2502 and 2530 Euclid Avenue in the City of Ontario, California. The purpose of our study was to evaluate the subsurface soil and groundwater conditions at the site to provide geotechnical recommendations for the design and construction of the proposed concept as currently planned. The results of our exploration, findings, conclusions and recommendations are presented in this report.

The recommendations presented in this report are considered to be preliminary and subject to revision based upon the limited information regarding the proposed development. Upon review of project design concept plans, revision to the recommendations may be considered necessary. In addition, revision to design recommendations may be necessary upon review by the local building official or their designated, third party technical reviewer.

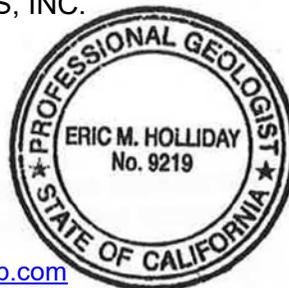
We sincerely appreciate the opportunity to be of service to you. If you have any questions or if we can be of further service, please contact us at **(866) LEIGHTON**; directly at the phone extensions or e-mail as listed below.

Respectfully submitted,

LEIGHTON AND ASSOCIATES, INC.



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## 1.0 INTRODUCTION

### 1.1 Site Description

The project site is a rectangular parcel of land, approximately 10.6-acres in size, located at the northwest corner of Walnut Street and Euclid Avenue in the city of Ontario, California. The site consists of the properties located at the street addresses of 112 W. Walnut Street, and 2502 and 2530 S. Euclid Avenue. The site is bordered by Euclid Avenue on the east, Walnut Street to the south, and residential development on the west and north. The southeastern region of the property is occupied by an existing Carl's Jr. restaurant. The site location (latitude 34.0275°, longitude -117.6524°) and immediate vicinity are shown on Figure 1, *Site Location Map*.

Based on visual site reconnaissance and review of the *Alta/NSPS Land Title Survey* prepared by Hillwig-Goodrow Inc., the site is currently occupied by a large rectangular-shaped structure formerly used as a K-Mart store located in the western portion of the site, and a strip mall retail development in the northeast region. The remainder of the site was generally paved with asphalt concrete and served as the parking lot for the development. The property is relatively flat, generally level with the adjacent roadways with site elevations (EL.) ranging from approximately EL. +823 feet above mean sea level (msl) in the northeastern region to approximately EL. +812 feet msl in the southwest region.

Based on review of historic aerial photographs (NETR, 2021), the project site appears to have a similar configuration dating back to at least 1985. The strip mall located in the northeast corner of the site was constructed between 1980 and 1985 and the K-Mart and Carl's Jr. structures were constructed at some point between 1966 and 1980. Prior to at least 1966, the site seems to have been used for agricultural purposes.

### 1.2 Proposed Development

Our understanding of the proposed development is based on review of the *Euclid and Walnut Mixed Use Site Plan Options A and B, Scale 1" = 100'*, dated March 10, 2022, prepared by AO Architects (AOA, 2022). The development conceptually consists of two options for a proposed mixed-use development with 3- to 4-story residential and commercial structures:

- Option A includes a total of 346 residential units in 8 structures with 5,000 square feet of commercial development. In the Option A development scheme it appears the existing Carl's Jr. restaurant in the southeast corner of the site will remain.
- Option B consists of full-site development with 376 residential units in 10 structures with 11,400 square feet of commercial development.

We understand the current preferred option for development is Option A and, therefore, is the development scheme that serves as the basis for the geotechnical recommendations presented in this report. Ancillary improvements will include pavement for vehicle access and parking, landscaping, utility infrastructure, and flatwork.

### **1.2.1 Structural Loads**

Information regarding total building height, finish floor elevations, and proposed loading conditions were not readily available at the time of this report. However, we understand that subterranean levels are not currently planned. Based upon the type of development planned for project site and our experience with similar developments, the buildings have been assumed to consist of wood frame structures supported by load bearing wall and isolated columns. Structural loads have been assumed to be a maximum of 3 kips per lineal foot for bearing walls and 40 kips for columns, Should additional design information become available, it should be provided to Leighton for review.

### **1.2.2 Finish Floor Elevations**

The finish first floor elevations of the proposed structures have been assumed to be within 1 to 2 feet of existing grade with floor elevations established or minimize cut and fill required on site. The actual quantity of cut and fill will be dependent upon the actual floor elevations determined by the project civil engineer and the quantity of overexcavation required to prepare building pad areas.

### **1.2.3 Pavement**

Pavements proposed for the development are expected to be primarily subjected to automobiles and occasional heavy truck traffic. Pavement

recommendations have been based upon a Traffic Index of 4.0 for automobile parking stalls; 5.0 for general purpose drive aisles; and 6.0 for areas subject to heavy trucks. Pavement recommendations have been based upon a twenty-year design life.

#### **1.2.4 Ancillary Improvements**

Based on email correspondence with Mr. Steve Ellis with Fuscoe Engineering, Inc., we understand preliminary infiltration system design is considering an invert depth of 15 feet below ground surface (bgs) along the southern property line.

### **1.3 Purpose and Scope**

The purpose of our geotechnical exploration was to evaluate the subsurface conditions at the site relative to the proposed development concept and provide geotechnical recommendations to aid in the design and construction for the project as currently planned. The scope of this geotechnical exploration included the following tasks:

- **Background Review** – We reviewed readily available in-house geotechnical reports, literature, aerial photographs, and maps relevant to the site. We evaluated geological hazards and potential geotechnical issues that may significantly impact the site. The documents reviewed are listed in Section 7.0.
- **Pre-Field Exploration Activities** – A site visit was performed by a member of our technical staff to mark the proposed exploration locations. Underground Service Alert (USA) was notified to identify and mark the locations of existing underground utilities prior to our subsurface exploration.
- **Field Exploration** – Our subsurface exploration was performed on April 6, 2022 and included drilling, logging, and sampling of five (5) hollow-stem auger borings (designated LB-1 through LB-5) to approximate depths ranging from 25 to 51½ feet below the existing ground surface (bgs). One (1) additional boring (designated LP-2) was drilled to an approximate depth of 20 feet bgs for subsequent percolation testing. To supplement the hollow-stem auger borings, four (4) Cone Penetrometer Test (CPT) soundings (designated CPT-1 through CPT-4) were advanced to depths of approximately 50 feet bgs. The approximate locations of the explorations are shown on Figure 2, *Geotechnical Map*. The boring and CPT logs are presented in Appendix A, *Exploration Logs*.

During drilling of the hollow-stem auger borings both bulk and drive samples were obtained from the borings for geotechnical laboratory testing. Driven ring samples were collected from the borings using a Modified California ring-lined sampler conducted in accordance with ASTM Test Method D 3550. Representative samples were also collected by conducting the Standard Penetration Test (SPT) within the borings in accordance with ASTM Test Method D 1586. Samples were collected at 5-foot intervals throughout the depth of exploration. In both test methods, the sampler is driven below the bottom of the borehole by a 140-pound weight (hammer) free-falling 30 inches. The drilling rig was equipped with an automatic hammer to provide greater consistency in the drop height and striking frequency. The number of blows to drive the sampler the final 12-inches of the 18-inch drive interval is termed the “blowcount” or SPT N-value. The N-values provide a measure of relative density in granular (non-cohesive) soils and comparative consistency in cohesive soils. The number of blows per 6 inches of penetration was recorded on the boring logs included in Appendix A, *Exploration Logs*.

The borings were logged in the field by a geologist from our firm. Each soil sample collected was reviewed and described in accordance with the Unified Soil Classification System (USCS). The samples were sealed and packaged for transportation to our laboratory. After completion of drilling, the borings were backfilled with soil cuttings and patched with cold-mix asphalt concrete at the surface.

- Percolation Testing – Boring LB-4 /LP-1 and LP-2 were converted to temporary percolation test wells upon completion of drilling and sampling. The test wells consisted of 2-inch diameter slotted (0.020”) PVC well casing surrounded by #3 Monterey Sand placed in the annulus of the borehole within the test zone. In-situ percolation testing was performed in general accordance with the County of San Bernardino guidelines. The results of the percolation testing are presented in Appendix B, *Percolation Test Data*. Additional details regarding the field percolation tests and results are presented in Section 2.4.1, *Infiltration*. Upon completion of the percolation testing, the well casing was removed from each boring and the borings were backfilled with soil cuttings and patched at the surface with cold-mix asphalt concrete to match existing site conditions.
- Laboratory Testing – Laboratory tests were performed on selected soil samples obtained from the borings during our field exploration. The laboratory testing

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program was designed to evaluate the physical and engineering characteristics of the onsite soil. Tests performed during this exploration included:

- In- situ Moisture Content and Dry Density (ASTM D2216 and ASTM D2937);
- Atterberg Limits (ASTM D 4318)
- Direct Shear (ASTM D 3080)
- Consolidation (ASTM D 2435);
- One Dimensional Swell or Settlement (ASTM D 4546)
- Maximum Dry Density (ASTM D 1557);
- Particle Size Distribution (ASTM D 6913);
- Expansion Index (ASTM D 4829);
- R-value (DOT CA Test 301)
- Sand Equivalent Test (DOT CA Test 217); and
- Corrosivity Suite – pH, Sulfate, Chloride, and Resistivity (California Test Methods 417, 422, and 532/643).

Results of the in-situ moisture content and dry density testing are presented on the boring logs in Appendix A. Other laboratory test results are presented in Appendix C, *Laboratory Test Results*

- *Engineering Analysis* – The data obtained from our background review and field exploration were evaluated and analyzed to develop recommendations for the proposed development.
- *Report Preparation* – This report presents our findings, conclusions, and recommendations for the proposed development.

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## 2.0 GEOTECHNICAL FINDINGS

### 2.1 Regional Geologic Setting

The project site is located in the Chino Basin in the northern portion of the Peninsular Ranges geomorphic province of California. Major structural features surround this region, including the Cucamonga fault and the San Gabriel Mountains to the north, the Chino fault and Puente/Chino Hills to the west, and the San Jacinto fault to the east. This is an area of large-scale crustal disturbance as the relatively northwestward moving Peninsular Ranges province collides with the Transverse Ranges province (San Gabriel Mountains) to the north. Several active and potentially active faults have been mapped in the region and are believed to accommodate compression associated with this collision. The Sierra Madre fault, a major structural feature along the southern flank of the San Gabriel Mountains, is located approximately 8.3 miles north of the site. This fault, as well as other faults in the region, has the potential for generating strong ground motions at the project site. Further discussion of faulting relative to the site is provided in Section 3.0, Seismic and Geologic Hazards.

The site is located in an area underlain by thick accumulations of alluvial sand, silt, gravel, cobbles, and boulders eroded from the mountains and deposited in the site vicinity by the Santa Ana River and smaller tributaries such as the San Antonio Creek and Cucamonga Creek (Morton and Miller, 2006; Dibblee, 2002).

### 2.2 Surficial Geology

The Quaternary age deposits that cover the floor and margins of the Chino Basin are composed primarily of unconsolidated recent (Holocene) young alluvial fan deposits consisting predominately of sands and gravels derived from the surrounding mountains and hills with finer clays and silts deposited into the basin over the broad floodplain. The surficial geologic units mapped in the vicinity of the project site are shown on Figure 3, *Regional Geology Map*.

### 2.3 Subsurface Soil Conditions

Based on our subsurface explorations, the site is underlain by a relatively thin mantle of undocumented artificial fill materials (Afu) overlying Quaternary-aged (Holocene) young alluvial fan deposits (Qyf).

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A general description of the encountered soils is presented as follows:

### **2.3.1 Undocumented Artificial Fill (Afu)**

The artificial fill encountered in our borings extended to a depth of approximately 5 feet below grade and likely associated with the existing site improvements. In general, the encountered fill soils consist primarily of sandy silt and silty sand. Localized thicker accumulations of fill materials may be present between explored locations, particularly beneath the existing buildings.

### **2.3.2 Quaternary-Aged Young Alluvial Fan Deposits (Qyf)**

Below the mantle of artificial fill material, Quaternary-aged young alluvial fan deposits were encountered in the borings to the maximum depth explored (approximately 51½ feet). As encountered, this younger alluvial unit consists of stiff to very stiff sandy silt, silty clay, and clay; interbedded with medium dense to dense silty sand, sand with silt, and sand with gravel. Although relatively variable across the site, in general, fine-grained material is more prevalent in the upper 15 to 25 feet with coarser grained material becoming more frequent at depths of 25 feet or greater.

Detailed descriptions of the subsurface soils encountered in the borings are presented on the logs included in Appendix A. The locations of the borings are shown on Figure 2, *Geotechnical Location Map*.

## **2.4 Engineering Properties**

The results of laboratory testing are presented in Appendix C of this report. Discussion regarding select engineering properties of these soils are described in the following sections based upon the results of the laboratory testing program.

### **2.4.1 Expansive Soil Characteristics**

Expansive soils contain significant amounts of clay particles that swell considerably when wetted and which shrink when dried. Foundations constructed on these soils are subject to uplifting forces caused by the swelling. Without proper mitigation measures, heaving and cracking of both building foundations and slabs-on-grade could result.

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One (1) near-surface bulk soil sample collected from Boring LB-1 was tested for expansion potential. The test results indicate an Expansion Index (EI) value of 18, corresponding to a “Very Low” expansion potential. The Expansion Index laboratory test results are included in Appendix C of this report.

Variance in expansion potential of onsite soil is anticipated; therefore, additional testing is recommended upon completion of site grading and excavation to confirm the expansion potential presented in this report. For purposes of this report and based upon visual characterization of alluvial materials at approximate foundation depth, low expansion potential of site materials may be considered to support design and verified upon completion of earthwork grading.

#### **2.4.2 Soil Corrosivity**

One (1) near-surface bulk soil sample collected from Boring LB-3 was tested for corrosivity to assess corrosion potential to buried concrete. The chemical analysis test results for the onsite soil from our geotechnical exploration are included in Appendix C of this report.

The test results indicate a soluble sulfate concentration of 266 parts per million (ppm), chloride content of 40 ppm, pH 7.92, and a minimum resistivity value of 1,335 ohm-cm.

The results of the resistivity tests indicate the underlying soil is severely corrosive to buried ferrous metals per ASTM STP 1013. Based on the measured water-soluble sulfate contents from the soil samples, concrete in contact with the soil is expected to have negligible exposure to sulfate attack per ACI 318 (ACI, 2014). The samples tested for water-soluble chloride content indicate a low potential for corrosion of steel in concrete due to the chloride content of the soil.

#### **2.4.3 Soil Compressibility**

Three (3) samples of the onsite soils recovered from the borings were subjected to consolidation testing to evaluate the compressibility of these materials under assumed loads representative of anticipated structural bearing stresses. The results of testing indicate these soils exhibit a low

compressibility potential. The results of testing are presented in Appendix C.

#### **2.4.4 Shear Strength**

Evaluation of the shear strength characteristics of the soils included laboratory direct shear testing. The results of testing are included in Appendix C that provide values of angle of internal friction ( $\phi$ ) and cohesion (c) for use in geotechnical analysis.

#### **2.4.5 Excavation Characteristics**

Based on our subsurface explorations performed at the site and our experience from grading jobs in the vicinity of the site, we anticipate the onsite artificial fill and alluvial materials can generally be excavated using conventional excavation equipment in good operating condition.

The soils within the planned excavation depths are variable, and locally consist of layers that contain granular, unconsolidated soils with little or no cementation and few fines. These materials are prone to cave in or collapse in unshored excavations. See Section 5.4, *Temporary Excavations* for additional information on soil type and excavation characteristics.

### **2.5 Groundwater Conditions**

Groundwater was not encountered during our subsurface exploration to the maximum depth of 51.5 feet bgs. Based on review of the *Chino Basin Optimum Basin Management Plan 2008 State of the Basin Report* (Wildermuth, 2009), groundwater depth at the site is anticipated to be on the order of approximately 225 feet bgs. Review of available information from the California Department of Water Resources (DWR, 2022) for a nearby groundwater monitoring well located approximately 1.8 miles northwest of the project site (State Well # 01S07W29A001S) indicates the shallowest groundwater level measured for a monitoring period between October 1959 and September 2021 was approximately 214 feet bgs in 1959; with the most recent groundwater levels documented to be on the order of 250 feet bgs.

Based on these findings, groundwater is not expected to pose a constraint during or after construction. Fluctuations of the groundwater level, localized zones of perched water, and an increase in soil moisture, should be anticipated during and

following the rainy seasons or periods of locally intense rainfall or storm water runoff, or from stormwater infiltration.

## 2.6 Infiltration

Percolation testing was performed in temporary wells installed within borings LB-4/LP-1 and LP-2 located in the southern region of the site with test zone at depths of 17 to 22 feet bgs and 15 to 20 feet bgs, respectively. The percolation tests were conducted in general accordance with the *San Bernardino County Technical Guidance Document (TGD) for Water Quality Management Plans (2013)*. Results of the percolation testing are presented in Appendix B. The test locations and tested depth intervals are shown on Figure 2.

A boring percolation test is useful for field measurements of the infiltration rate of soils, and is suited for testing when the design depth of the infiltration device is deeper than current existing grades, especially in areas where it is difficult to dig test pits, or where the depths of these test pits would be considerably deep. At the subject site, testing consisted of advancing the borings to the anticipated depth for the invert of the proposed infiltration devices.

The *Percolation Test Procedure* (falling-head test method) as outlined in the County Guidelines was implemented at each percolation test well location. The infiltration rate was calculated by dividing the rate of discharge by the infiltration surface area, or flow area. The volume of discharge was calculated by adding the total volume of water that dropped within the PVC pipe and within the annulus, and incorporating a porosity reduction factor to account for the porosity of the annulus material. The flow area was based on the average water height within the test well.

Detailed results of the field testing data and measured infiltration rate for the test well are presented in Appendix B. The test results are summarized in the table below:

**Table 1 – Measured (Unfactored) Infiltration Rate**

Test Well Designation	Approximate Depth of Test Zone (feet bgs)	Measured Infiltration Rate (inches per hour)
LB-4/LP-1	17 to 22	0.32
LP-2	15 to 20	0.69

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Based on the results of our field percolation testing that was performed at the site, the measured (unfactored) infiltration rates for the two (2) tests performed were 0.32 inches per hour (LB-4/LP-1) and 0.69 inches per hour (LP-2), respectively. According to the *San Bernardino County Technical Guidance Document (TGD) for Water Quality Management Plans* (2013), the measured infiltration rate at both test well locations technically exceeds the minimum feasibility criteria of 0.3 inch per hour. However, implementation of a minimum factor of safety of 2.0 as required for the design infiltration rate indicates the depth and location tested for LB-4/LP-1 is considered infeasible for infiltration.

In consideration of the general greater prevalence of coarse-grained material at the site below depths of 25 feet or deeper, a more feasible infiltration rate may be achieved in percolation testing performed at depths greater than those tested during this exploration.

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### 3.0 SEISMIC AND GEOLOGIC HAZARDS

Depending upon the geographic location and geologic setting of a particular site in southern California, seismic-related hazards can include surface fault rupture; strong ground shaking; seismically-induced landslides; liquefaction and associated effects such as settlement and/or lateral spreading; and seiches, tsunamis and/or flooding depending upon the proximity of bodies of water. The following sections discuss each of these hazards and potential effect upon this site.

#### 3.1 Surface Fault Rupture

Known surface faults in the region are mapped on Figure 4, *Regional Surface Fault and Historical Seismicity Map*. Review of available literature indicates that no known active faults have been mapped across the site, and the site is **not** located within a currently established *Alquist-Priolo Earthquake Fault Zone* (Bryant and Hart, 2007). Therefore, a surface fault rupture hazard evaluation is not mandated for this site. Given an absence of known faults, potential risk for surface fault rupture at this site is low.

#### 3.2 Regional Faulting

The location of the closest active faults to the site was evaluated using the United States Geological Survey (USGS) Earthquake Hazards Program National Seismic Hazard Maps (USGS, 2008b). The closest active faults to the site with the potential for surface fault rupture are the Chino fault, San Jose fault, Cucamonga fault and Sierra Madre fault, located approximately 4.7 miles, 6.0 miles, 7.9 miles and 8.3 miles from the site, respectively. The San Andreas fault, which is the largest active fault in California, is approximately 20.3 miles northeast of the site on the north side of the San Gabriel Mountains. As discussed, major regional faults with surface expression in proximity to the site are shown on Figure 4, *Regional Fault and Historic Seismicity Map*.

#### 3.3 Strong Ground Shaking

The principal seismic hazard to the site is ground shaking resulting from an earthquake occurring along any of several major active and potentially active faults in southern California (Figure 4). The intensity of ground shaking at a given location depends primarily upon the earthquake magnitude, the distance from the source, and the site response characteristics. Accordingly, design of the project should be performed in accordance with all applicable current codes and standards

utilizing the appropriate seismic design parameters to reduce seismic risk as defined by California Geological Survey (CGS) Chapter 2 of Special Publication 117A (CGS, 2008). The 2019 edition of the California Building Code (CBC) is the current edition of the code. Through compliance with these regulatory requirements and the utilization of appropriate seismic design parameters selected by the design professionals, potential effects relating to seismic shaking can be reduced.

The following code-based seismic parameters should be considered for design under the 2019 CBC:

**Table 2 – 2019 CBC Based Ground Motion Parameters (Mapped Values)**

<b>Categorization/Coefficient</b>	<b>Code-Based</b>
Site Latitude	34.0275°
Site Longitude	-117.6523°
Site Class	D
Mapped Spectral Response Acceleration at Short Period (0.2 sec), $S_S$	1.5 g
Mapped Spectral Response Acceleration at Long Period (1 sec), $S_1$	0.579 g
Short Period (0.2 sec) Site Coefficient, $F_a$	1.0
Long Period (1 sec) Site Coefficient, $F_v$	1.72*
Adjusted Spectral Response Acceleration at Short Period (0.2 sec), $S_{MS}$	1.5 g
Adjusted Spectral Response Acceleration at Long Period (1 sec), $S_{M1}$	0.996*
Design Spectral Response Acceleration at Short Period (0.2 sec), $S_{DS}$	1.0 g
Design Spectral Response Acceleration at Long Period (1 sec), $S_{D1}$	0.664*
Site Coefficient for Peak Ground Acceleration, $F_{PGA}$	1.1
Peak Ground Acceleration adjusted for Site Class effects, $PGA_M$	0.644 g

1. All were derived from the ASCE 7 Hazard Tool web page: <https://asce7hazardtool.online/>
2. All coefficients in units of g (spectral acceleration)
3. \*Requires  $C_s$  calculation, see *Note* below.

Based on Table 1613.2.3(2) of the 2019 CBC, the long period site coefficient ( $F_v$ ) should be determined in accordance with Section 11.4.8 of ASCE 7-16 since the mapped spectral response acceleration at 1 second is greater than 0.2g for Site Class D. In accordance with Section 11.4.8 of ASCE 7-16, a site-specific seismic analysis is required; however, the values provided herein may be utilized if design

is performed in accordance with exception (2) in Section 11.4.8 of ASCE 7-16, with special requirements for the seismic response coefficient ( $C_s$ ) as noted below. The project structural engineer should review the seismic parameters.

*Note: Long period coefficient ( $F_v$ ) of 1.7 may be utilized for calculation of  $T_s$ , provided that the value of the Seismic Response Coefficient ( $C_s$ ) is determined by Equation 12.8-2 for values of the fundamental period of the building ( $T$ ) less than or equal to  $1.5T_s$ , and taken as 1.5 times the value computed in accordance with either equation 12.8-3 for  $T$  greater than  $1.5T_s$  and less than or equal to  $T_L$  or equation 12.8-4 for  $T$  greater than  $T_L$ .*

### 3.4 **Liquefaction Potential**

The term liquefaction is generally referenced to loss of strength and stiffness in soils due to build-up of pore water pressure when subject to cyclic or monotonic loading. Both sandy and clayey soils are susceptible to loss of strength and stiffness. Because of the difference in strength characteristic and methods for evaluating strength loss potential for granular and clayey soils, the term liquefaction is used for granular soils while cyclic softening is used for fine-grained soils (i.e. clays and plastic silts).

In general, adverse effects of liquefaction or cyclic softening include excessive ground settlement, loss of bearing support for structural foundations, and seismically-induced lateral ground deformations such as lateral spreading. Depending upon the relative thickness of the liquefied strata with respect to overlying non-liquefiable soils, other potentially adverse effects such as ground oscillation and ground fissuring may occur.

As regionally mapped on the California Geological Survey *Earthquake Zones of Required Investigation (EZRI) for the Ontario Quadrangle* (CGS, 200) and shown on Figure 4, *Seismic Hazard Zone Map*, the site is **not** within an area potentially susceptible to liquefaction. In addition, review of the San Bernardino County *Geologic Hazard Overlays* map FH27C (2010), the project site is not located within a County liquefaction susceptibility zone. The historically shallowest groundwater level recorded by DWR near the site is 214 feet bgs and the recent recorded depth to groundwater is greater than 200 feet bgs. Based on these findings, liquefaction is not considered a hazard at the site.

### 3.5 **Seismically-Induced Settlement**

Seismically-induced settlement consists of dynamic settlement of unsaturated soil (above groundwater) and liquefaction-induced settlement (below groundwater).

These settlements occur primarily within low density sandy soil due to reduction in volume during and shortly after an earthquake event.

As previously discussed, the site is not considered susceptible to the occurrence of liquefaction. Therefore, seismically-induced settlement will consist solely of densification of non-saturated soils upon exposure to strong ground shaking. Evaluation of the potential for such seismically-induced settlements to occur was performed for the Geomean Maximum Considered Event ( $MCE_G$ ) and the associated ground motion that corresponds to a 2,475 year average return period (ARP) for the CPT soundings that were advanced to a depth of 50 feet below grade. The results of the analysis are presented below:

**Table 3 – Seismically-Induced Settlement -  $MCE_G$  Seismic Event**

Design Scenario		CPT I.D.	Settlement (inches)		
PGA	$M_w$		Liquefaction <sup>(1)</sup>	Non-Liquefaction <sup>(2)</sup>	Total
0.64	6.78	CPT-1	No Liquefaction	0.23	0.23
		CPT-2	No Liquefaction	0.09	0.09
		CPT-3A	No Liquefaction	0.16	0.16
		CPT-4	No Liquefaction	0.45	0.45
Notes: (1) Liquefaction-induced settlement; Design Groundwater below depth of 50 feet					
(2) Non-liquefaction induced ("dry sand") settlement					

The results of the analysis indicated the magnitude of seismically-induced settlement under the  $MCE_G$  scenario will be less than ½ to 1 inch. Based on the general consistency in soil conditions as depicted by the test borings conducted at the site, the differential settlement is estimated to be approximately ½ inch over a distance of at least 40 feet, which results in an angular distortion less than 0.0021 in./in., which is anticipated to be within tolerable levels for structural design.

### 3.6 Lateral Spreading

Liquefaction may also cause lateral spreading. For lateral spreading to occur, the liquefiable zone must be continuous, unconstrained laterally, and free to move along gently sloping ground toward an unconfined area. Since the site is relatively flat and constrained laterally and liquefaction is not considered a hazard at the site, earthquake-induced lateral spreading is also not considered a hazard at the site.

### 3.7 **Earthquake-Induced Landsliding**

As regionally mapped on the California Geological Survey *Earthquake Zones of Required Investigation for the Torrance Quadrangle* (CGS, March 25, 1999) and shown on Figure 4, *Seismic Hazard Zone Map*, the site is **not** located within an area potentially susceptible to liquefaction (CGS, 2000a). Review of the San Bernardino County *Geologic Hazard Overlays* map FH27C (2010) indicates the project site is not located within a County landslide susceptibility zone. The project site is relatively flat with no significant slopes on or immediately adjacent. It is our opinion that seismically-induced landsliding is not considered a hazard at the site.

### 3.8 **Flooding**

According to a Federal Emergency Management Agency (FEMA) flood insurance rate map (FEMA, 2015), the project site is located within a flood hazard area identified as “Zone X”, which is defined as an area of minimal flood hazard. Regionally, storm runoff flow is generally directed to the southwest. As shown on Figure 5, *Flood Hazard Zone Map*, the site is **not** located within a 100-year or 500-year flood hazard zone.

Earthquake-induced flooding can be caused by failure of dams or other water-retaining structures as a result of earthquakes. As shown on Figure 6, *Dam Inundation Map*, the site **is** mapped within an inundation zone associated with San Antonio Dam. Catastrophic failure of this dam is expected to be a very unlikely event in that dam safety regulations exist and are enforced by the DOSD, Army Corps of Engineers and Department of Water Resources. Inspectors may require dam owners to perform work, maintenance or implement controls if issues are found with the safety of the dam. Due to the location and distance of the site from San Antonio Dam, along with the unlikely failure of the dam, the potential for earthquake-induced flooding to occur due to a failure of this dam is considered low.

### 3.9 **Seiches and Tsunamis**

Seiches are large waves generated in enclosed bodies of water in response to ground shaking. Tsunamis are waves generated in large bodies of water by fault displacement or major ground movement. Based on the absence of an enclosed water body near the site and the inland location of the site, seiche and tsunami risks at the site are considered negligible.

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### 3.10 **Methane**

Based on review of State of California Geologic Energy Management Division (CalGEM) records, the project site is not located within an oil field boundary (CalGEM, 2021). The nearest documented oil well to the site is located approximately 0.6 miles southwest of the site (API# 0407100083; Donald B. Lamont, Donald B. Lamont Lease, Well No. 1) and is reported as a plugged dry hole (CalGEM, 2021). Based on these findings, the potential for methane hazard at the site is low.

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## 4.0 FINDINGS AND CONCLUSIONS

No evidence of adverse geological or geotechnical hazards was noted at the site that will preclude the development of the project as currently planned. Presented below is a summary of findings based upon the results of our geotechnical exploration of the site. Geotechnical recommendations for design and construction are presented in Section 4.0 of this report.

- The potential for surface fault rupture is considered to be low since the site is not located in a designated Alquist-Priolo Earthquake Fault Zone.
- The site may be subjected to strong ground shaking during the design life of the proposed development due to the proximity of several active faults in the vicinity of the site. The Chino fault, located approximately 4.7 miles southwest of the site is the nearest active fault to the site with a potential for surface rupture and generation of strong ground shaking. However, strong ground shaking may occur at the site due to seismic activity on one of a number of faults in the area.
- The site is **not** located within an area shown as susceptible to liquefaction according to the CGS *Earthquake Zones of Required Investigation Map* for the Ontario Quadrangle or the San Bernardino County *Geologic Hazard Overlays* map FH27C. Given the lack of shallow groundwater underlying the site, the potential for liquefaction is considered low.
- Groundwater was not encountered to the maximum depth explored of 51½ feet bgs. Recent nearby groundwater levels as documented by the California Department of Water Resources indicate the depth to groundwater is likely on the order of greater than 200 feet bgs. Groundwater is not anticipated to be a constraint to site grading or construction.
- At a minimum, development of the site for support of the proposed mixed-use development should include overexcavation and recompaction of the existing artificial fill materials as well as a portion of the underlying native soils to develop a layer of structural compacted fill to provide foundation support.
- The results of the infiltration testing performed at the site indicate stormwater infiltration is marginally feasible based on the tested locations and depths.
- The proposed structures may be supported by a shallow foundation system supported on structural compacted fill underlain by suitable bearing native soils.

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## 5.0 GEOTECHNICAL DESIGN RECOMMENDATIONS

Based upon this study, we conclude that the proposed development for the subject site is feasible from a geotechnical standpoint, provided that the recommendations presented in this report are properly incorporated in design and construction. Geotechnical recommendations for the proposed development are presented in the following sections and are intended to provide sufficient geotechnical information to develop the project plans in accordance with 2019 CBC requirements. The following recommendations may be superseded by more restrictive requirements of the architect, structural engineer, and/or local building official.

The recommendations below are based upon the exhibited geotechnical engineering properties of the soils and their anticipated response both during and after construction. The recommendations are also based upon proper field observation and testing during construction. The project geotechnical engineer should be notified of suspected variances in field conditions to determine the effect upon the recommendations subsequently presented. These recommendations are considered minimal and may be superseded by more restrictive requirements of the civil and structural engineers, the City of Ontario, the County of San Bernardino and other governing agencies.

Leighton should review the grading plans, foundation plans and project specifications as they become available to verify that the recommendations presented in this report have been incorporated into the plans for this project.

### 5.1 Earthwork

All site grading should be performed in accordance with the project specifications that are prepared by the appropriate design professional. The guide specifications presented in Appendix D, General Earthwork and Grading Recommendations may be used as a guideline in developing the project specifications.

Earthwork and grading operations are recommended to be observed and appropriate testing be performed by representatives of the geotechnical engineer to verify that the site is properly prepared, the selected fill materials are satisfactory, and that placement and compaction of fills has been performed in accordance with our recommendations and the project specifications.

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### **5.1.1 Site Preparation**

Initial preparation of the site should include demolition and removal of the existing facility from the project site including all foundations, slabs and underground structures. Existing utilities not planned for reuse with the proposed development should be either removed in their entirety, properly abandoned in-place, or rerouted around the development area to preserve their function. Disposal of all debris and remnants of the existing development should be performed in accordance with the type of material and local regulations.

The existing development includes a relatively large paved parking lot that consists of asphalt concrete. Based upon the conditions encountered at the test boring locations, the thickness of the existing asphalt concrete ranged from 2½ to 5 inches underlain by base course that ranged from 3 to 12 inches in thickness. Reuse of the pavement with the proposed development will require consideration of proposed finish grades and the need to construct an asphalt overlay to prolong the service life of the pavement. Recommendations for reuse of the pavement can be provided upon request. However, for purposes of this report, the existing pavement is assumed to not be salvaged for reuse and will be removed from the site. If properly processed during demolition and removal, the pavement may be reused as the base course for construction of new pavement.

Upon completion of demolition and site clearing activities, the soils should be carefully observed for the removal of all unsuitable deposits. All undocumented fill or man-made debris, unsuitable native soils and former foundation remnants should be excavated and removed from the proposed building/structure footprint prior to fill placement.

### **5.1.2 Removals and Overexcavations**

The recommended depths of overexcavation presented below have been based upon the assumed structural loads and the recommended allowable bearing pressure. The actual depth recommended for preparation of foundation areas may be revised depending upon the actual footing sizes that result from structural design of the foundations. Consequently, the recommendations for building pad preparation/overexcavation should be reviewed by the geotechnical engineer as foundation design proceeds.

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To provide uniform foundation support and reduce the potential for excessive static settlement, all existing undocumented fill and any unsuitable soil, as deemed by the geotechnical engineer, should be removed to expose suitable native soils and replaced as engineered fill below the proposed building and other structural improvements. Based on our field explorations, we estimate removals of existing undocumented fill will be approximately 5 feet below existing grade across most of the site. Localized areas are anticipated to require deeper removals, in particular beneath the existing buildings and in areas of existing utilities.

Removals should be performed such that all undocumented fill is removed and replaced as engineered fill. In addition, overexcavations should be performed such that a minimum of 4 feet of engineered fill is established below the proposed building foundation elements and the at-grade slabs of the buildings. The lateral extent of overexcavation beyond foundations should be equal to the depth of overexcavation below the proposed foundations as measured at the excavation subgrade.

The depth of overexcavation in non-structural areas planned for new pavement construction is recommended to be 2 feet below the current grade or planned subgrade elevation to develop a suitable bearing subgrade for pavement support. Deeper overexcavations in localized areas may be recommended during grading by a representative of the geotechnical engineer depending on observed subsurface conditions.

### **5.1.3 Subgrade Preparation**

All excavation bottoms or removal bottoms should be observed by a representative of the geotechnical engineer prior to placement of fill or other improvements to determine that geotechnically suitable soil is exposed. Excavation bottoms observed to be suitable for fill placement or other improvements should be scarified to a depth of at least 8 inches, moisture-conditioned as necessary to achieve a moisture content of at least 2 percentage points above the optimum moisture content, and then compacted to a minimum of 90 percent of the maximum dry density as determined by ASTM Test Method D 1557 (Modified Proctor).

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#### **5.1.4 Fill Placement and Compaction**

The onsite soil, free of organic material, cobbles, boulders, rubble, and rock less than 3 inches in largest dimension, is suitable to be used as structural fill. All fill soil should be placed in loose lifts no greater than 8 inches in thickness, moisture-conditioned as necessary to a moisture content 1 to 2 percentage points above optimum moisture content and compacted using proper equipment to the minimum standard as noted below, unless stated otherwise in the specific sections.

- Fill soil should be moisture-conditioned and compacted to a minimum of 90 percent relative compaction as determined by ASTM Test Method D1557.
- Subgrade exposures should be moisture-conditioned and compacted to a minimum of 90 percent relative compaction as determined by ASTM Test Method D1557
- Base course material should be compacted to a minimum of 95 percent relative compaction.
- Utility trench backfill is discussed in Section 5.5.

Material imported to the site for use as fill should be reviewed and approved by the geotechnical engineer prior to import to the site and placement as fill. Imported soils should be very low in expansion potential (EI less than 20); non-corrosive to metals and concrete; and be free of hazardous substances.

When grading is interrupted by heavy rains, fill operations should not be resumed until the moisture content and the dry density of the placed fill are satisfactory.

#### **5.1.5 Shrinkage and Bulking**

The change in volume of excavated and recompacted soil varies according to soil type and location. This volume change is represented as a percentage increase (bulking) or decrease (shrinkage) in volume of fill after removal and recompaction. Field and laboratory data used in our calculations included laboratory-measured maximum dry density for the

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general soil type encountered at the subject site, the measured in-place densities of near surface soils encountered and our experience.

Earthwork operations are generally anticipated to be limited to soils to a depth of 5 to 6 feet below current grade with some additional overexcavation in localized areas of the site where unsuitable bearing/very loose relative density soils may be encountered in the southern to southwestern region of the site. Data regarding the in-place density of the near surface soils could not be collected due to the manner in which field exploration was encountered whereby the soils to a depth of 5 feet at the boring locations were pre-drilled by use of a hand auger to protect against damaging buried utilities. Therefore, earthwork quantities (shrinkage/bulking) are primarily based upon experience with similar materials at other project sites and the limited available data from soils recovered from a depth of 6 feet.

On a preliminary basis, the existing fill materials requiring removal and recompaction are anticipated to exhibit volume shrinkage on the order of 10 to 15 percent. The estimated shrinkage does not include material losses due to removal of organic material or other unsuitable bearing materials (debris, rubble, oversize material greater than 6-inches) and the actual shrinkage that occurs during grading may vary throughout the site.

#### **5.1.6 Reuse of Concrete and Asphalt Rubble**

If encountered during site clearing and/or during preparation activities, construction rubble (i.e., Portland cement concrete and asphalt concrete) may be incorporated in the proposed development. For use as structural fill, the processed material should be crushed to develop a relatively well-graded mixture with a maximum particle size of 3-inch nominal diameter. Concrete rubble should be free of rebar and processed asphalt pavement rubble may be used if mixed with the existing base course (where present). Processed material may be used as structural fill if uniformly mixed with onsite soils in proportion of 1 part processed material to 3 parts soil. For use as pavement base course, rubble should be crushed to satisfy gradation requirements of Section 200-2.4 of the *Standard Specifications for Public Works Construction*, (SSPWC, "Greenbook"). Such materials must be free of and segregated from any hazardous materials and/or organic material of any kind.

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## 5.2 **Foundation Design**

Preparation of the building areas should be performed as described in Section 5.1 of this report. Upon completion of building pad preparation, the soils that will provide support of the foundations are expected to consist of properly moisture-conditioned structural compacted fill that exhibits very low to low expansion potential underlain by suitable bearing native soils.

### 5.2.1 **Vertical Load Bearing Capacity**

The proposed structures are recommended to be supported by a shallow foundation system in which continuous strip footings are used for wall support and isolated square pad footings for column support. Footings to support the proposed buildings are recommended to be designed for a maximum net allowable soil bearing pressure of 2,500 pounds per square foot (psf) for continuous strip footings for wall support and 3,000 psf for isolated square pad footings for column support.

The foundations for ancillary structures separate from the proposed buildings are recommend to be designed for a maximum 2,000 pounds per square foot (psf) for continuous strip footings for wall support and 2,500 psf for isolated square pad footings for column support. The recommended bearing pressures assume the foundations will be supported by a layer of structural compacted fill that is a minimum 2 feet in thickness below foundations and extends laterally distance of at least 2 feet beyond the edges of the foundations.

The allowable bearing values may be increased by one-third when considering short-term seismic or wind loads. The recommended bearing pressure is net so the unit weight of concrete may be assumed to be 50 pcf when calculating the component of load demand due to foundation weight; the weight of soil backfill can be neglected when determining the downward loads.

The recommended allowable bearing pressures stated above have been based upon specific minimum footing sizes and embedment depths:

- Minimum widths for foundations are recommended to be 18 inches for continuous strip footings and 24 inches for square pad footings.

- Minimum footing embedment depth for the isolated exterior footings and the footings for the exterior walls is recommended to be 18 inches.
- The minimum embedment depth for interior footings is recommended to be 18 inches.
- The minimum embedment depth for ancillary structures is 18 inches below adjacent subgrade elevation.

The depth of embedment should be determined from the finish subgrade elevation adjacent to the building for the perimeter footings and the finish pad grade within the structure for interior footings. Additional foundation embedment depth may be considered for foundations located close to property lines to protect foundations from being undermined due future excavation that may be performed on the adjacent properties.

Determination of the minimum steel reinforcement requirements of the continuous strip and isolated square pad footings should be performed by the structural engineer.

The foundation bearing soils are recommended to be evaluated by the geotechnical engineer prior to placing reinforcing steel. Evaluation is intended to verify suitable bearing conditions to support the footings and the footing excavations are generally in compliance with foundation plans.

### **5.2.2 Lateral Load Resistance**

Lateral loads may be resisted by friction acting along the bottoms of the footings and passive resistance of the soil adjacent to the vertical sides of the foundations provided the foundations are poured neat against properly compacted fill or undisturbed native soils. Resistance to lateral load may be calculated on the basis of an allowable frictional coefficient of 0.30 and allowable passive resistance equal to an equivalent fluid density of 250 pounds-per-cubic-foot (pcf) to a maximum of 2,500 psf. No reduction will be needed to any of the above two components for computing the total resistance to lateral loads. The use of passive resistance in lateral load analysis requires the foundations to be cast against vertical, undisturbed trench walls or any voids along the footing be backfilled with structural compacted fill.

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### 5.2.3 Settlement Estimate

Estimated post-construction total and differential settlement under the assumed loading conditions and preparation of the building areas as described in this report are estimated to be on the order of 1 inch and ½ inch, respectively. The differential settlement is expected to occur over a minimum span of 30 feet, thereby resulting in an angular distortion less than 0.002, which is expected to be within tolerable limits for the proposed structures.

Settlement is a function of footing size and contact bearing pressure. As a result, differential settlement can be expected between adjacent columns or walls where a large differential loading condition exists. Leighton should review the settlement estimates when final foundation plans and loads for the proposed structures become available.

### 5.3 Slab-on-Grade Floors

Upon completion of the recommended building pad preparation, the subgrades of the slabs supported on grade are anticipated to consist of newly placed structural compacted fill, which is generally expected to consist of the existing soils that have been overexcavated and recompacted under engineering controlled conditions.

Based upon the anticipated subgrade conditions, the floor slabs of the proposed buildings that will be supported on grade may be designed and constructed as a mat on elastic foundation using a modulus of subgrade reaction ( $k_{v1}$ ) of 100 pounds per cubic inch (pci). These slabs are recommended to be a minimum of 4 inches in thickness and include No. 3 rebar placed at center of the slab at 18 inches on-center in each direction based on geotechnical considerations. Increase in the slab thickness and/or reinforcing may be necessary due to structural engineering considerations as determined by the structural engineer.

The slabs may be recommended to be underlain by a minimum 4-inch thick coarse granular material to serve as a working mat during construction and serve as a capillary moisture break.

Interior slabs-on-grade are recommended to be underlain by a synthetic sheeting to serve as a retarder to moisture vapor transmission in areas where moisture-sensitive floor coverings are used (such as vinyl, tile, or carpet) or storage areas

for personal possessions. Prior to installing the synthetic sheeting, the exposed subgrade surface should be clear of all extruding rock and gravel that could damage the sheeting. The sheeting should be evaluated for the presence of punctures or tears by the installer prior to pouring concrete. Installation of the sheeting should include proper overlap and taping of seams.

Appropriate synthetic sheeting should be determined by others qualified in evaluating and mitigating moisture vapor transmission through concrete slabs. Our firm does not practice in the field of moisture vapor transmission evaluation, since this is not specifically a geotechnical issue. Therefore, we recommend that a qualified person, such as the flooring subcontractor and/or structural engineer, be consulted with to evaluate the general and specific moisture vapor transmission paths and any impact on the proposed construction with respect to the storage facility and retail areas. That person should provide recommendations for mitigation of the potential adverse effects of moisture vapor transmission on various components of the structures as deemed appropriate.

Care should be taken to avoid slab curling if slabs are poured in hot weather. Frequent construction joints should be provided to minimize the potential for cracking. Slabs should be designed and constructed as promulgated by the Portland Cement Association (PCA). Prior to the slab pour, all utility trenches should be properly backfilled and compacted. Differential settlement of this material could result in movement and distress to hardscape and other improvements. The need to repair cracks, etc. should be anticipated.

#### **5.4 Temporary Excavations**

All temporary excavations, including utility trenches, retaining wall excavations, and other excavations should be performed in accordance with project plans, specifications and all Occupational Safety and Health Administration (OSHA) requirements.

Temporary excavations should be treated in accordance with the State of California version of OSHA excavation regulations, Construction Safety Orders for Excavation General Requirements, Article 6, Section 1541, effective October 1, 1995. The sides of excavations should be shored or sloped in accordance with OSHA regulations. OSHA allows the sides of unbraced excavations, up to a maximum height of 20 feet, to be cut to a  $\frac{3}{4}H:1V$  (horizontal:vertical) slope for Type A soils,  $1H:1V$  for Type B soils, and  $1\frac{1}{2}H:1V$  for Type C soils. Onsite sandy soils

are to be considered Type C soils which are subject to collapse in shallow unbraced excavations (i.e., approximately 3 to 4 feet in vertical height).

OSHA regulations are applicable in areas with no restriction of surrounding ground deformations. Shoring should be designed for areas with deformation restrictions. The soil type should be verified or revised based on geotechnical observation and testing during construction, as soil classifications may vary over short horizontal distances.

Typical cantilever shoring should be designed based on an active fluid pressure of 38 pcf, assuming level ground above the shoring. If excavations are braced at the top and at specific design intervals, the active pressure may then be approximated by a rectangular soil pressure distribution with the pressure per foot of width equal to  $25H$  psf, where  $H$  is equal to the depth of the excavation being shored.

Heavy construction loads, such as those resulting from stockpiles and heavy machinery, should be kept a minimum distance equivalent to the excavation height or 5 feet, whichever is greater, from the excavation unless the excavation is shored and these surcharges are considered in the design of the shoring system. Excavations that extend below an imaginary plane inclined at 45 degrees below the edge of any adjacent existing site foundation should be properly shored to maintain support of the adjacent structures.

## 5.5 Trench Backfill

Utility trenches should be backfilled with compacted fill in accordance with Sections 306-1.2 and 306-1.3 of the *Standard Specifications for Public Works Construction*, (SSPWC, "Greenbook"), 2018 Edition. Utility trenches can be backfilled with onsite material free of rubble, debris, organic and oversized material up to 3 inches in largest dimension. Prior to backfilling trenches, pipes should be bedded in and covered with either:

- **Granular Bedding:** a) ½-inch open grade aggregate; or b) a uniform sand material with a Sand Equivalent (SE) greater than or equal to ( $\geq$ ) 30, passing the No. 4 U.S. Standard Sieve (or as specified by the pipe manufacturer). Testing to evaluate the Sand Equivalent (SE) of representative samples of the near surface soils indicated SE values below 30, thereby indicating the on-site soils may not be suitable for reuse in this manner.

- **CLSM:** Controlled Low Strength Material (CLSM) conforming to Section 201-6 of the SSPWC. CLSM bedding should be placed to 1 foot (0.3 m) over the top of the conduit, and vibrated.

Pipe bedding should extend at least 4 inches below the pipeline invert and at least 12 inches over the top of the pipeline. The bedding and shading sand is recommended to be densified in place by vibratory, lightweight compaction equipment. Jetting or hydro-consolidation may be suitable for this project site where utility trenches will be underlain by the silty sands, typically present in the upper 5 to 10 feet.

Trench backfill over the pipe bedding zone may consist of native and clean fill soils. All backfill should be placed in thin lifts (appropriate for the type of compaction equipment), moisture conditioned above optimum, and mechanically compacted to at least 90 percent relative compaction, relative to the ASTM D 1557 laboratory maximum density.

## 5.6 Soil Corrosivity

In general, soil resistivity, which is a measure of how easily electrical current flows through soils, is the most influential factor for corrosion to ferrous metals. The following table presents an approximate relationship between soil resistivity and soil corrosiveness.

**Table 4 – Soil Corrosivity as a Function of Resistivity**

Soil Resistivity (ohm-cm)	Classification of Soil Corrosiveness
0 to 900	Very severe corrosion
900 to 2,300	Severely corrosive
2,300 to 5,000	Moderately corrosive
5,000 to 10,000	Mildly corrosive
10,000 to >100,000	Very mildly corrosive
Note: <sup>1</sup> ASTM STP 1013 titled <i>Effects of Soil Characteristics on Corrosion</i> (February, 1989).	

In addition to resistivity, the concentration of chloride ions can also be used to evaluate corrosive potential to steel, either in the form of reinforcement protected by concrete cover or plain steel substructures, such as steel pipes. As a general guideline, the chloride threshold adopted by Caltrans is a concentration of 500 ppm

or greater as determined by California Test 532. Concentrations of chloride ions above the stated concentration or other characteristics such as soil resistivity or redox potential may warrant special corrosion protection measures. The results of corrosivity testing are summarized in the following table.

**Table 5 – Summary of Corrosivity Testing**

Test Parameter	Test Results LB-3 @ 0'-5'	General Classification of Hazard
Water-Soluble Sulfate in Soil (ppm)	260	Negligible sulfate exposure to buried concrete
Water-Soluble Chloride in Soil (ppm)	40	Non-corrosive to buried reinforced concrete
pH	7.92	Moderately alkaline
Minimum Resistivity (saturated, ohm-cm)	1,335	Severely corrosive to buried ferrous pipes

The results of the resistivity tests indicate the underlying soil is moderately corrosive to buried ferrous metals per ASTM STP 1013. The samples tested for water-soluble chloride content indicate a low potential for corrosion of steel in concrete due to the chloride content of the soil.

Based on the test results, ferrous pipes buried in moist to wet site earth materials should be avoided by using high-density polyethylene (HDPE), polyvinyl chloride (PVC) and/or other non-ferrous pipe when possible provided the pipe walls possess sufficient strength for the embedment and external loading to which the pipe will be subjected. Ferrous pipe can also be protected by polyethylene bags, tape or coatings, di-electric fittings or other means to separate pipe from on-site soils. If buried ferrous pipes are planned for this site, further corrosivity testing of soil samples should be performed upon completion of rough grading and specific corrosion protection measures should be recommended by a qualified corrosion engineer.

## 5.7 Cement Type

In general, soil environments that are detrimental to concrete have high concentrations of soluble sulfates and/or pH values of less than 5.5. Section 4.3 of ACI 318 (ACI, 2014) provides specific guidelines for the concrete mix-design when the soluble sulfate content of the soil exceeds 0.1 percent by weight or 1,000 parts per million (ppm).

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The results of laboratory testing indicated concentrations of soluble sulfate less than 0.1 percent. The test results indicate a sulfate Exposure Class designation of “S0” appears to be appropriate for the project site based upon criteria presented in ACI 318. However, if the concrete is expected to be in contact with reclaimed water, Type V cement and a water/cement ratio of 0.45 should be used. Samples should be collected from the compacted fill subgrade upon completion of grading to confirm the initial findings of this exploration.

## **5.8 Elevator Pit Wall Design**

The proposed development is not expected to include new earth retaining structures due to the generally level topographic relief of the site and no below grade levels associated with the buildings. However, in consideration that the buildings will be multi-stories in height, the buildings are anticipated to include elevators. In the anticipation that elevator equipment will include below-grade pits to house the mechanical workings, design of the pit walls should include provisions to resist the lateral load of the adjacent soils. Based on the recommended building pad parathion and the anticipated soil conditions, design of the pit walls is recommended to be based upon an equivalent lateral earth pressure of 60 psf per foot of retained height.

## **5.9 Pavements**

### **5.9.1 Pavement Subgrades**

The pavement subgrades should be prepared as described in Section 5.1 of this report. In accordance with the recommendations, preparation of the subgrade within the areas of new pavement construction are recommended to be overexcavated to a depth of 2 feet below the current grade or planned subgrade elevation, or to the depth of undocumented fill whichever is greater, to allow placement of a minimum of 2 feet of structural fill to develop a suitable bearing subgrade for pavement support.

### **5.9.2 Hot Mix Asphalt (HMA) Pavement Sections**

Asphalt pavements are anticipated to be feasible for the proposed development. Based on the anticipated subgrade conditions and the results of laboratory testing conducted on one bulk sample of the near surface soils

(LB-1), the following recommendations for pavement design have been based upon a design R-value of 30 for the anticipated subgrade. R-value tests should be performed upon completion of grading to verify the design value is appropriate for the actual subgrade conditions. Based on the design procedures outlined in the current Caltrans Highway Design Manual and using an R-value of 78 for the pavement base course, the following flexible pavement sections may be used for Traffic Index values that correspond to various levels of vehicle traffic.

**Table 6 – Asphalt Pavement Sections**

Traffic Index	Asphalt Concrete (inches)	Base Course (inches)	
		CAB	CMB
4 or less	3	5	6
5.0	3	6	7
6.0	4	7	8
Notes: CAB – Crushed Aggregate Base Course; Caltrans Class 2, Section 26 or SSPWC Section 200-2.2			
CMB – Crushed Miscellaneous Base Course; SSPWC Section 200-2.4			

The asphalt concrete should conform to the specifications outlined in Section 203-6 of the Standard Specifications for Public Works Construction (SSPWC, a.k.a. “Greenbook”), and asphalt concrete construction methods should meet the requirements of Section 302-5 of the Green Book.

The base course should conform to requirements of Section 26 of State of California Department of Transportation Standard Specifications (Caltrans), latest edition, or meet the specifications for untreated base as defined in Section 200-2.2 of the SSPWC (Greenbook). As an alternate, the base course may comply with the specifications for Crushed Miscellaneous Base per SSPWC Section 200-2.4 with an appropriate increase in thickness.

Prior to placement of the base course, the subgrade soil should be processed to a minimum depth of 8 inches, moisture-conditioned to 1 to 2 percent above optimum moisture content, and recompact to a minimum of 95 percent relative compaction. Base course should be placed in thin lifts, moisture conditioned, as necessary, and compacted to a minimum of 95 percent relative compaction (ASTM D1557).

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### **5.9.3 Portland Cement Concrete (PCC) Pavements**

Portland cement concrete is recommended for areas of the development subjected to large loads and truck loading/unloading areas. In such areas, a minimum 6-inch thick Portland Concrete Cement (PCC) pavement section reinforced is recommended. Reinforcement is recommended to consist of No. 4 rebar at a maximum on-center spaced at 16 inches in each direction. The recommended PCC pavement section was based on the procedures described in the *Guide for Design and Construction of Concrete Parking Lots by the American Concrete Institute (ACI 330R-08)*.

All PCC pavements should have a minimum 28-day concrete compressive strength of 3,000 pounds-per-square-inch (psi). The reinforcement should be evaluated by the civil/structural engineer to accommodate any additional structural loading requirements. Control joints are recommended to be installed at a maximum on-center spacing of 12 feet for 6-inch thick slabs, and should form square panels.

Concrete pavement may be underlain by a minimum 4-inch thick layer of compacted granular base to serve as a leveling mat for construction and to assist in load transfer at construction joints.

Integral curbs should be used at the perimeter of PCC pavement. Longitudinal joints should be avoided near curbs and gutters. Use of concrete cutoff or edge barriers should be considered at the perimeter of common parking or driveway areas when abutting either open (unfinished) or landscaped areas.

### **5.10 Concrete Flatwork and Exterior Slabs**

Exterior concrete slabs-on-grade should have a minimum thickness of 4 inches. Common Type II cement should be adequate for concrete flatwork not exposed to recycled water. Type V cement and a water:cement ratio of 0.45 should be used for concrete exposed to recycled water.

Concrete flatwork should be placed on compacted fill. If this material has been disturbed or dried out, the subgrade soil to a depth of 12 inches should be moisture conditioned to 1 to 2 percent above optimum moisture content and recompact to minimum 90 percent relative compaction.

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Exterior concrete driveways, ramps, curbs, gutters, sidewalks often crack. Inclusion of joints at frequent intervals and reinforcement will help control the locations of the cracks, and thus reduce the unsightly appearance. Construction or weakened plane joints should be spaced at intervals of 6 feet or less for sidewalks, curbs and gutters. The spacing may be increased to 10 feet for ramps and driveways. If cracking occurs, repairs may be needed to mitigate the trip hazard and/or improve the appearance.

Minor cracking of concrete after curing due to expansion, drying and shrinkage is normal and should be expected. However, cracking is often aggravated by a high water-to-cement ratio, high concrete temperature at the time of placement, small nominal aggregate size, and rapid moisture loss due to hot, dry, and/or windy weather conditions during placement and curing. Cracking due to temperature and moisture fluctuations can also be expected.

The use of low-slump concrete or low water/cement ratios can reduce the potential for shrinkage cracking. Inclusion of joints at frequent intervals and reinforcement will help control the locations of the cracks, and thus improve aesthetics. Control joints should be spaced at intervals no more than 10 feet. If cracking occurs, repairs may be needed to mitigate the trip hazard and/or improve the appearance.

Slab cracking and/or uneven slab surfaces may result due to the presence of fill if the fill is left in place below the slabs. Slab distortion may result in tripping hazards. Standard methods to mitigate trip hazards include the following:

- Saw Cutting
- Grinding
- Patching and ramping
- Removing and replacement

A regular maintenance program should be implemented to mitigate trip hazards and comply with safety requirements.

### 5.11 **Surface Drainage**

Positive drainage of surface water away from structures is very important. Water should not be allowed to pond adjacent to buildings or new site improvements. Positive drainage may be accomplished by providing drainage away at a minimum of 2 percent for earthen surfaces for a lateral distance of at least five feet and further maintained by a swale or drainage path at a gradient of at least 1 percent.

Where necessary, drainage paths may be shortened by the use of area drains and collector pipes. Eave gutters are recommended and should reduce water infiltration into the subgrade materials. Downspouts should be connected to appropriate outlet devices.

Irrigation of landscaping should be controlled to maintain, as much as possible, consistent moisture content sufficient to provide healthy plant growth without over watering.

## 5.12 **Additional Geotechnical Services**

Leighton should review the grading plans, foundation plans, and specifications when they are available to verify that the recommendations presented in this report have been properly interpreted and incorporated.

Geotechnical observation and testing should be provided during the following activities:

- Grading and excavation of the site;
- Subgrade Preparation;
- Compaction of all fill materials;
- Utility trench backfilling and compaction;
- Footing excavation and slab-on-grade preparation;
- Pavement subgrade and base preparation;
- Placement of asphalt concrete and/or concrete; and
- When conditions are encountered on site that are not consistent with the conditions described in this report.

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## 6.0 LIMITATIONS

This report was prepared using the degree of care and skill ordinarily exercised, under similar circumstances, by reputable geotechnical consultants practicing at this time in San Bernardino County. We do not make any warranty, either express or implied.

As in many projects, conditions revealed in excavations may be at variance with preliminary findings. If this occurs, the changed conditions must be evaluated by the geotechnical consultant and additional recommendations be developed as needed.

The identification and testing of hazardous, toxic or contaminated materials was outside the scope of Leighton's work. Should such materials be encountered at any time, or their existence be suspected, all measures stipulated in local, County, State and Federal regulations, as applicable, should be implemented.

This report is issued with the understanding that it is the responsibility of the owner, or of his representative, to ensure that the information and recommendations contained herein are brought to the attention of the necessary design consultants for the project and incorporated into the plans; and that the necessary steps are taken to see that the contractors carry out such recommendations in the field.

Changes in the conditions of a property can occur with the passage of time, whether due to natural processes or the work of man on the subject or adjacent properties. In addition, changes in standards of practice may occur from legislation or the broadening of knowledge. Accordingly, the findings of this report may at some future time be invalidated wholly or partially by changes outside Leighton's control.

The conclusions and recommendations in this report are based in part upon data that were obtained from a necessarily limited number of observations, site visits, excavations, samples and tests. Such information can be obtained only with respect to the specific locations explored, and therefore may not completely define all subsurface conditions throughout the site. The nature of many sites is that differing geotechnical or geological conditions can occur within small distances and under varying climatic conditions. Furthermore, changes in subsurface conditions can and do occur over time. Therefore, the findings, conclusions and recommendations presented in this report can be relied upon only if Leighton has the opportunity to perform additional investigation of the site, finalize and complete the conclusions and recommendations presented in this report, and finally to observe the subsurface conditions during grading and construction of the project, in order to verify that our preliminary findings are representative of the site.

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This report is intended only for the use of Legacy/Collier Residential, LLC and its design consultants, and only as related expressly to evaluation of the feasibility of developing the subject site with the proposed development and for preliminary planning and design.

If parties other than Leighton are engaged to provide construction geotechnical services, they must be notified that they will be required to assume complete responsibility for the geotechnical phase of the project by concurring with the findings and recommendations in this report or by providing alternative recommendations.

Any persons using this report for bidding or construction purposes should perform such independent explorations as they deem necessary to satisfy themselves as to the surface and subsurface conditions to be encountered and the procedures to be used in the performance of work on the subject site.

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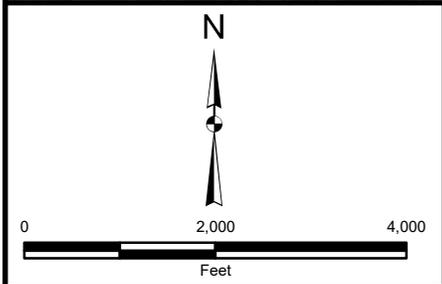
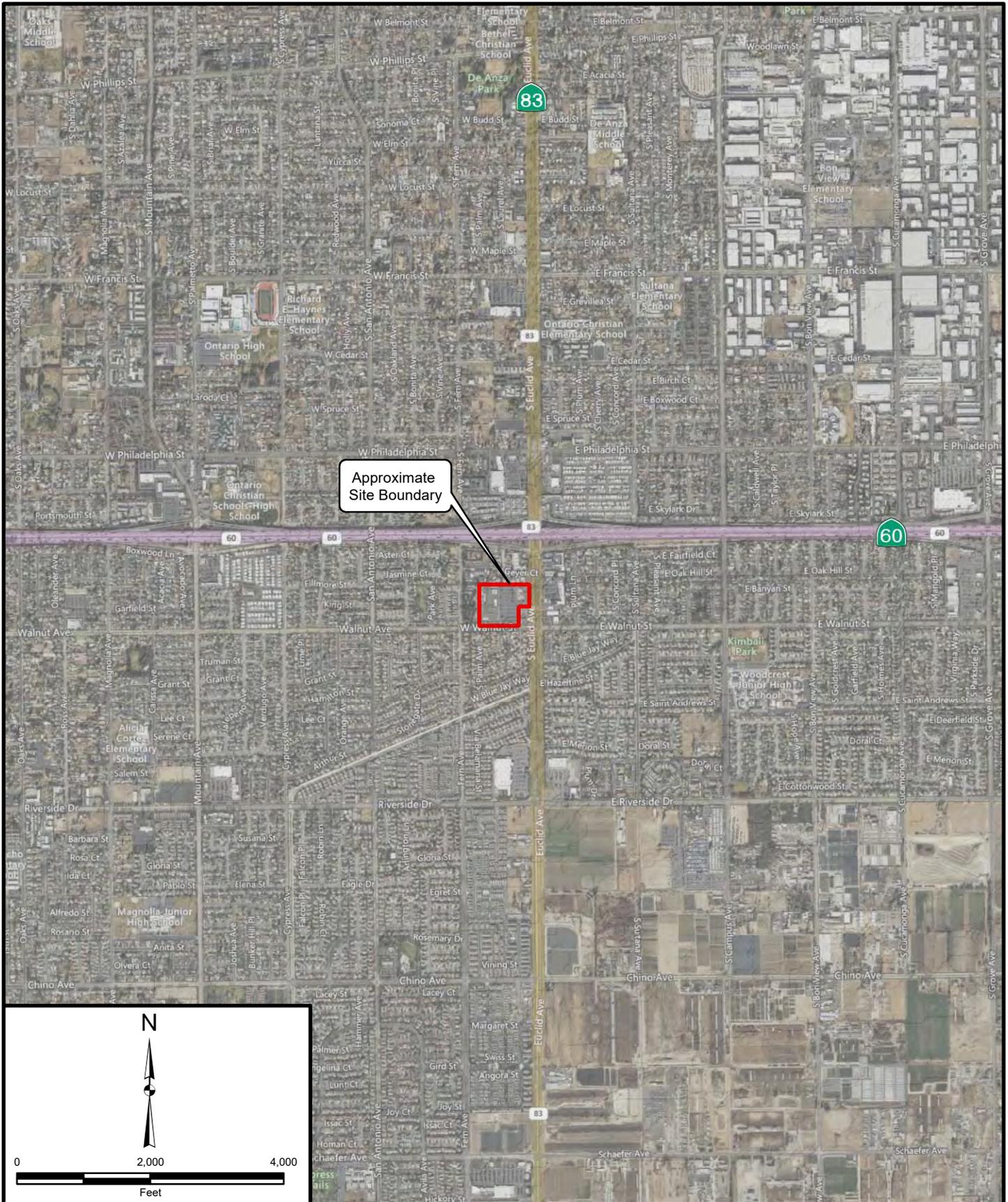
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# FIGURES



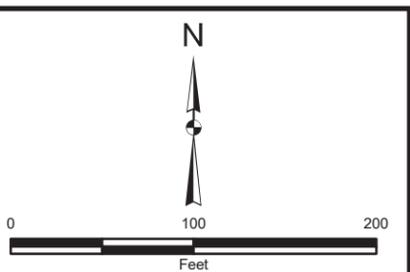
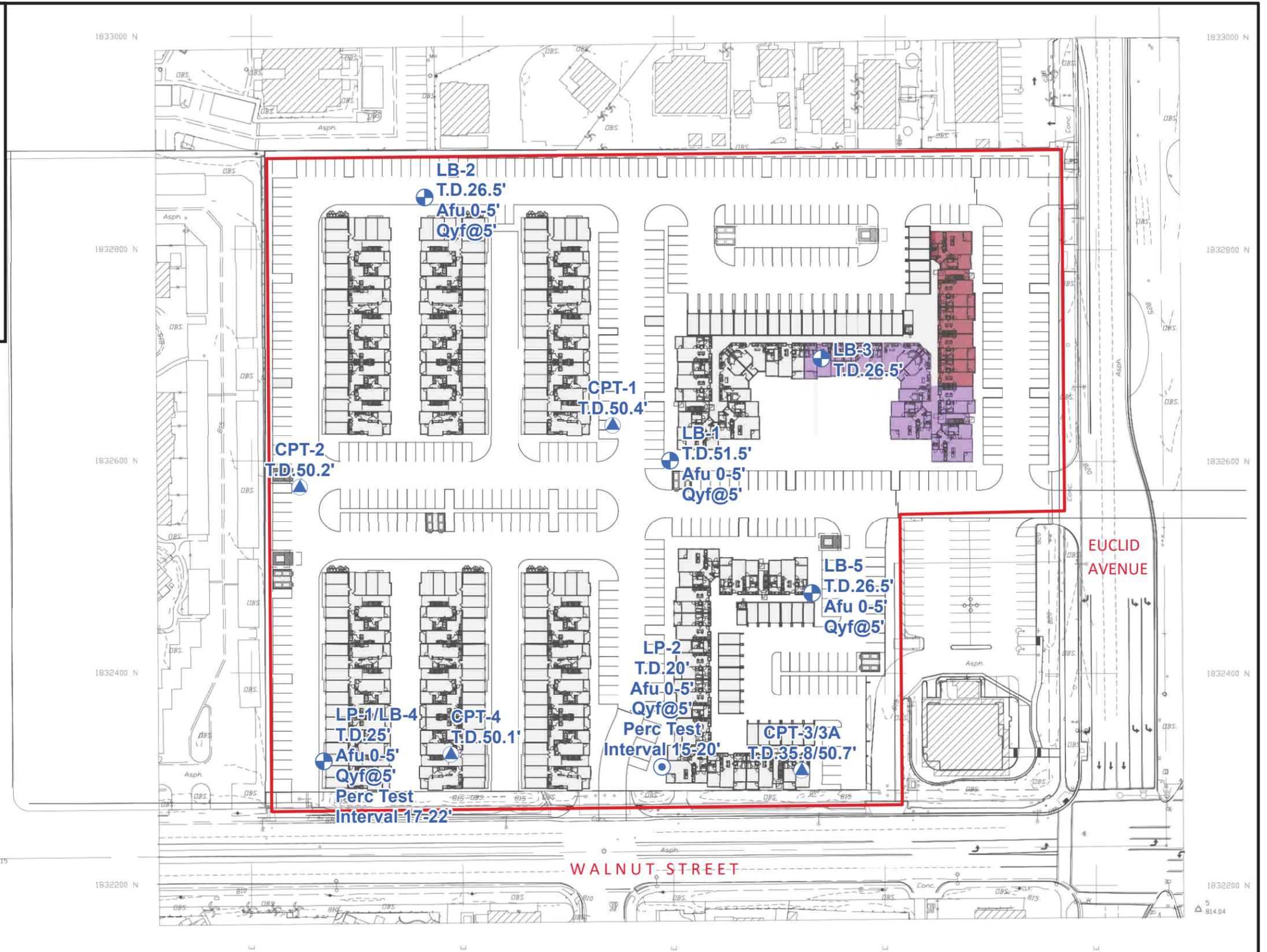
Project: 13493.001	Eng/Geol: JEH/EMH
Scale: 1" = 2,000'	Date: May 2022
Reference: © 2022 Microsoft Corporation © 2022 Maxar © CNES (2022) Distribution Airbus	

**SITE LOCATION MAP**  
 Proposed Euclid and  
 Walnut Mixed-Use Development  
 2502 and 2530 S. Euclid Avenue  
 Ontario, California

**FIGURE 1**

**LEGEND**

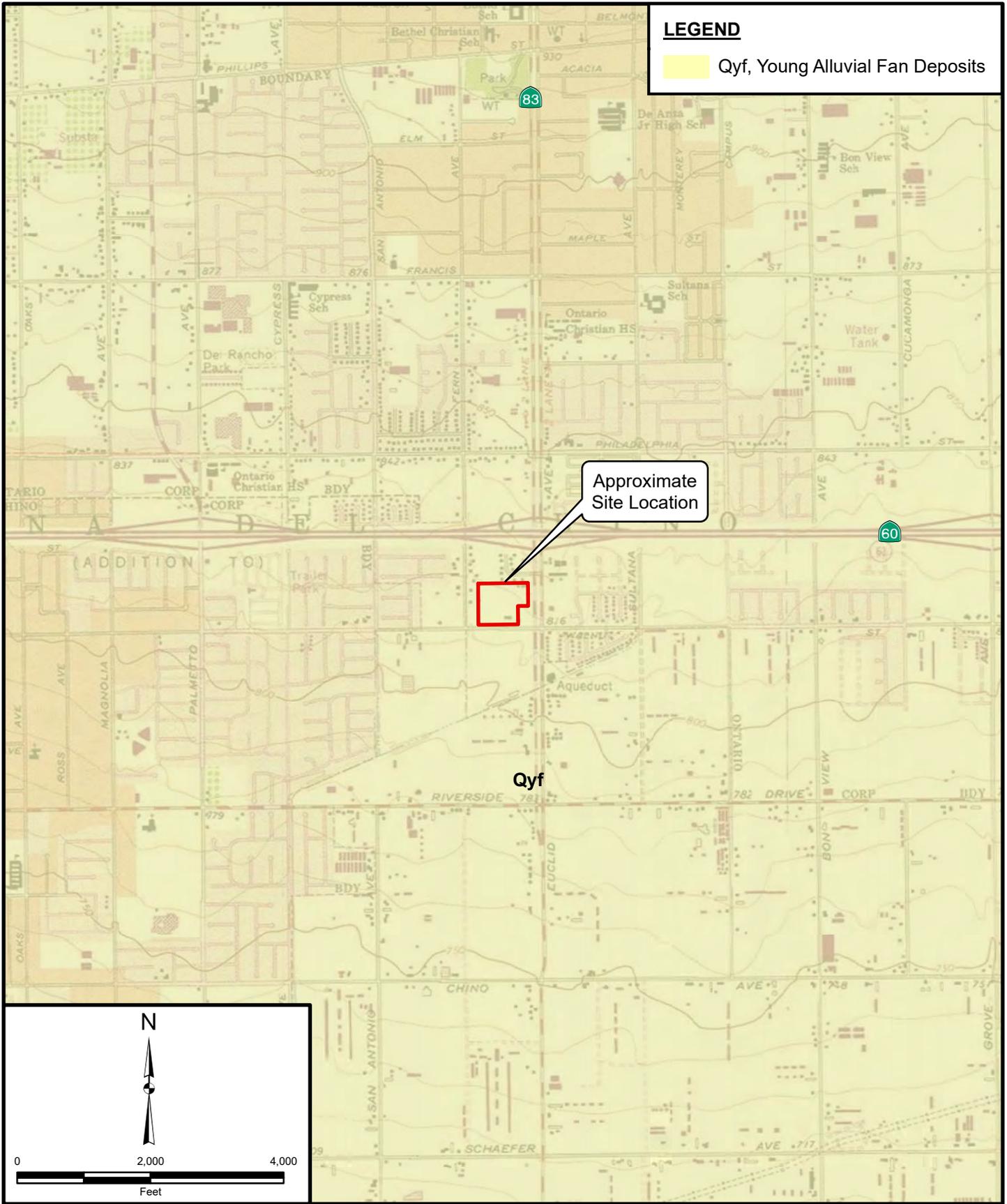
- Afu** Artificial Fill
- Qyf** Quaternary Young Alluvial Fan Deposits
- LB-5** Approximate location of hollow-stem auger boring showing total depth (T.D.) and depth to earth units in feet below ground surface.
- LP-2** Approximate location of percolation test well showing percolation test interval in feet below ground surface.
- CPT-4** Approximate location of cone penetrometer test sounding showing total depth (T.D.) in feet below ground surface
- Approximate Site Boundary



Project: 13493.001 Eng/Geol: JEH/EMH  
 Scale: 1" = 100' Date: May 2022  
 Base Map: Option A Site Plan, Euclid and Walnut Mixed Use Sheet 01, Dated: 03/10/2022 by AO Architecture Design Relationships

**GEOTECHNICAL MAP**  
 Proposed Euclid and Walnut Mixed-Use Development  
 2502 and 2530 S. Euclid Avenue  
 Ontario, California

**FIGURE 2**

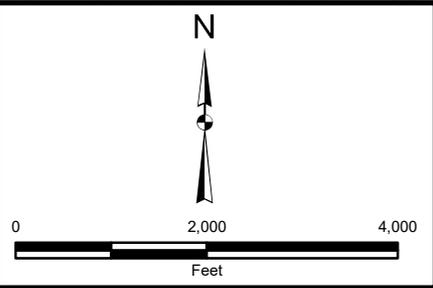


**LEGEND**

 Qyf, Young Alluvial Fan Deposits

Approximate Site Location

Qyf



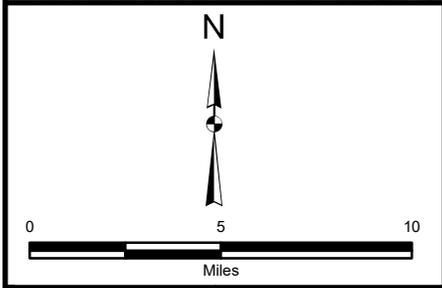
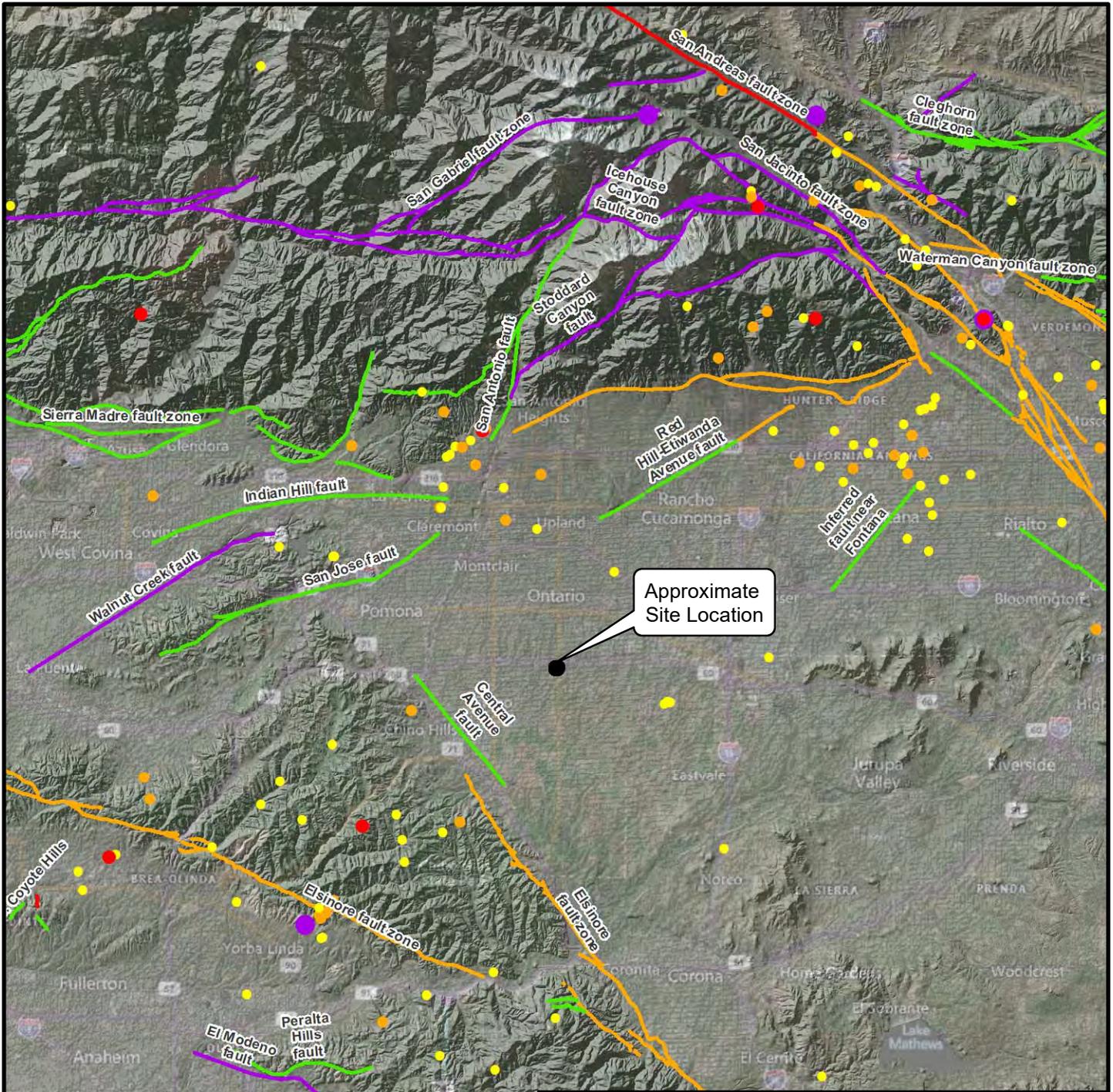
Project: 13493.001    Eng/Geol: JEH/EMH  
 Scale: 1" = 2,000'    Date: May 2022

Basemap: USGS Topo Map Service from Esri, 2021  
 Reference: USGS Geologic Map of the Southern California GIS Compilation by CGS, Lancaster, et al., 2012

**REGIONAL GEOLOGY MAP**  
 Proposed Euclid and  
 Walnut Mixed-Use Development  
 2502 and 2530 S. Euclid Avenue  
 Ontario, California

**FIGURE 3**





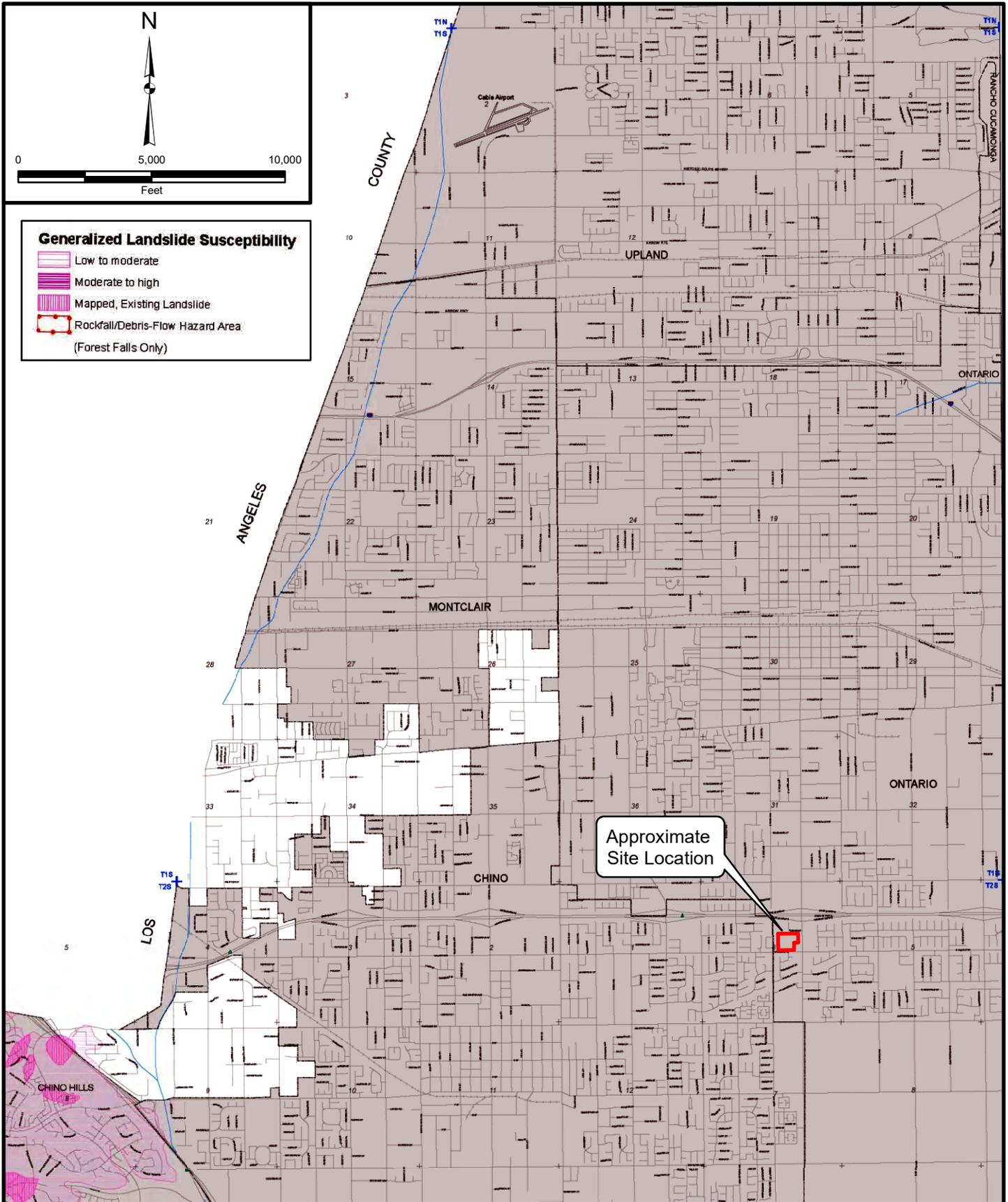
**LEGEND**

<b>Fault activity</b>		<b>Historical Earthquakes (<math>\geq M3.5</math>)</b>	
<b>Recency of Movement</b>		● 3.5 - 3.99	
— Historic (<200 years)		● 4.0 - 4.99	
— Holocene (<11,700 years)		● 5.0 - 5.99	
— Late Quaternary (last 700,000 years)		● 6.0 - 6.99	
— Quaternary (<1.6M years)			

Project: 13493.001    Eng/Geol: JEH/EMH  
 Scale: 1" = 5 miles    Date: May 2022  
 Base Map: ESRI ArcGIS Online 2022  
 Reference: maps.conservation.ca.gov

**REGIONAL FAULTS AND HISTORIC SEISMICITY MAP**  
 Proposed Euclid and Walnut Mixed-Use Development  
 2502 and 2530 S. Euclid Avenue  
 Ontario, California

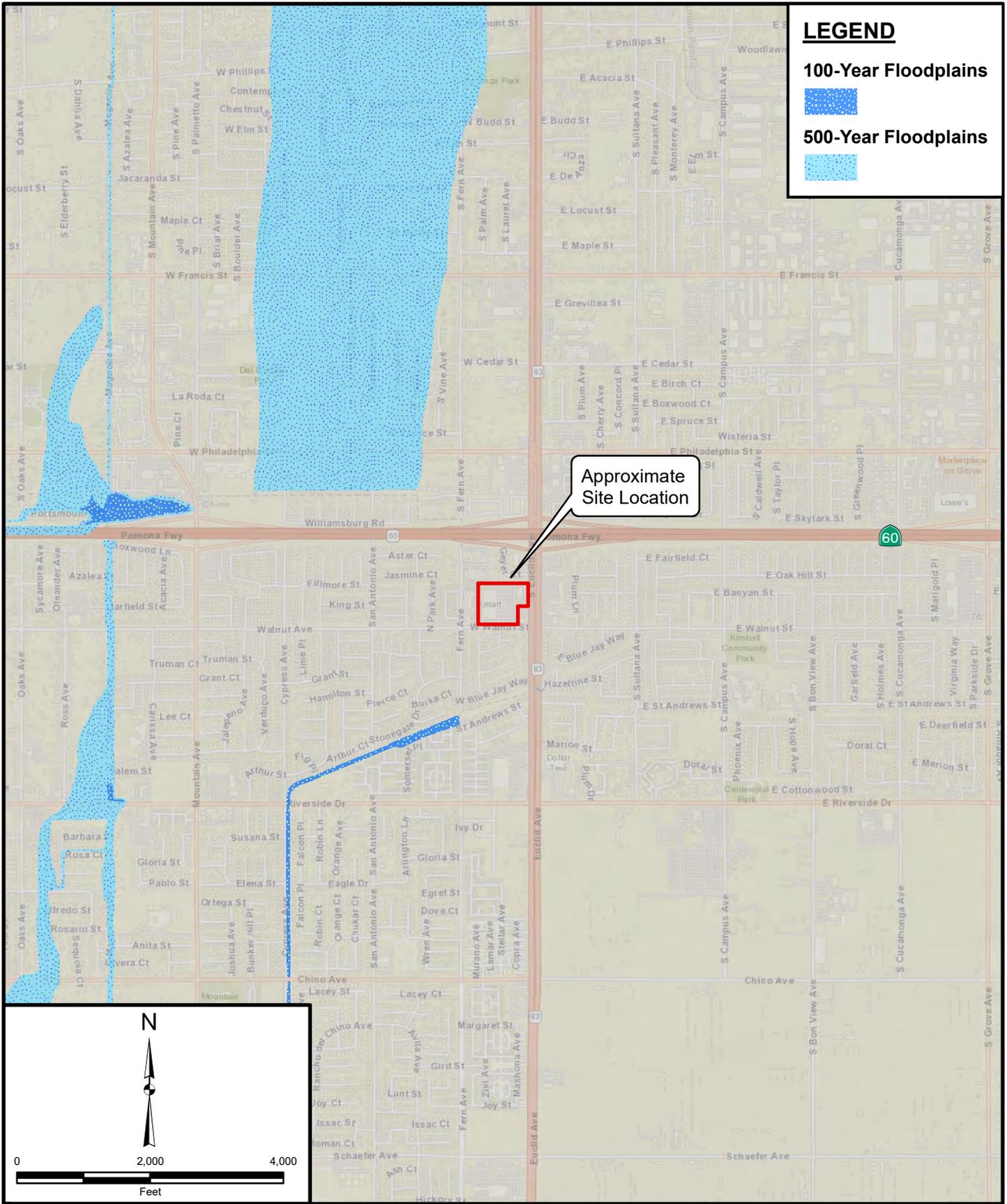
**FIGURE 4**



Project: 13493.001	Eng/Geol: JEH/EMH
Scale: 1" = 5,000'	Date: May 2022
Base Map: San Bernardino County Land Use Plan General Plan, Geologic Hazard Overlays, FH27 C Ontario	

**SEISMIC HAZARD MAP**  
 Proposed Euclid and  
 Walnut Mixed-Use Development  
 2502 and 2530 S. Euclid Avenue  
 Ontario, California

**FIGURE 5**

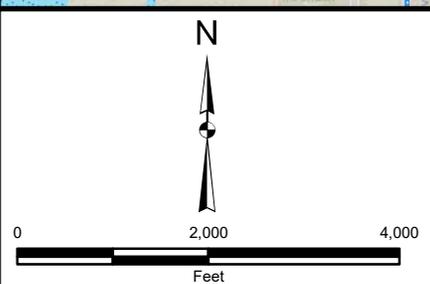


**LEGEND**

**100-Year Floodplains**  


**500-Year Floodplains**  


Approximate Site Location



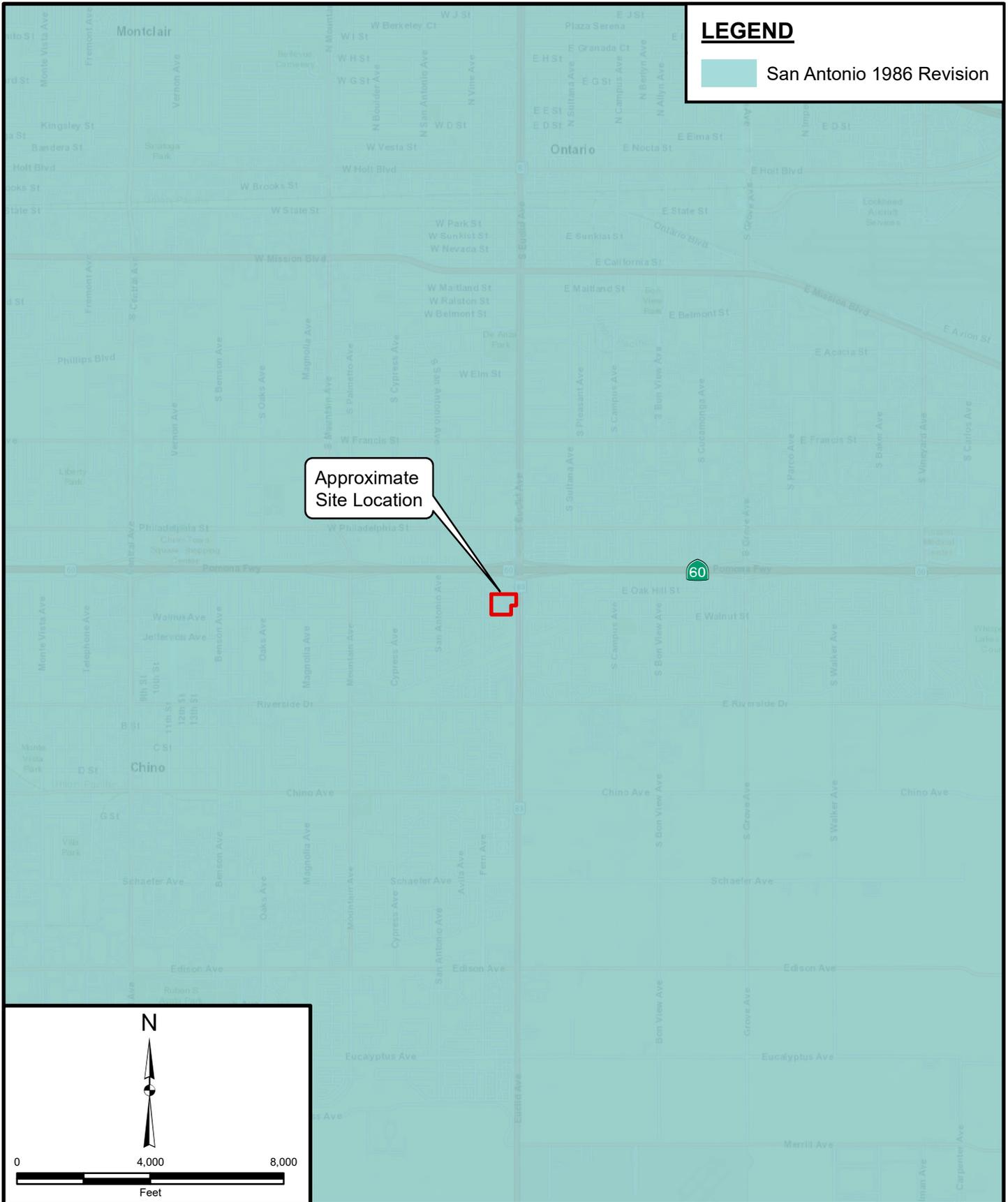
Project: 13493.001	Eng/Geol: JEH/EMH
Scale: 1" = 2,000'	Date: May 2022
Base Map: ESRI ArcGIS Online 2022 Reference: FEMA, DWR	

**FLOOD HAZARD ZONE MAP**

Proposed Euclid and Walnut Mixed-Use Development  
 2502 and 2530 S. Euclid Avenue  
 Ontario, California

**FIGURE 6**

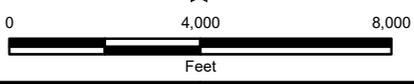




**LEGEND**

San Antonio 1986 Revision

Approximate Site Location



Project: 13493.001	Eng/Geol: JEH/EMH
Scale: 1" = 4,000'	Date: May 2022
Base Map: ESRI ArcGIS Online 2022 Reference: FEMA, DWR	

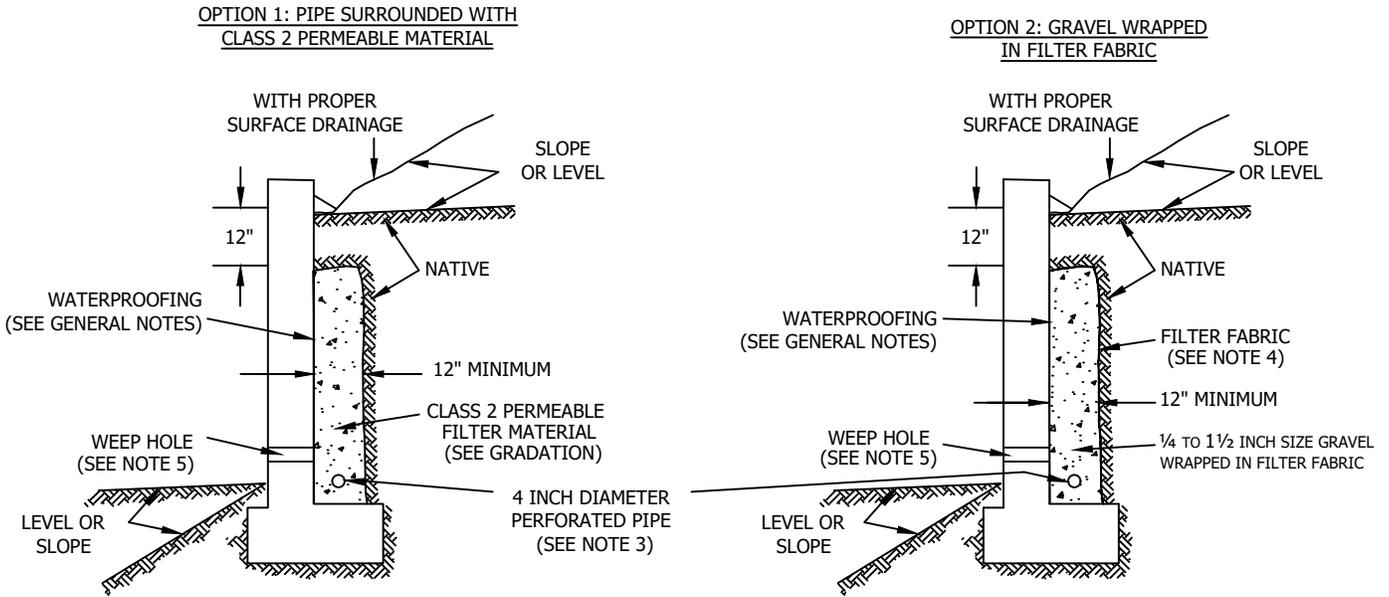
**DAM INUNDATION MAP**

Proposed Euclid and Walnut Mixed-Use Development  
2502 and 2530 S. Euclid Avenue  
Ontario, California

**FIGURE 7**



**SUBDRAIN OPTIONS AND BACKFILL WHEN NATIVE MATERIAL HAS EXPANSION INDEX OF  $\leq 50$**



Class 2 Filter Permeable Material Gradation  
Per Caltrans Specifications

Sieve Size	Percent Passing
1"	100
3/4"	90-100
3/8"	40-100
No. 4	25-40
No. 8	18-33
No. 30	5-15
No. 50	0-7
No. 200	0-3

**GENERAL NOTES:**

- \* Waterproofing should be provided where moisture nuisance problem through the wall is undesirable.
- \* Water proofing of the walls is not under purview of the geotechnical engineer
- \* All drains should have a gradient of 1 percent minimum
- \* Outlet portion of the subdrain should have a 4-inch diameter solid pipe discharged into a suitable disposal area designed by the project engineer. The subdrain pipe should be accessible for maintenance (rodding)
- \* Other subdrain backfill options are subject to the review by the geotechnical engineer and modification of design parameters.

**Notes:**

- 1) Sand should have a sand equivalent of 30 or greater and may be densified by water jetting.
- 2) 1 Cu. ft. per ft. of 1/4- to 1 1/2-inch size gravel wrapped in filter fabric
- 3) Pipe type should be ASTM D1527 Acrylonitrile Butadiene Styrene (ABS) SDR35 or ASTM D1785 Polyvinyl Chloride plastic (PVC), Schedule 40, Armco A2000 PVC, or approved equivalent. Pipe should be installed with perforations down. Perforations should be 3/8 inch in diameter placed at the ends of a 120-degree arc in two rows at 3-inch on center (staggered)
- 4) Filter fabric should be Mirafi 140NC or approved equivalent.
- 5) Weephole should be 3-inch minimum diameter and provided at 10-foot maximum intervals. If exposure is permitted, weepholes should be located 12 inches above finished grade. If exposure is not permitted such as for a wall adjacent to a sidewalk/curb, a pipe under the sidewalk to be discharged through the curb face or equivalent should be provided. For a basement-type wall, a proper subdrain outlet system should be provided.
- 6) Retaining wall plans should be reviewed and approved by the geotechnical engineer.
- 7) Walls over six feet in height are subject to a special review by the geotechnical engineer and modifications to the above requirements.

**RETAINING WALL BACKFILL AND SUBDRAIN DETAIL  
FOR WALLS 6 FEET OR LESS IN HEIGHT  
WHEN NATIVE MATERIAL HAS EXPANSION INDEX OF  $\leq 50$**



V:\DRAFTING\TEMP\ATES\STANDARD-FIGURES\DWG (04.02.21) 007-554M1.dwg, created by: bham



**APPENDIX A**  
**EXPLORATION LOGS**

# GEOTECHNICAL BORING LOG LB-1

**Project No.** 13493.001  
**Project** Legacy-Collier, Proposed Residential Development  
**Drilling Co.** Martini Drilling, Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** See Figure 2 - Geotechnical Map

**Date Drilled** 4-6-22  
**Logged By** BTM  
**Hole Diameter** 8"  
**Ground Elevation** 805'  
**Sampled By** BTM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	<b>SOIL DESCRIPTION</b>	Type of Tests
805	0	N S		B-1	Bulk Driven			ML-SM	This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual. @Surface: 2.5 -inches Asphalt Concrete over 4.5 -inches Base <b>Artificial Fill, undocumented (Afu)</b> @0.58': Sandy SILT, olive brown, moist, low plasticity, very fine to fine sand, slightly micaceous; grades to Silty SAND, medium brown, moist, very fine to fine sand, slightly micaceous @ ~4'	EI, RV
800	5			R-1	4 7 9			ML/CL	<Quaternary-Aged Young Alluvial Deposits (Qyf) @5': Silty CLAY, stiff, olive brown, moist, low plasticity, iron oxidation staining, slightly micaceous, few fine sand PP=2.50 TSF }>>	CN
795	10			R-2	7 11 13	95	9	ML-SM	@7.5': Sandy SILT, very stiff, medium olive brown, moist, very fine sand, low plasticity, slightly micaceous, slightly laminated; grades to Clayey SILT with sand, grayish brown, moist, low plasticity, iron oxidation staining, slightly micaceous, few fine sand	
795	10			R-3	4 9 15	89	31	CL-ML	@10': Silty CLAY, very stiff, gray, moist, low to medium plasticity, iron oxidation staining/veins, few fine sand, trace subrounded gravel, slightly laminated PP>4.5 TSF	
790	15			R-4	4 8 12	112	16		@15': Silty CLAY, stiff, medium brown, moist, medium plasticity, iron oxidation staining, slightly micaceous; grades to Sandy CLAY, medium brown, moist, medium plasticity, very fine to fine sand, slightly micaceous, iron oxidation staining PP=4.25 TSF	
785	20			R-5	8 18 22	120	12	SC	@20': Clayey SAND, medium dense, mottled medium brown to orange, low plasticity, predominately fine sand, little medium sand, slightly micaceous, slightly laminated, trace fine subrounded gravel PP>4.50 TSF	
780	25			R-6	12 16 27			SP	@25': SAND with Silt, medium dense, yellowish brown, slightly moist, predominately fine sand, poorly-graded, little medium sand, slightly micaceous	CO
775	30									

**SAMPLE TYPES:**  
 B BULK SAMPLE  
 C CORE SAMPLE  
 G GRAB SAMPLE  
 R RING SAMPLE  
 S SPLIT SPOON SAMPLE  
 T TUBE SAMPLE

**TYPE OF TESTS:**  
 -200 % FINES PASSING  
 AL ATTERBERG LIMITS  
 CN CONSOLIDATION  
 CO COLLAPSE  
 CR CORROSION  
 CU UNDRAINED TRIAXIAL

DS DIRECT SHEAR  
 EI EXPANSION INDEX  
 H HYDROMETER  
 MD MAXIMUM DENSITY  
 PP POCKET PENETROMETER  
 RV R VALUE

SA SIEVE ANALYSIS  
 SE SAND EQUIVALENT  
 SG SPECIFIC GRAVITY  
 UC UNCONFINED COMPRESSIVE STRENGTH



\*\*\* This log is a part of a report by Leighton and should not be used as a stand-alone document. \*\*\*

# GEOTECHNICAL BORING LOG LB-1

**Project No.** 13493.001  
**Project** Legacy-Collier, Proposed Residential Development  
**Drilling Co.** Martini Drilling, Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** See Figure 2 - Geotechnical Map

**Date Drilled** 4-6-22  
**Logged By** BTM  
**Hole Diameter** 8"  
**Ground Elevation** 805'  
**Sampled By** BTM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.										
775	30			S-7	9 12 14		4		@30': SAND with gravel, medium dense, orange brown, slightly moist, fine to coarse sand, few fine subrounded gravel, slightly micaceous	CO
770	35			R-8	11 24 50/4"				@35': SAND with Silt, Very dense, yellowish brown, predominately fine sand, little medium to coarse sand, poorly graded, few fine subangular to subrounded gravel	
765	40			S-9	8 12 19		4		@40': SAND, dense, medium brown, slightly moist, predominately fine sand, little medium to coarse sand, trace to few fine subangular to subrounded gravel, slightly micaceous	
760	45			R-10	47 50/3"	115		2	@45': Very dense, medium brown to orange brown, few fine subrounded gravel	
755	50			S-11	35 39 50/4"			3	@50': Very dense, little subrounded granitic gravel	
750	55							Total Depth: 51.5' bgs No groundwater encountered during drilling Backfilled with soil cuttings Patched with cold-mix asphalt concrete		
745	60									

- |                                                                                                                                   |                                                                                                                                                  |                                                                                                                     |                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| <b>SAMPLE TYPES:</b><br>B BULK SAMPLE<br>C CORE SAMPLE<br>G GRAB SAMPLE<br>R RING SAMPLE<br>S SPLIT SPOON SAMPLE<br>T TUBE SAMPLE | <b>TYPE OF TESTS:</b><br>-200 % FINES PASSING<br>AL ATTERBERG LIMITS<br>CN CONSOLIDATION<br>CO COLLAPSE<br>CR CORROSION<br>CU UNDRAINED TRIAXIAL | DS DIRECT SHEAR<br>EI EXPANSION INDEX<br>H HYDROMETER<br>MD MAXIMUM DENSITY<br>PP POCKET PENETROMETER<br>RV R VALUE | SA SIEVE ANALYSIS<br>SE SAND EQUIVALENT<br>SG SPECIFIC GRAVITY<br>UC UNCONFINED COMPRESSIVE STRENGTH |
|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|



# GEOTECHNICAL BORING LOG LB-2

**Project No.** 13493.001  
**Project** Legacy-Collier, Proposed Residential Development  
**Drilling Co.** Martini Drilling, Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** See Figure 2 - Geotechnical Map

**Date Drilled** 4-6-22  
**Logged By** BTM  
**Hole Diameter** 8"  
**Ground Elevation** 807'  
**Sampled By** BTM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	<b>SOIL DESCRIPTION</b>	Type of Tests
	0	N S							This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
805				B-1				ML-SM	@Surface: 4 -inches Asphalt Concrete over 5 -inches Base <b>Artificial Fill, undocumented (Afu)</b> @0.75': Sandy SILT, olive brown, moist, low plasticity, very fine sand, slightly micaceous, some debris (asphalt)	DS, MD, SE
800	5			R-1	3 8 16			ML-SM	<Quaternary-Aged Young Alluvial Deposits (Qyf) @5': Clayey SAND, medium dense, olive gray, very moist, low plasticity, very fine to fine sand, slightly micaceous, pinhole pores; grades to Silty SAND with gravel, light to medium brown, predominately fine sand, few medium sand, fine subangular granitic gravel )>>	CN
				R-2	6 11 11	101	3	SP	@7.5': SAND, medium dense, grayish brown, moist, very fine to fine sand, slightly micaceous, little iron oxidation staining	
795	10			R-3	4 8 12			CL/SM	@10': CLAY, stiff, olive gray, moist, lean, low plasticity, extensive iron oxidation staining, few very fine sand, slightly micaceous; grades to Silty SAND, light orange brown, very fine sand, slightly micaceous	CN, AL
790	15			R-4	10 10 11	103	4	SP-ML	@15': SAND with silt, medium dense, light gray, slightly moist, very fine to fine sand, micaceous; interbedded with Clayey SILT, medium brown, moist, low plasticity, laminated, iron oxidation staining	
785	20			R-5	7 11 17	112	16	ML-SM CL-SC	@20': Sandy SILT, very stiff, medium brown, moist, low plasticity, very fine sand, micaceous; grades to Sandy CLAY, medium brown, moist, low plasticity, very fine to fine sand, trace subrounded gravel  PP = 3.50	
780	25			R-6	10 15 24	108	10	SP	@25': Sandy CLAY, very stiff, medium brown, moist, low plasticity, very fine to fine sand, micaceous, some silt  PP > 4.50 TSF @26': SAND with silt, orange brown, dry to slightly moist, very fine to fine sand, few medium sand, slightly micaceous <b>Total Depth: 26.5' bgs</b> <b>No groundwater encountered during drilling</b> <b>Backfilled with soil cuttings</b>	
	30									

**SAMPLE TYPES:**

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

**TYPE OF TESTS:**

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



# GEOTECHNICAL BORING LOG LB-2

**Project No.** 13493.001  
**Project** Legacy-Collier, Proposed Residential Development  
**Drilling Co.** Martini Drilling, Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** See Figure 2 - Geotechnical Map

**Date Drilled** 4-6-22  
**Logged By** BTM  
**Hole Diameter** 8"  
**Ground Elevation** 807'  
**Sampled By** BTM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests	
		N S							This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.		
30									Patched with cold-mix asphalt concrete		
775											
35											
770											
40											
765											
45											
760											
50											
755											
55											
750											
60											
SAMPLE TYPES:		TYPE OF TESTS:									
B	BULK SAMPLE	-200	% FINES PASSING	DS	DIRECT SHEAR	SA	SIEVE ANALYSIS				
C	CORE SAMPLE	AL	ATTERBERG LIMITS	EI	EXPANSION INDEX	SE	SAND EQUIVALENT				
G	GRAB SAMPLE	CN	CONSOLIDATION	H	HYDROMETER	SG	SPECIFIC GRAVITY				
R	RING SAMPLE	CO	COLLAPSE	MD	MAXIMUM DENSITY	UC	UNCONFINED COMPRESSIVE STRENGTH				
S	SPLIT SPOON SAMPLE	CR	CORROSION	PP	POCKET PENETROMETER						
T	TUBE SAMPLE	CU	UNDRAINED TRIAXIAL	RV	R VALUE						



\*\*\* This log is a part of a report by Leighton and should not be used as a stand-alone document. \*\*\*

# GEOTECHNICAL BORING LOG LB-3

**Project No.** 13493.001  
**Project** Legacy-Collier, Proposed Residential Development  
**Drilling Co.** Martini Drilling, Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** See Figure 2 - Geotechnical Map

**Date Drilled** 4-6-22  
**Logged By** BTM  
**Hole Diameter** 8"  
**Ground Elevation** 808'  
**Sampled By** BTM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	<b>SOIL DESCRIPTION</b>	Type of Tests
	0	N S							This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
				B-1				SM	@Surface: 3.5 -inches Asphalt Concrete over 12 -inches Base	
805									<b>Artificial Fill, undocumented (Afu)</b> @1.3': Silty SAND, olive brown, slightly moist, very fine to fine sand, few medium sand, trace coarse sand, non-plastic, few debris (asphalt)	CR, MD
	5			R-1	7 9 11	111	8	SM	<Quaternary-Aged Young Alluvial Deposits (Qyf) @5': Silty SAND, medium dense, medium brown, moist, very fine to fine sand, slightly laminated, slightly micaceous >>	
800				R-2	7 12 15			CL-SC	@7.5': Silty SAND, medium dense, olive, slightly moist, fine sand, low plasticity, iron oxidation staining, carbonate veins; grades to SAND, yellowish brown, slightly moist, very fine to fine sand	DS
	10			R-3	10 16 26	90	26	CL	@10': Silty CLAY, very stiff, grayish brown, slightly moist, low to medium plasticity, trace very fine sand, iron oxidation staining  PP > 4.50 TSF	
795										
	15			R-4	5 9 17	87	35		@15': Very stiff, slightly laminated  PP = 4.25 TSF	
790										
	20			R-5	12 16 27	122	12	SC	@20': Clayey SAND, medium dense, orange brown, slightly moist, low plasticity, fine sand, trace medium to coarse sand, slightly laminated, iron oxidation staining  PP = 4.50 TSF	
785										
	25			R-6	7 10 17	114	14		@25': Medium dense, higher sand content, pinhole pores  PP > 4.50 TSF	
780									<b>Total Depth: 26.5' bgs</b> No groundwater encountered during drilling Backfilled with soil cuttings Patched with cold-mix asphalt concrete	
	30									

**SAMPLE TYPES:**

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

**TYPE OF TESTS:**

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



# GEOTECHNICAL BORING LOG LB-5

**Project No.** 13493.001  
**Project** Legacy-Collier, Proposed Residential Development  
**Drilling Co.** Martini Drilling, Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** See Figure 2 - Geotechnical Map

**Date Drilled** 4-6-22  
**Logged By** BTM  
**Hole Diameter** 8"  
**Ground Elevation** 807'  
**Sampled By** BTM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S			Bulk Driven				This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
805	0			B-1				SM	@Surface: 5 -inches Asphalt Concrete over 3 -inches Base <b>Artificial Fill, undocumented (Afu)</b> @0.67': Silty SAND, olive brown, slightly moist, very fine to fine sand, few medium sand, trace coarse sand, trace debris (asphalt)	SE
800	5			R-1	5 7 9			SM-ML	<Quaternary-Aged Young Alluvial Deposits (Qyf) @5': Silty SAND, medium dense, medium brown, slightly moist, very fine to fine sand, trace coarse sand, nonplastic, slightly micaceous; grades to Sandy SILT, yellowish brown, slightly moist, very fine sand, no to low plasticity, slightly micaceous >>>	
				R-2	9 16 16			ML-SM	@7.5': Sandy SILT, very stiff, grayish brown, slightly moist, very fine sand, low plasticity, iron oxidation staining; grades to Sandy SILT, yellowish brown	
795	10			R-3	6 11 16			CL-ML	@10': Silty CLAY, very stiff, grayish brown to tan, moist, low plasticity, slightly laminated, trace very fine sand; grades to SAND, tan to yellowish brown, slightly moist, very fine to fine sand, slightly micaceous	
790	15			R-4	5 10 21				@15': Silty CLAY, very stiff, grayish brown, moist, low to medium plasticity, iron oxidation staining, some very fine to fine sand, slightly laminated	
785	20			R-5	6 9 19				@20': Very stiff, few to little very fine to fine sand, slightly laminated	
780	25			R-6	10 18 28			SC	@25': Clayey SAND, dense, olive brown, moist, predominately fine sand, trace to few medium to coarse sand, low plasticity, slightly micaceous; grades to orange, iron oxidation stained Clayey SAND, slightly laminated	
									Total Depth: 26.5' bgs No groundwater encountered during drilling Backfilled with soil cuttings Patched with cold-mix asphalt concrete	
	30									

**SAMPLE TYPES:**

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

**TYPE OF TESTS:**

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



# GEOTECHNICAL BORING LOG LP-1

**Project No.** 13493.001  
**Project** Legacy-Collier, Proposed Residential Development  
**Drilling Co.** Martini Drilling, Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** See Figure 2 - Geotechnical Map

**Date Drilled** 4-6-22  
**Logged By** BTM  
**Hole Diameter** 8"  
**Ground Elevation** 805'  
**Sampled By** BTM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	<b>SOIL DESCRIPTION</b>	Type of Tests
805	0	N S							This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
					Bulk Driven				@Surface: 3 -inches Asphalt Concrete over 7 -inches Base ML-SM <b>Artificial Fill, undocumented (Afu)</b> @0.83': Sandy SILT, olive brown, moist, low plasticity, very fine sand, slightly micaceous; grades to Silty SAND, medium brown, moist, very fine to fine sand, trace medium sand, slightly micaceous @ ~4'	
800	5			S-1	2 2			SM-ML	<b>Quaternary-Aged Young Alluvial Deposits (Qyf)</b> @5': Silty SAND, very loose, medium brown, moist, very fine to fine sand, slightly micaceous, nonplastic	
795	10			S-2	2 3 4			ML-CL	@10': Clayey Sandy SILT, medium stiff, moist, low plasticity, very fine sand, slightly micaceous; grades to Silty CLAY with sand, gray, moist, low to medium plasticity, very fine sand, micaceous, extensive iron oxidation staining	
790	15			R-3	6 9 11	104	5	SP	@15': Silty SAND, medium dense, grayish brown, slightly moist, predominately fine sand, some clay, trace medium to coarse sand, trace fine subrounded gravel, slightly micaceous	, SA
785	20			R-4	8 13 21	119	12	SM	@18.5': Sandy SILT, very stiff, olive brown, slightly moist, low plasticity, very fine to fine sand, iron oxidation staining, slightly micaceous  PP > 4.50 TSF	, SA
780	25			S-5	5 6 7			ML-SM	@23.5': Sandy CLAY, stiff to medium dense, orange mottled with brown, low plasticity, very fine to fine sand, slightly micaceous	SA
									Total Depth: 25' bgs No groundwater encountered during drilling Temporary percolation well installed; screened from 17 - 22' bgs Upon completion of percolation testing, boring was backfilled with soil cuttings and patched with cold-mix asphalt	
775	30									

- SAMPLE TYPES:**
- B BULK SAMPLE
  - C CORE SAMPLE
  - G GRAB SAMPLE
  - R RING SAMPLE
  - S SPLIT SPOON SAMPLE
  - T TUBE SAMPLE

- TYPE OF TESTS:**
- 200 % FINES PASSING
  - AL ATTERBERG LIMITS
  - CN CONSOLIDATION
  - CO COLLAPSE
  - CR CORROSION
  - CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
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- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



\*\*\* This log is a part of a report by Leighton and should not be used as a stand-alone document. \*\*\*

# GEOTECHNICAL BORING LOG LP-2

**Project No.** 13493.001  
**Project** Legacy-Collier, Proposed Residential Development  
**Drilling Co.** Martini Drilling, Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** See Figure 2 - Geotechnical Map

**Date Drilled** 4-6-22  
**Logged By** BTM  
**Hole Diameter** 8"  
**Ground Elevation** 804'  
**Sampled By** BTM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
	0	N S							This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
	0	N S		B-1				SM-ML	@Surface: 3.5 -inches Asphalt Concrete over 4 -inches Base <b>Artificial Fill, undocumented (Afu)</b> @0.62': Silty SAND to Sandy SILT, olive brown, slightly moist, very fine to fine sand, low to no plasticity, slightly micaceous	
800	5			S-1	4 2 2			SM	<Quaternary-Aged Young Alluvial Deposits (Qyf) @5': Silty SAND, very loose, medium to dark brown, moist, very fine to fine sand, trace coarse sand to fine subrounded gravel >>	
795	10			S-2	2 2 3			ML/CL	@10': Sandy SILT, medium stiff, mottled with gray and light brown, slightly moist, low plasticity, very fine sand, slightly micaceous; grades to Silty CLAY, grayish brown, moist, low to medium plasticity, iron oxidation staining, laminated	
790	15			R-3	4 6 9	91	25		@15': Silty CLAY, stiff, olive brown, moist, low plasticity, very fine sand, slightly micaceous, laminated, iron oxidation staining	, SA
785	20			R-4	12 16 26	115	7	SM	@18.5': Silty SAND, medium dense, olive brown, moist, very fine to fine sand, low to no plasticity, little iron oxidation staining, trace pinhole pores	, SA
780	25								Total Depth: 20' bgs No groundwater encountered during drilling Temporary percolation well installed; screened from 15 - 20' bgs Upon completion of percolation testing, boring was backfilled with soil cuttings and patched with cold-mix asphalt	
775	30									

**SAMPLE TYPES:**

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

**TYPE OF TESTS:**

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
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**SUMMARY**  
**OF**  
**CONE PENETRATION TEST DATA**

Project:

**Legacy-Ontario**  
**2530 W. Walnut Street**  
**Ontario, CA**  
**April 7, 2022**

Prepared for:

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- CPT Plots
- CPT Classification/Soil Behavior Chart
- Summary of Shear Wave Velocities
- CPT Data Files (sent via email)

# SUMMARY OF CONE PENETRATION TEST DATA

## 1. INTRODUCTION

This report presents the results of a Cone Penetration Test (CPT) program carried out for the Legacy-Ontario project located at 2530 W. Walnut Street in Ontario, California. The work was performed by Kehoe Testing & Engineering (KTE) on April 7, 2022. The scope of work was performed as directed by Leighton & Associates personnel.

## 2. SUMMARY OF FIELD WORK

The fieldwork consisted of performing CPT soundings at five locations to determine the soil lithology. A summary is provided in **TABLE 2.1**.

LOCATION	DEPTH OF CPT (ft)	COMMENTS/NOTES:
CPT-1	50	
CPT-2	50	
CPT-3	35	Refusal
CPT-3A	50	
LB-4	50	

TABLE 2.1 - Summary of CPT Soundings

## 3. FIELD EQUIPMENT & PROCEDURES

The CPT soundings were carried out by **KTE** using an integrated electronic cone system manufactured by Vertek. The CPT soundings were performed in accordance with ASTM standards (D5778). The cone penetrometers were pushed using a 30-ton CPT rig. The cone used during the program was a 15 cm<sup>2</sup> cone with a cone net area ratio of 0.83. The following parameters were recorded at approximately 2.5 cm depth intervals:

- Cone Resistance (qc)
- Sleeve Friction (fs)
- Dynamic Pore Pressure (u)
- Inclination
- Penetration Speed

At location CPT-1, shear wave measurements were obtained at approximately 5-foot intervals. The shear wave is generated using an air-actuated hammer, which is located inside the front jack of the CPT rig. The cone has a triaxial geophone, which recorded the shear wave signal generated by the air hammer.

The above parameters were recorded and viewed in real time using a laptop computer. Data is stored at the KTE office for up to 2 years for future analysis and reference. A complete set of baseline readings was taken prior to each sounding to determine temperature shifts and any zero load offsets. Monitoring base line readings ensures that the cone electronics are operating properly.

#### **4. CONE PENETRATION TEST DATA & INTERPRETATION**

The Cone Penetration Test data is presented in graphical form in the attached Appendix. These plots were generated using the CPeT-IT program. Penetration depths are referenced to ground surface. The soil behavior type on the CPT plots is derived from the attached CPT SBT plot (Robertson, "Interpretation of Cone Penetration Test...", 2009) and presents major soil lithologic changes. The stratigraphic interpretation is based on relationships between cone resistance ( $q_c$ ), sleeve friction ( $f_s$ ), and penetration pore pressure ( $u$ ). The friction ratio ( $R_f$ ), which is sleeve friction divided by cone resistance, is a calculated parameter that is used along with cone resistance to infer soil behavior type. Generally, cohesive soils (clays) have high friction ratios, low cone resistance and generate excess pore water pressures. Cohesionless soils (sands) have lower friction ratios, high cone bearing and generate little (or negative) excess pore water pressures.

The CPT data files have also been provided. These files can be imported in CPeT-IT (software by GeoLogismiki) and other programs to calculate various geotechnical parameters.

It should be noted that it is not always possible to clearly identify a soil type based on  $q_c$ ,  $f_s$  and  $u$ . In these situations, experience, judgement and an assessment of the pore pressure data should be used to infer the soil behavior type.

If you have any questions regarding this information, please do not hesitate to call our office at (714) 901-7270.

Sincerely,

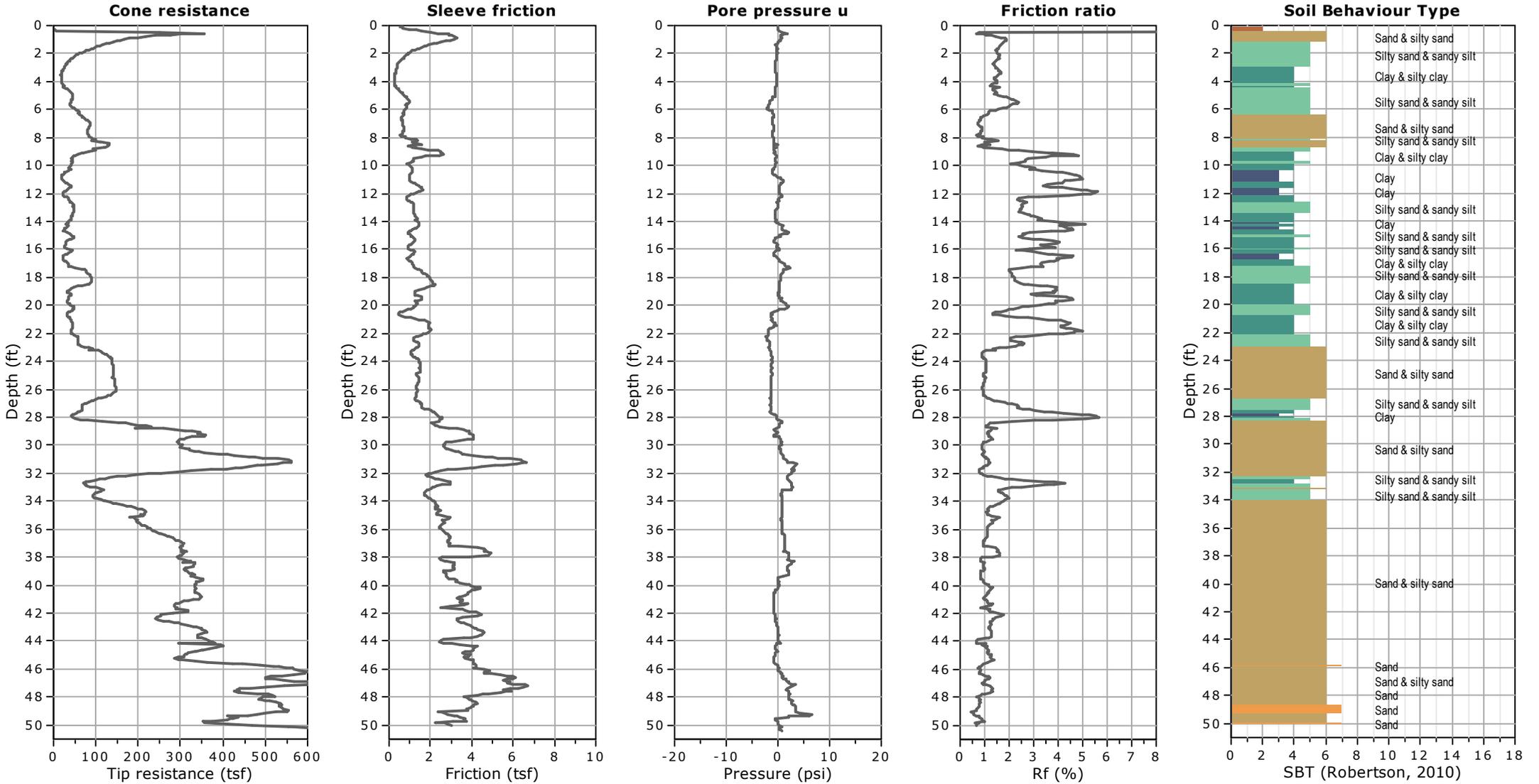
#### **KEHOE TESTING & ENGINEERING**

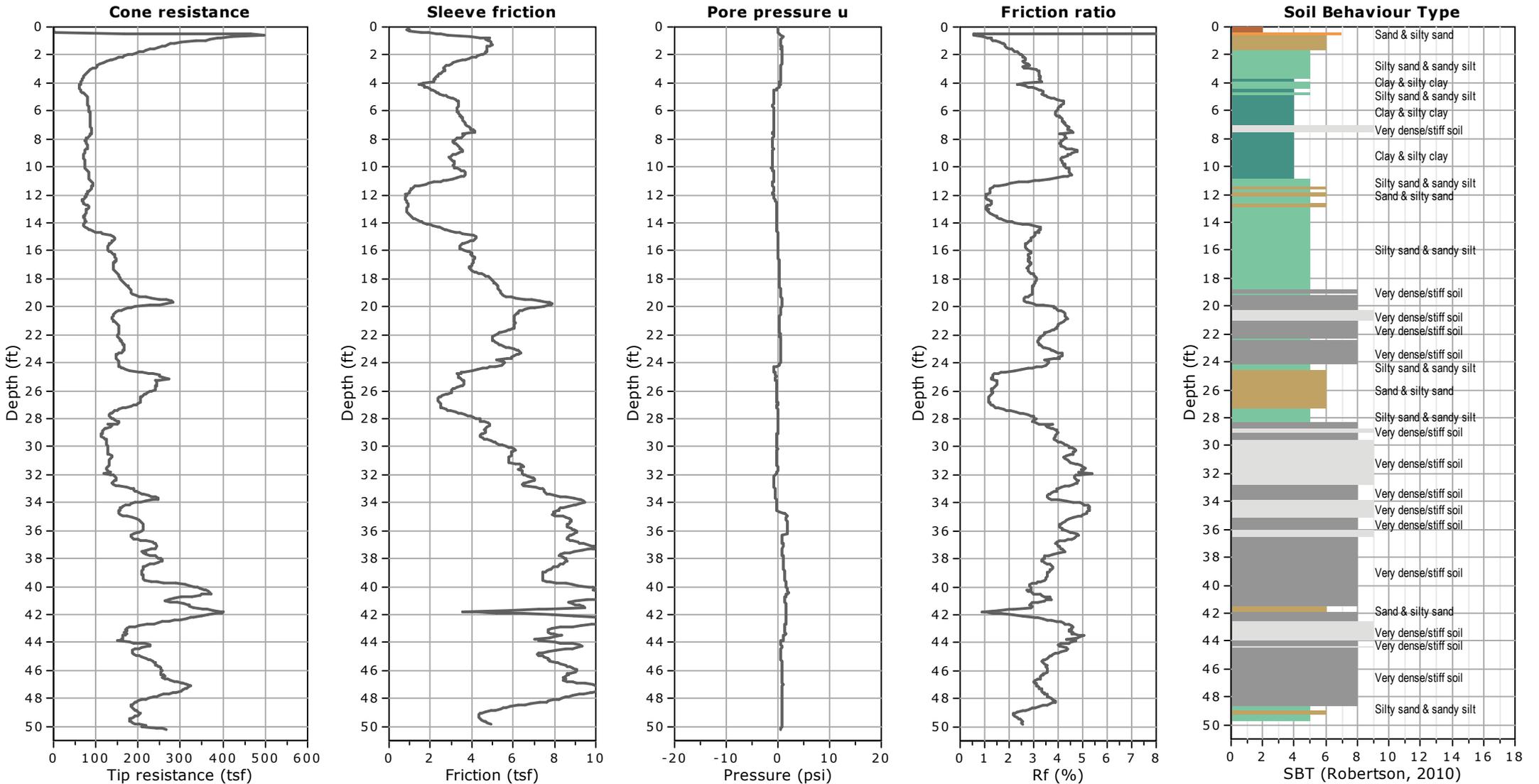


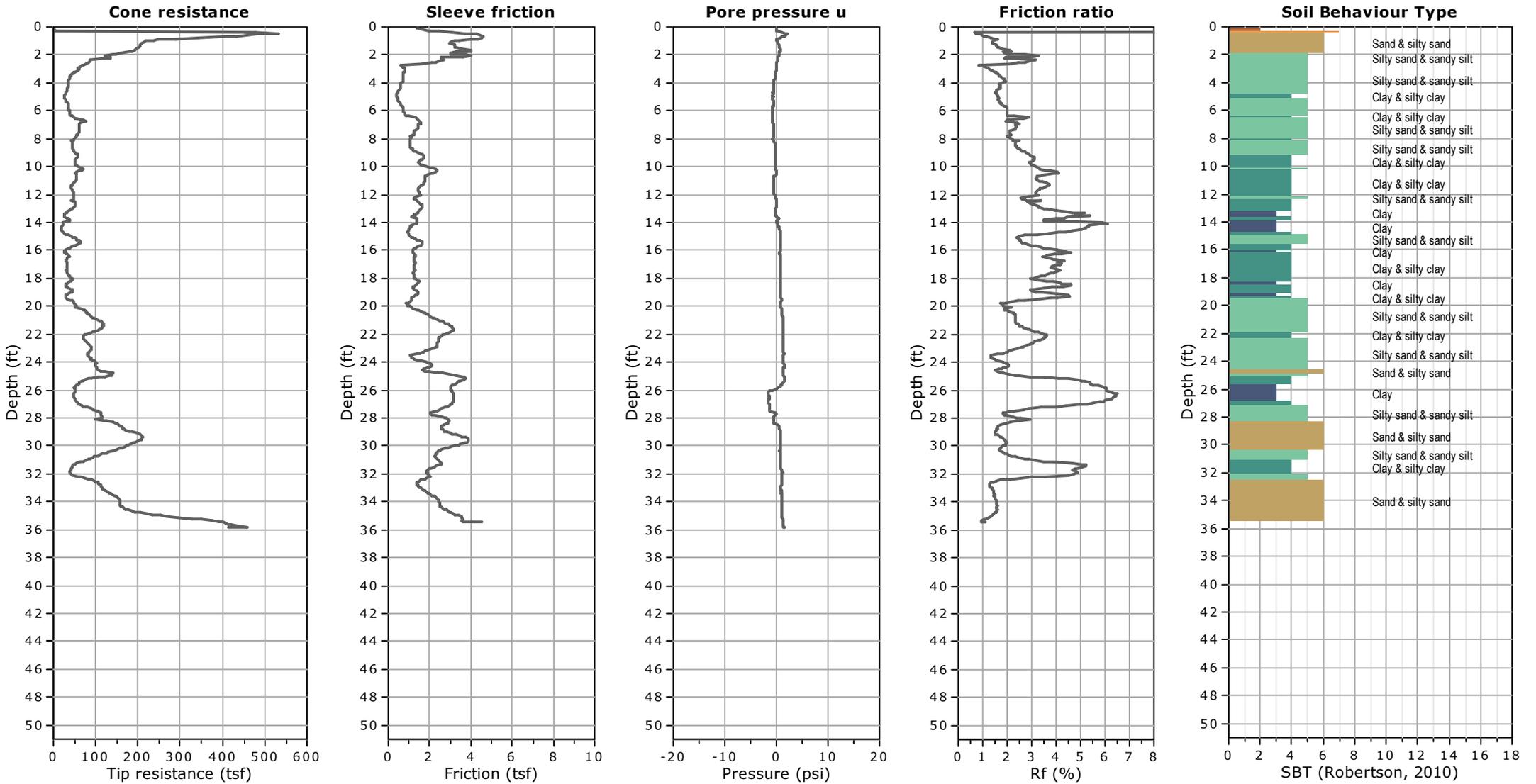
Steven P. Kehoe  
President

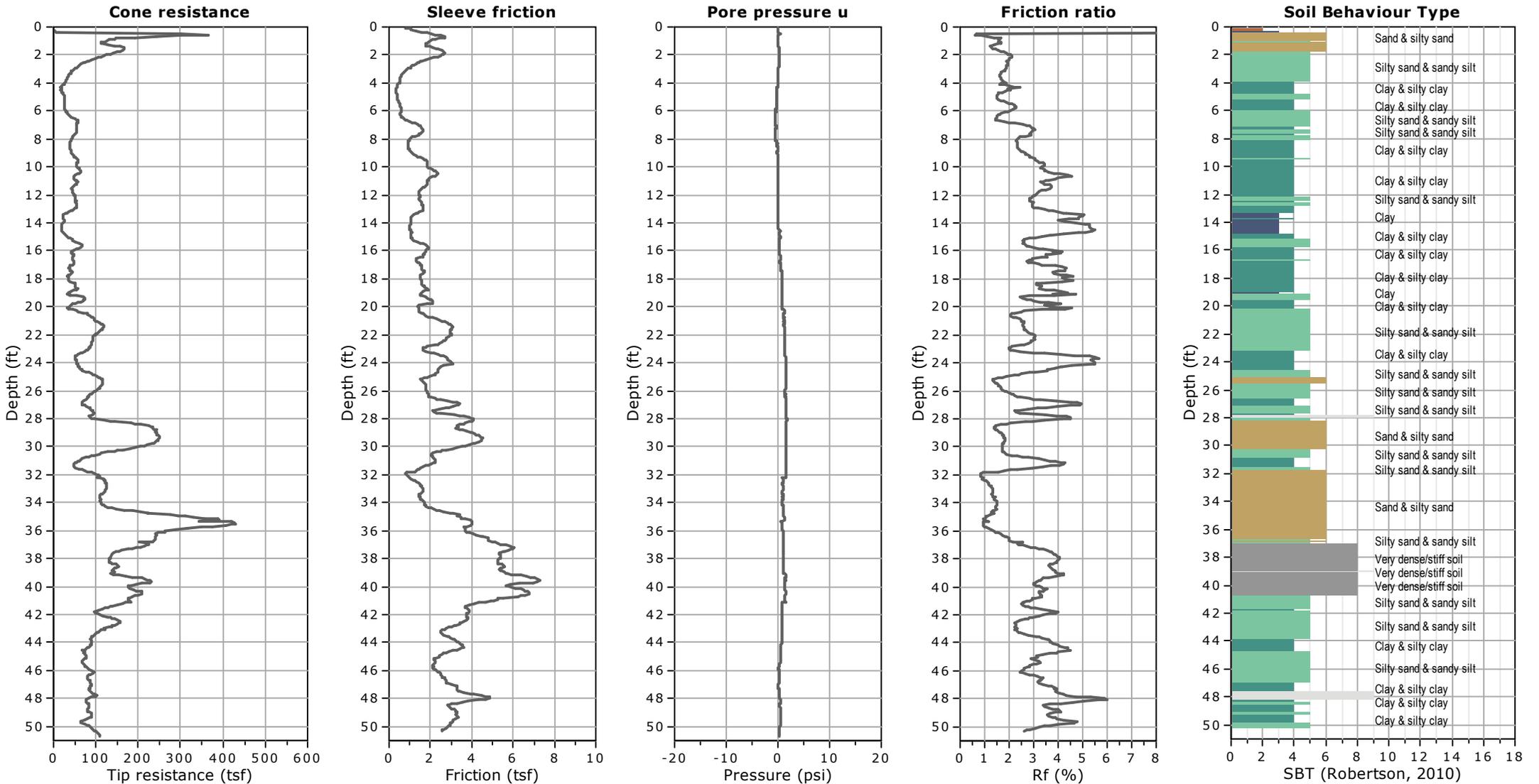
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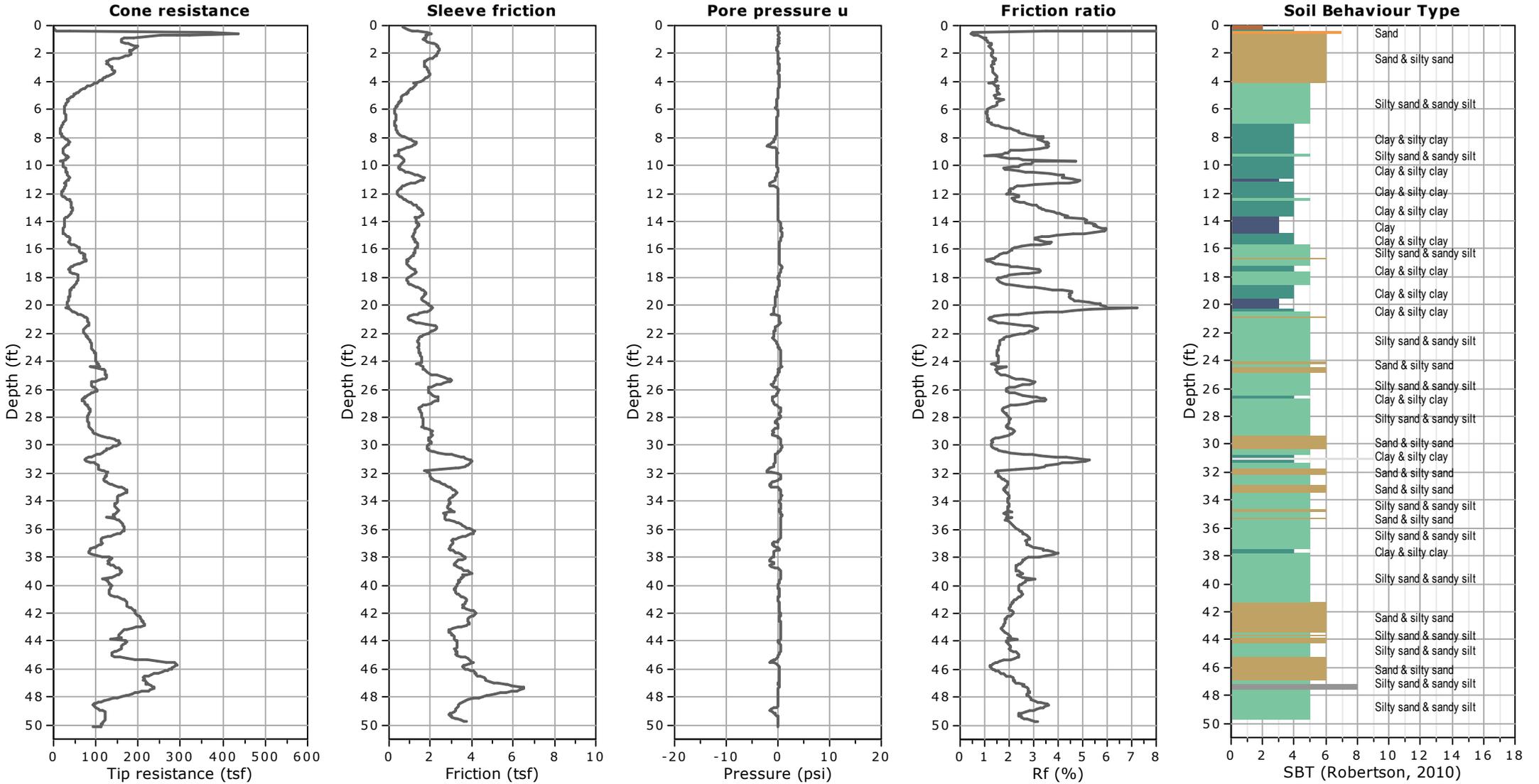
# APPENDIX

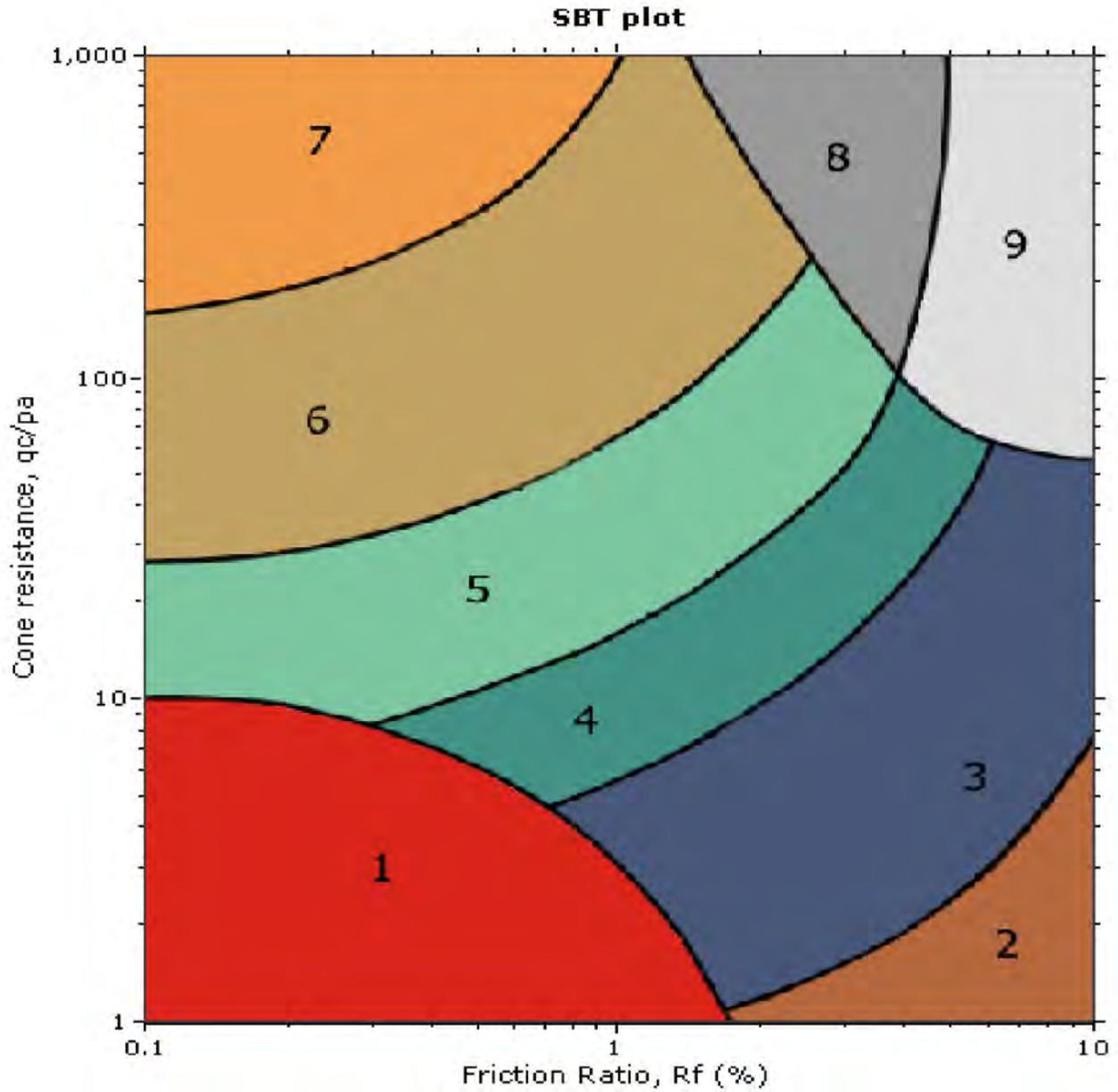












**SBT legend**

- |                           |                              |                                   |
|---------------------------|------------------------------|-----------------------------------|
| 1. Sensitive fine grained | 4. Clayey silt to silty clay | 7. Gravely sand to sand           |
| 2. Organic material       | 5. Silty sand to sandy silt  | 8. Very stiff sand to clayey sand |
| 3. Clay to silty clay     | 6. Clean sand to silty sand  | 9. Very stiff fine grained        |

Leighton & Associates  
 Legacy  
 Ontario, CA

CPT Shear Wave Measurements

Location	Tip Depth (ft)	Geophone Depth (ft)	Travel Distance (ft)	S-Wave Arrival (msec)	S-Wave Velocity from Surface (ft/sec)	Interval S-Wave Velocity (ft/sec)
CPT-1	5.09	4.09	4.55	4.80	949	
	10.14	9.14	9.36	10.26	912	880
	15.03	14.03	14.17	16.16	877	816
	20.01	19.01	19.11	21.42	892	940
	25.10	24.10	24.18	26.42	915	1014
	30.05	29.05	29.12	31.16	934	1041
	35.07	34.07	34.13	36.20	943	994
	40.03	39.03	39.08	40.12	974	1263
	45.14	44.14	44.19	44.64	990	1129
	50.03	49.03	49.07	48.80	1006	1174

Shear Wave Source Offset - 2 ft

S-Wave Velocity from Surface = Travel Distance/S-Wave Arrival  
 Interval S-Wave Velocity = (Travel Dist2-Travel Dist1)/(Time2-Time1)



**APPENDIX B**  
**PERCOLATION TEST DATA**

**Boring Percolation Test Data Sheet**

<b>Project Number:</b>	13493.001	<b>Test Hole Number:</b>	LP-1
<b>Project Name:</b>	Legacy - Collier	<b>Date Excavated:</b>	4/6/2022
<b>Earth Description:</b>	Alluvium	<b>Date Tested:</b>	4/7/2022
<b>Liquid Description:</b>	Tap water	<b>Depth of boring (ft):</b>	23.5
<b>Tested By:</b>	LFO/KD	<b>Radius of boring (in):</b>	4
<b><u>Time Interval Standard</u></b>		<b>Radius of casing (in):</b>	1
<b>Start Time for Pre-Soak:</b>	8:34	<b>Length of slotted of casing (ft):</b>	5
<b>Start Time for Standard:</b>	9:31	<b>Depth to Initial Water Depth (ft):</b>	16.9
<b>Standard Time Interval</b>	25	<b>Porosity of Annulus Material, <i>n</i>:</b>	0.35
<b>Between Readings, mins:</b>	10	<b>Bentonite Plug at Bottom:</b>	No

**Percolation Data**

Reading	Time	Time Interval, Δt (min.)	Initial/Final Depth to Water (ft.)	Initial/Final Water Height, H <sub>0</sub> /H <sub>f</sub> (in.)	Total Water Drop, Δd (in.)	Percolation Rate (min./in.)	Infiltration Rate (in./hr.)
1	8:34	25	16.93	78.8	8.2	3.06	0.20
	8:59		17.61	70.7			
2	9:04	25	16.99	78.1	7.4	3.36	0.18
	9:29		17.61	70.7			
3	9:31	10	16.94	78.7	5.9	1.70	0.35
	9:41		17.43	72.8			
4	9:43	10	17.00	78.0	5.0	1.98	0.30
	9:53		17.42	73.0			
5	9:55	10	17.00	78.0	5.3	1.89	0.32
	10:05		17.44	72.7			
6	10:06	10	17.00	78.0	5.3	1.89	0.32
	10:16		17.44	72.7			
7	10:18	10	17.00	78.0	5.4	1.85	0.33
	10:28		17.45	72.6			
8	10:30	10	17.00	78.0	5.3	1.89	0.32
	10:40		17.44	72.7			

Infiltration Rate (I) = Discharge Volume/Surface Area of Test Section/Time Interval

**Infiltration Rate, I (Last Reading) = 0.32 in./hr.**

**Boring Percolation Test Data Sheet**

<b>Project Number:</b>	13493.001	<b>Test Hole Number:</b>	LP-2
<b>Project Name:</b>	Legacy - Collier	<b>Date Excavated:</b>	4/6/2022
<b>Earth Description:</b>	Alluvium	<b>Date Tested:</b>	4/7/2022
<b>Liquid Description:</b>	Tap water	<b>Depth of boring (ft):</b>	20
<b>Tested By:</b>	LFO/KD	<b>Radius of boring (in):</b>	4
<b><u>Time Interval Standard</u></b>		<b>Radius of casing (in):</b>	1
<b>Start Time for Pre-Soak:</b>	7:25	<b>Length of slotted of casing (ft):</b>	5
<b>Start Time for Standard:</b>	8:27	<b>Depth to Initial Water Depth (ft):</b>	15.05
<b>Standard Time Interval</b>	25	<b>Porosity of Annulus Material, <i>n</i>:</b>	0.35
<b>Between Readings, mins:</b>	10	<b>Bentonite Plug at Bottom:</b>	No

**Percolation Data**

Reading	Time	Time Interval, Δt (min.)	Initial/Final Depth to Water (ft.)	Initial/Final Water Height, H <sub>0</sub> /H <sub>f</sub> (in.)	Total Water Drop, Δd (in.)	Percolation Rate (min./in.)	Infiltration Rate (in./hr.)
1	7:25	25	15.05	59.4	0.1	208.33	0.00
	7:50		15.06	59.3			
2	7:55	25	15.20	57.6	16.2	1.54	0.59
	8:20		16.55	41.4			
3	8:27	10	15.08	59.0	8.0	1.24	0.66
	8:37		15.75	51.0			
4	8:39	10	15.05	59.4	8.8	1.14	0.72
	8:49		15.78	50.6			
5	8:56	10	15.08	59.0	8.0	1.24	0.66
	9:06		15.75	51.0			
6	9:08	10	15.08	59.0	5.0	1.98	0.40
	9:18		15.50	54.0			
7	9:21	10	15.08	59.0	8.4	1.19	0.69
	9:31		15.78	50.6			
8	9:34	10	15.08	59.0	8.4	1.19	0.69
	9:44		15.78	50.6			

Infiltration Rate (I) = Discharge Volume/Surface Area of Test Section/Time Interval

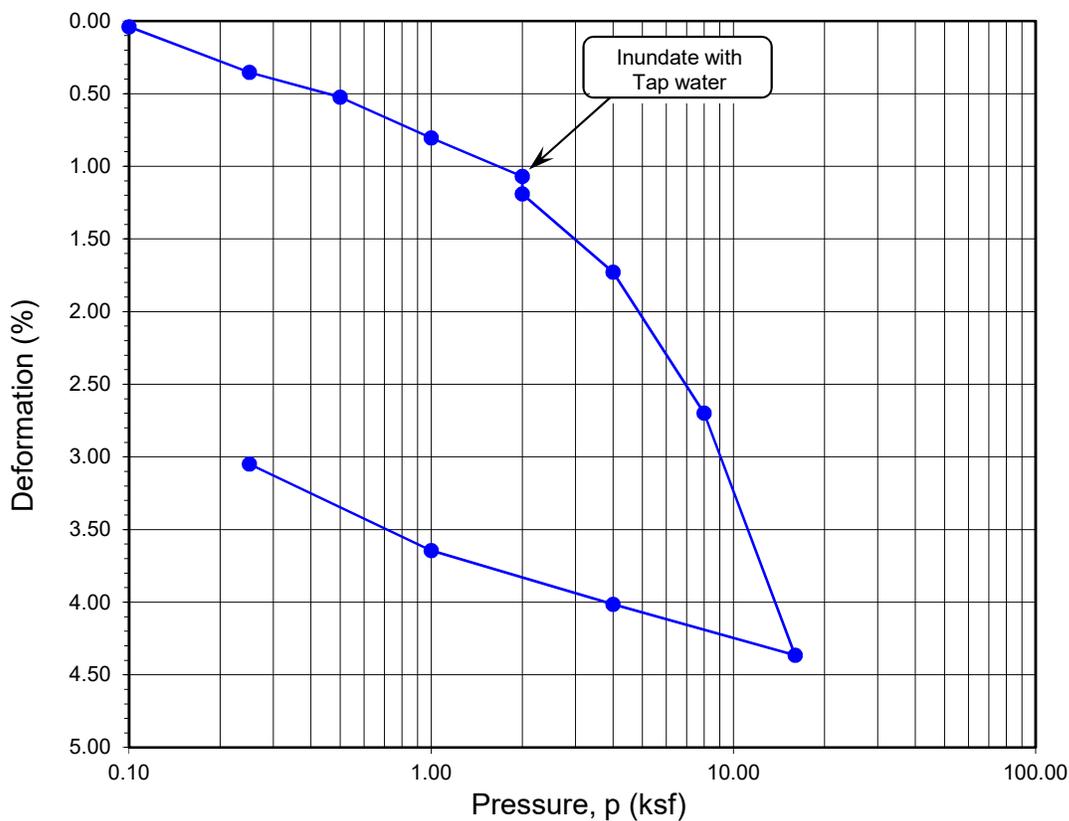
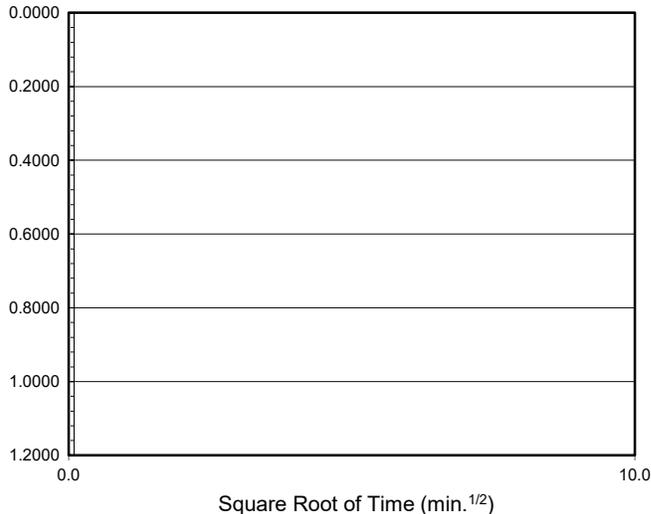
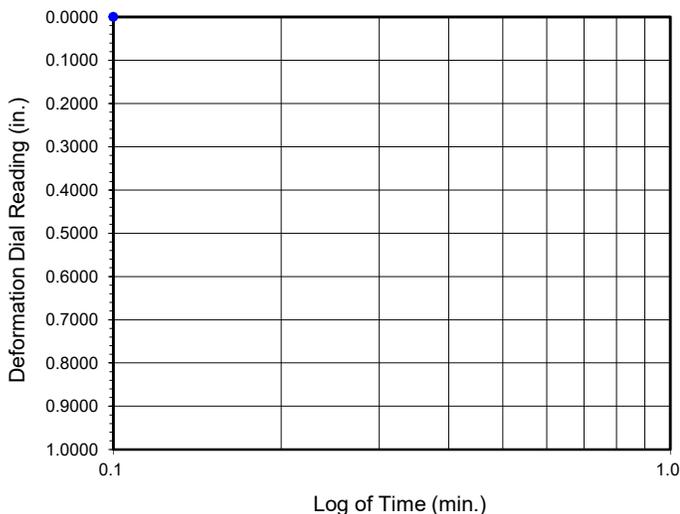
**Infiltration Rate, I (Last Reading) = 0.69 in./hr.**



**APPENDIX C**  
**LABORATORY TEST RESULTS**



Time Readings



Boring No.	Sample No.	Depth (ft.)	Moisture Content (%)		Dry Density (pcf)		Void Ratio		Degree of Saturation (%)	
			Initial	Final	Initial	Final	Initial	Final	Initial	Final
<b>LB-1</b>	<b>R-1</b>	<b>5</b>	<b>18.2</b>	<b>20.3</b>	<b>98.3</b>	<b>106.5</b>	<b>0.720</b>	<b>0.668</b>	<b>68</b>	<b>94</b>

Soil Identification: Olive silty clay (CL-ML)



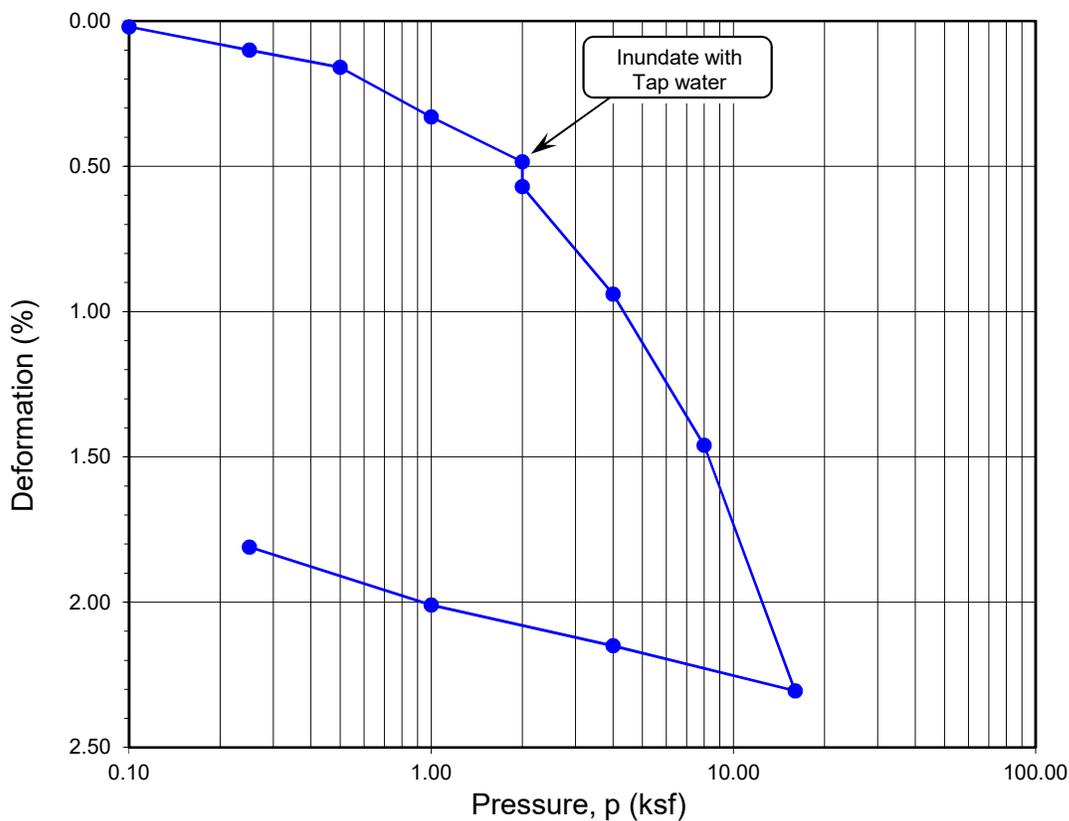
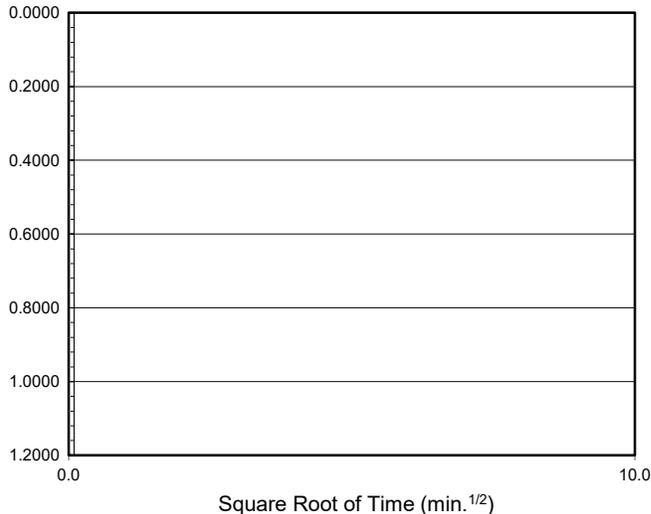
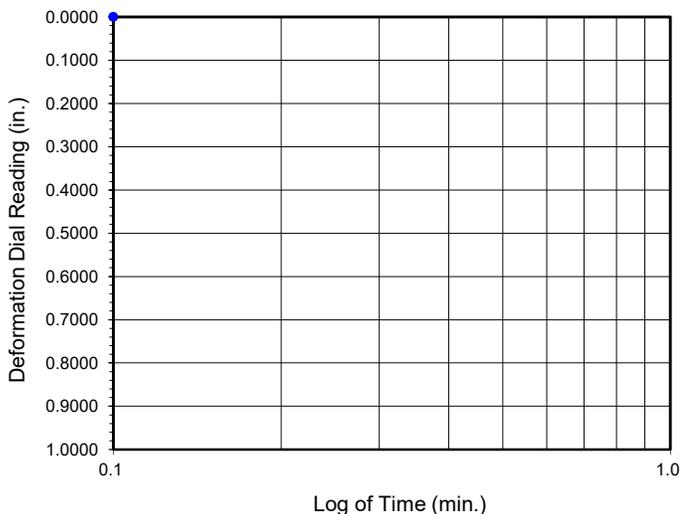
**ONE-DIMENSIONAL CONSOLIDATION  
PROPERTIES of SOILS**  
ASTM D 2435

Project No.: 13493.001  
Legacy-Collier, Proposed Euclid &  
Walnut Mixed-Use, Ontario CA

04-22



Time Readings



Boring No.	Sample No.	Depth (ft.)	Moisture Content (%)		Dry Density (pcf)		Void Ratio		Degree of Saturation (%)	
			Initial	Final	Initial	Final	Initial	Final	Initial	Final
<b>LB-2</b>	<b>R-1</b>	<b>5</b>	<b>9.0</b>	<b>11.4</b>	<b>117.9</b>	<b>120.3</b>	<b>0.435</b>	<b>0.409</b>	<b>56</b>	<b>76</b>

Soil Identification: Olive gray silty, clayey sand (SC-SM)



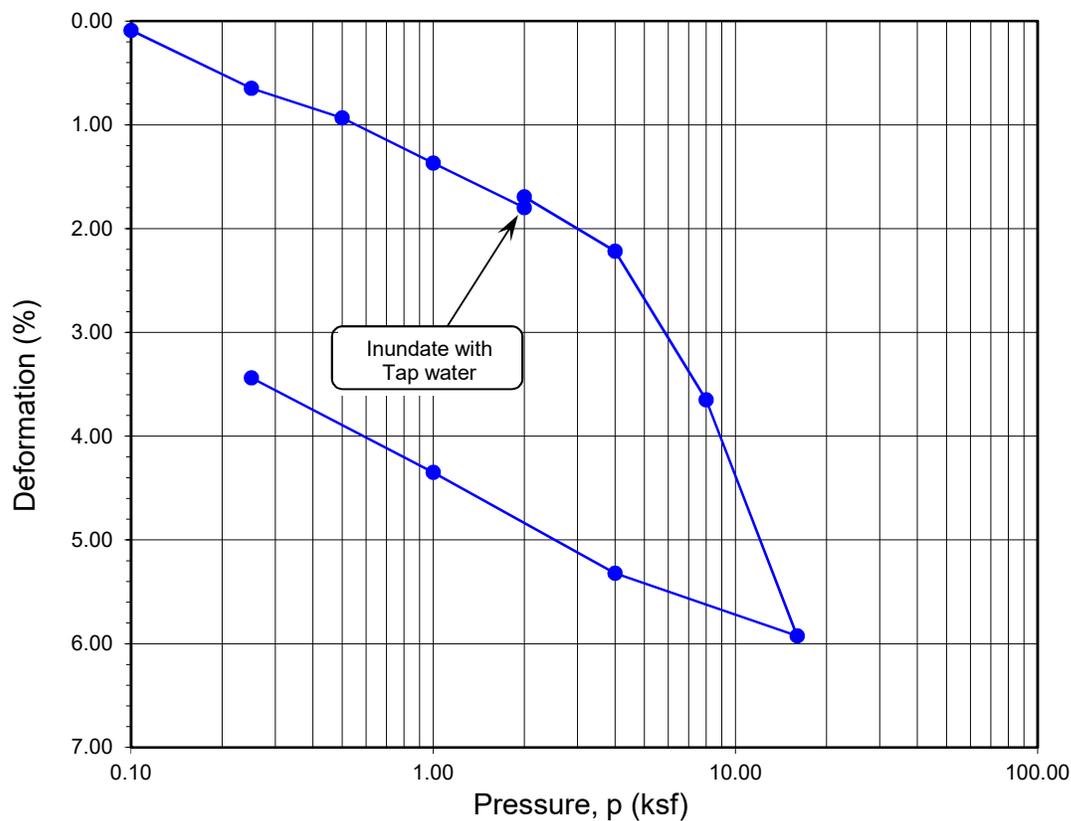
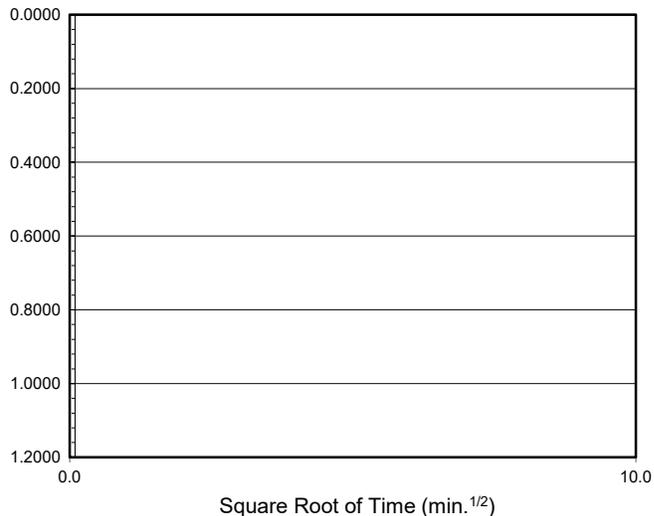
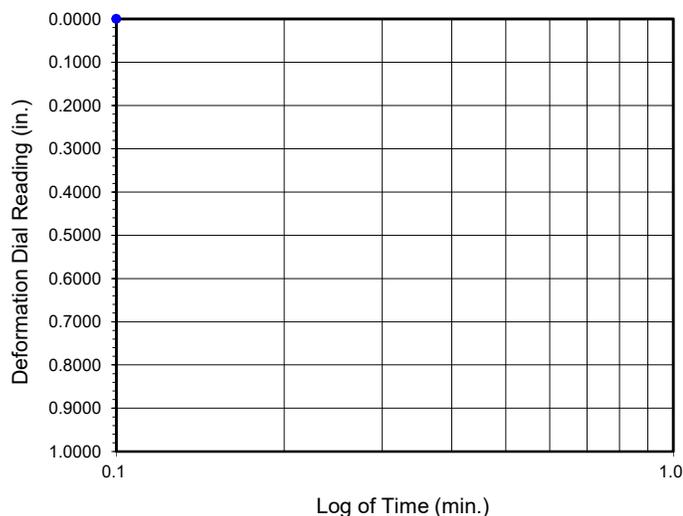
**ONE-DIMENSIONAL CONSOLIDATION  
PROPERTIES of SOILS**  
ASTM D 2435

Project No.: 13493.001  
Legacy-Collier, Proposed Euclid &  
Walnut Mixed-Use, Ontario CA

04-22



Time Readings



Boring No.	Sample No.	Depth (ft.)	Moisture Content (%)		Dry Density (pcf)		Void Ratio		Degree of Saturation (%)	
			Initial	Final	Initial	Final	Initial	Final	Initial	Final
<b>LB-2</b>	<b>R-3</b>	<b>10</b>	<b>30.7</b>	<b>26.5</b>	<b>93.9</b>	<b>99.6</b>	<b>0.855</b>	<b>0.791</b>	<b>100</b>	<b>99</b>

Soil Identification: Olive gray lean clay (CL)



**ONE-DIMENSIONAL CONSOLIDATION  
PROPERTIES of SOILS**  
ASTM D 2435

Project No.: 13493.001  
Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario CA

04-22



**TESTS for SULFATE CONTENT  
CHLORIDE CONTENT and pH of SOILS**

Legacy-Collier, Proposed Euclid & Walnut

Project Name: Mixed-Use, Ontario CA Tested By : G. Berdy Date: 04/13/22  
 Project No. : 13493.001 Checked By: A. Santos Date: 04/25/22

Boring No.	LB-3			
Sample No.	B-1			
Sample Depth (ft)	0-5			
Soil Identification:	Olive brown (SM)			
Wet Weight of Soil + Container (g)	168.20			
Dry Weight of Soil + Container (g)	168.07			
Weight of Container (g)	52.00			
Moisture Content (%)	0.11			
Weight of Soaked Soil (g)	100.19			

**SULFATE CONTENT, DOT California Test 417, Part II**

Beaker No.	8			
Crucible No.	3			
Furnace Temperature (°C)	860			
Time In / Time Out	7:15/8:00			
Duration of Combustion (min)	45			
Wt. of Crucible + Residue (g)	24.5192			
Wt. of Crucible (g)	24.5129			
Wt. of Residue (g) (A)	0.0063			
PPM of Sulfate (A) x 41150	259.25			
<b>PPM of Sulfate, Dry Weight Basis</b>	<b>260</b>			

**CHLORIDE CONTENT, DOT California Test 422**

ml of Extract For Titration (B)	15			
ml of AgNO3 Soln. Used in Titration (C)	0.4			
PPM of Chloride (C -0.2) * 100 * 30 / B	40			
<b>PPM of Chloride, Dry Wt. Basis</b>	<b>40</b>			

**pH TEST, DOT California Test 643**

<b>pH Value</b>	<b>7.92</b>			
<b>Temperature °C</b>	<b>20.3</b>			



## SOIL RESISTIVITY TEST

### DOT CA TEST 643

Project Name: Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario C Tested By : G. Berdy Date: 04/19/22  
 Project No. : 13493.001 Checked By: A. Santos Date: 04/25/22  
 Boring No.: LB-3 Depth (ft.) : 0-5  
 Sample No. : B-1

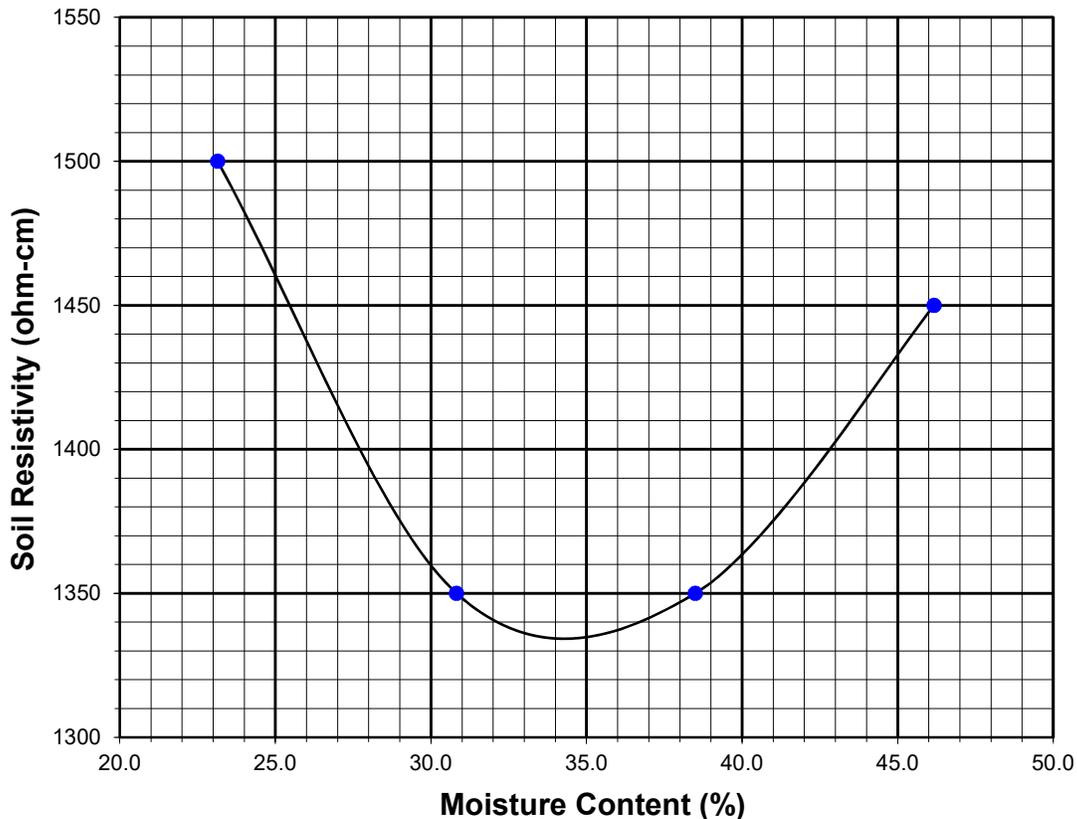
Soil Identification:\* Olive brown (SM)

\*California Test 643 requires soil specimens to consist only of portions of samples passing through the No. 8 US Standard Sieve before resistivity testing. Therefore, this test method may not be representative for coarser materials.

Specimen No.	Water Added (ml) (Wa)	Adjusted Moisture Content (MC)	Resistance Reading (ohm)	Soil Resistivity (ohm-cm)
1	30	23.14	1500	1500
2	40	30.82	1350	1350
3	50	38.50	1350	1350
4	60	46.18	1450	1450
5				

Moisture Content (%) (MCi)	0.11
Wet Wt. of Soil + Cont. (g)	168.20
Dry Wt. of Soil + Cont. (g)	168.07
Wt. of Container (g)	52.00
Container No.	
Initial Soil Wt. (g) (Wt)	130.40
Box Constant	1.000
$MC = (((1 + MC_i / 100) \times (W_a / W_t + 1)) - 1) \times 100$	

Min. Resistivity (ohm-cm)	Moisture Content (%)	Sulfate Content (ppm)	Chloride Content (ppm)	Soil pH	
				pH	Temp. (°C)
DOT CA Test 643		DOT CA Test 417 Part II		DOT CA Test 643	
<b>1335</b>	<b>34.4</b>	<b>260</b>	<b>40</b>	<b>7.92</b>	<b>20.3</b>





**DIRECT SHEAR TEST**  
Consolidated Drained - ASTM D 3080

Project Name: Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario CA      Tested By: G. Bathala      Date: 04/18/22  
 Project No.: 13493.001      Checked By: A. Santos      Date: 04/25/22  
 Boring No.: LB-2      Sample Type: 90% Remold  
 Sample No.: B-1      Depth (ft.): 0-5  
 Soil Identification: Olive brown sandy silt s(ML)

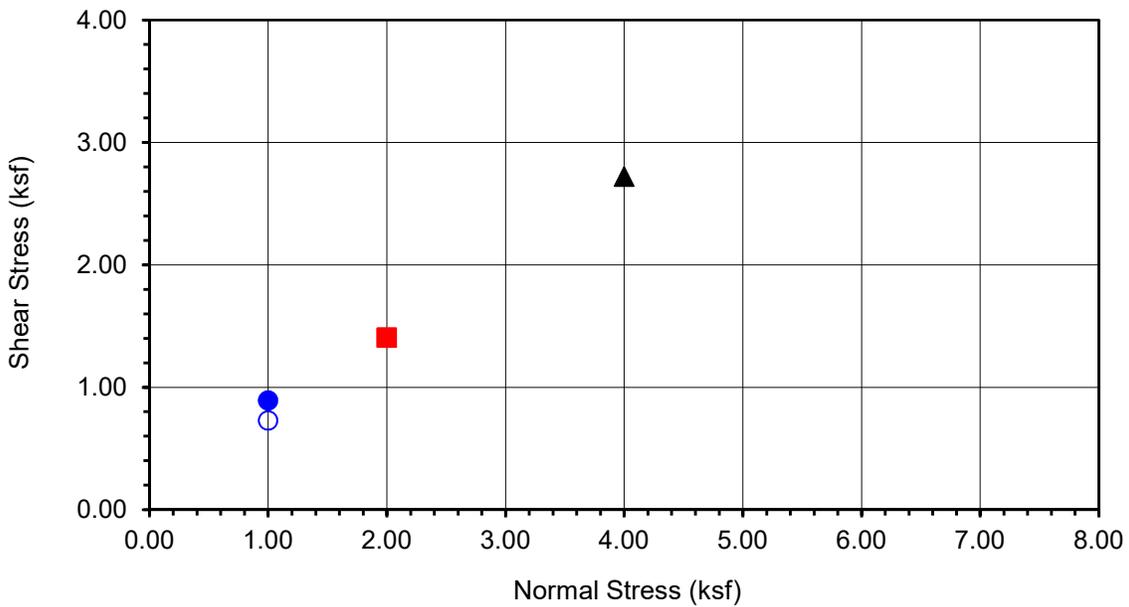
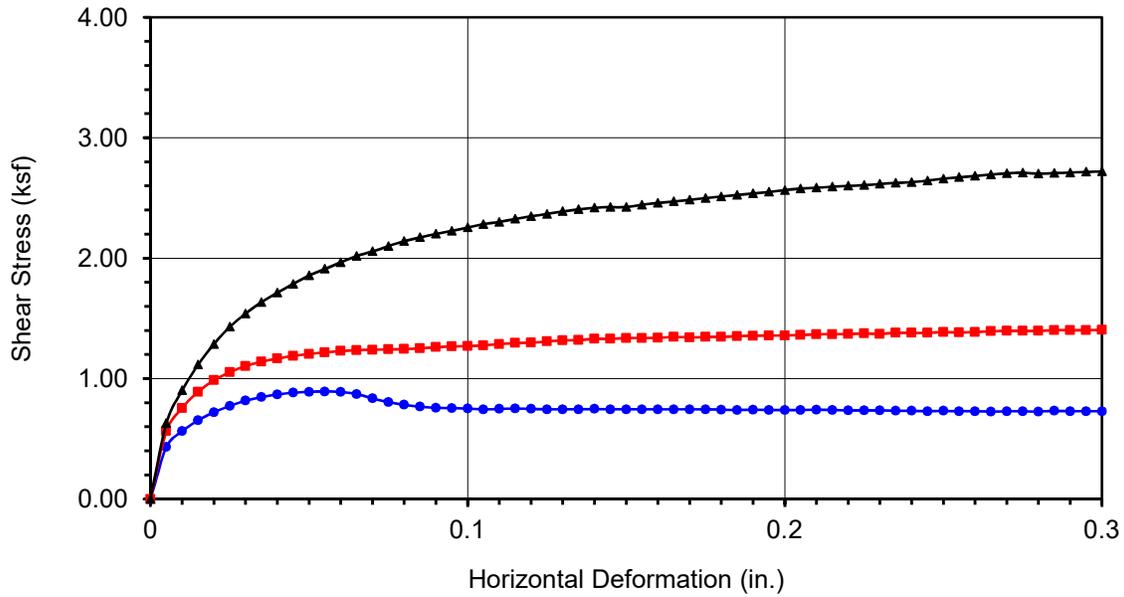
Sample Diameter(in):	2.415	2.415	2.415
Sample Thickness(in.):	1.000	1.000	1.000
Weight of Sample + ring(gm):	197.98	198.21	198.62
Weight of Ring(gm):	45.38	45.43	45.60

**Before Shearing**

Weight of Wet Sample+Cont.(gm):	169.35	169.35	169.35
Weight of Dry Sample+Cont.(gm):	155.92	155.92	155.92
Weight of Container(gm):	56.15	56.15	56.15
Vertical Rdg.(in): Initial	0.2545	0.2729	0.0000
Vertical Rdg.(in): Final	0.2651	0.2858	-0.0224

**After Shearing**

Weight of Wet Sample+Cont.(gm):	211.09	212.06	191.55
Weight of Dry Sample+Cont.(gm):	190.82	191.76	171.67
Weight of Container(gm):	58.12	58.19	38.35
Specific Gravity (Assumed):	2.70	2.70	2.70
Water Density(pcf):	62.43	62.43	62.43



<b>Boring No.</b>	<b>LB-2</b>
<b>Sample No.</b>	<b>B-1</b>
<b>Depth (ft)</b>	<b>0-5</b>
<u>Sample Type:</u>	
90% Remold	
<u>Soil Identification:</u>	
Olive brown sandy silt s(ML)	

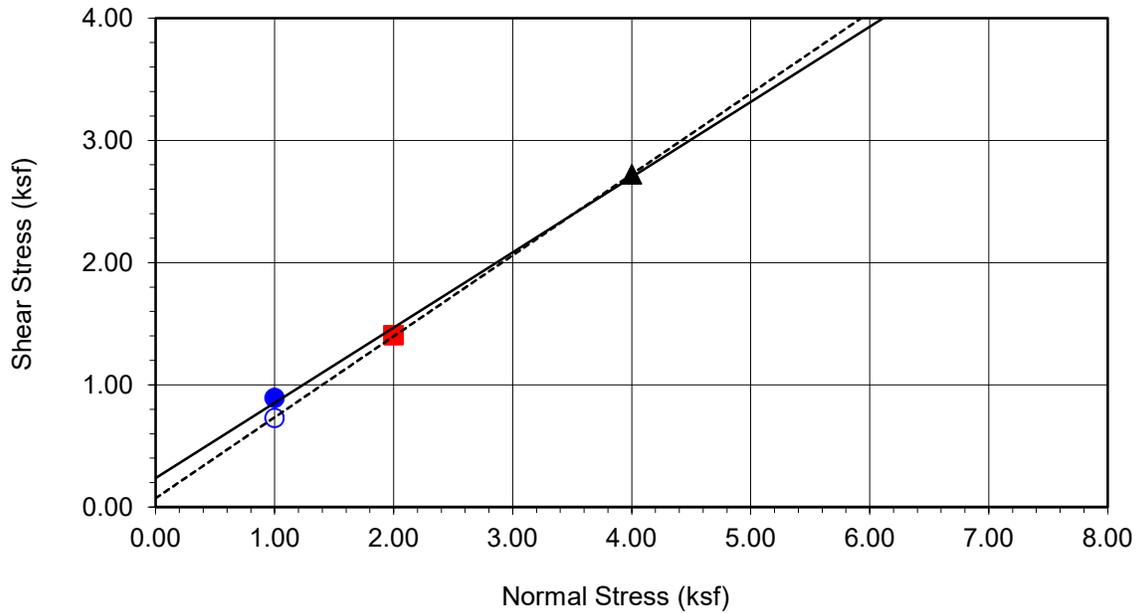
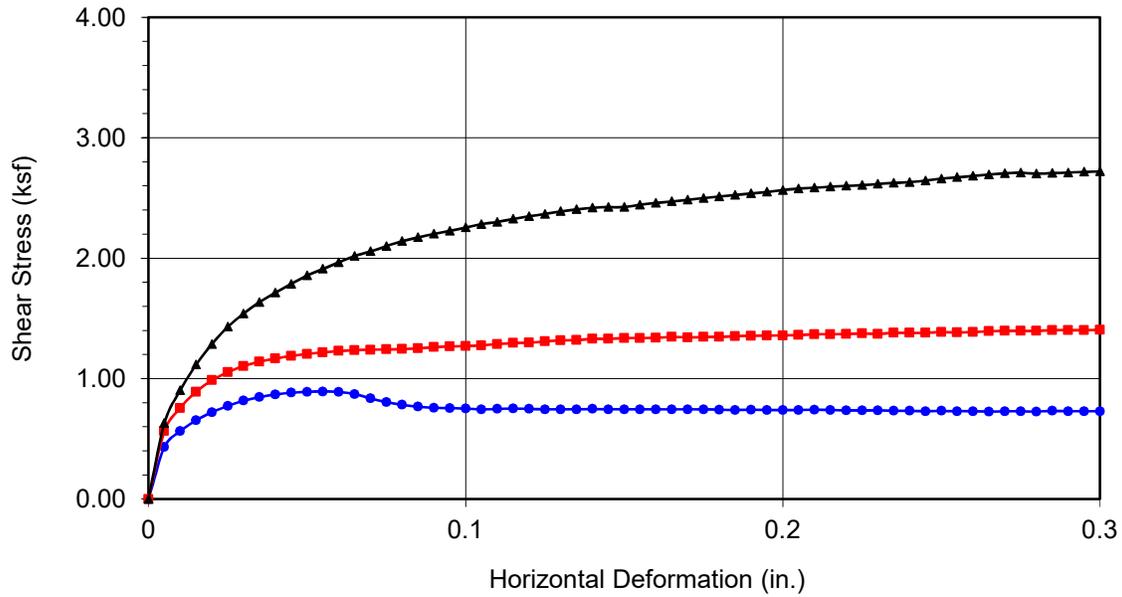
Normal Stress (kip/ft <sup>2</sup> )	1.000	2.000	4.000
Peak Shear Stress (kip/ft <sup>2</sup> )	● 0.893	■ 1.405	▲ 2.719
Shear Stress @ End of Test (ksf)	○ 0.729	□ 1.405	△ 2.719
Deformation Rate (in./min.)	0.0017	0.0017	0.0017
Initial Sample Height (in.)	1.000	1.000	1.000
Diameter (in.)	2.415	2.415	2.415
Initial Moisture Content (%)	13.46	13.46	13.46
Dry Density (pcf)	111.9	112.0	112.2
Saturation (%)	71.7	71.9	72.3
Soil Height Before Shearing (in.)	0.9894	0.9871	0.9776
Final Moisture Content (%)	15.3	15.2	14.9



**DIRECT SHEAR TEST RESULTS**  
Consolidated Drained - ASTM D 3080

Project No.: 13493.001  
Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario CA

04-22



<b>Boring No.</b>	<b>LB-2</b>	
<b>Sample No.</b>	<b>B-1</b>	
<b>Depth (ft)</b>	<b>0-5</b>	
Sample Type: 90% Remold		
Soil Identification: Olive brown sandy silt s(ML)		
<b>Strength Parameters</b>		
	C (psf)	$\phi$ (°)
Peak	236	32
Ultimate	72	34

Normal Stress (kip/ft <sup>2</sup> )	1.000	2.000	4.000
Peak Shear Stress (kip/ft <sup>2</sup> )	● 0.893	■ 1.405	▲ 2.719
Shear Stress @ End of Test (ksf)	○ 0.729	□ 1.405	△ 2.719
Deformation Rate (in./min.)	0.0017	0.0017	0.0017
Initial Sample Height (in.)	1.000	1.000	1.000
Diameter (in.)	2.415	2.415	2.415
Initial Moisture Content (%)	13.46	13.46	13.46
Dry Density (pcf)	111.9	112.0	112.2
Saturation (%)	71.7	71.9	72.3
Soil Height Before Shearing (in.)	0.9894	0.9871	0.9776
Final Moisture Content (%)	15.3	15.2	14.9



**DIRECT SHEAR TEST RESULTS**  
Consolidated Drained - ASTM D 3080

Project No.: 13493.001  
Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario CA

04-22



**DIRECT SHEAR TEST**  
Consolidated Drained - ASTM D 3080

Project Name: [Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario CA](#)      Tested By: [G. Bathala](#)      Date: [04/19/22](#)  
 Project No.: [13493.001](#)      Checked By: [A. Santos](#)      Date: [04/25/22](#)  
 Boring No.: [LB-3](#)      Sample Type: [Ring](#)  
 Sample No.: [R-2](#)      Depth (ft.): [7.5](#)  
 Soil Identification: [Olive silty sand \(SM\)](#)

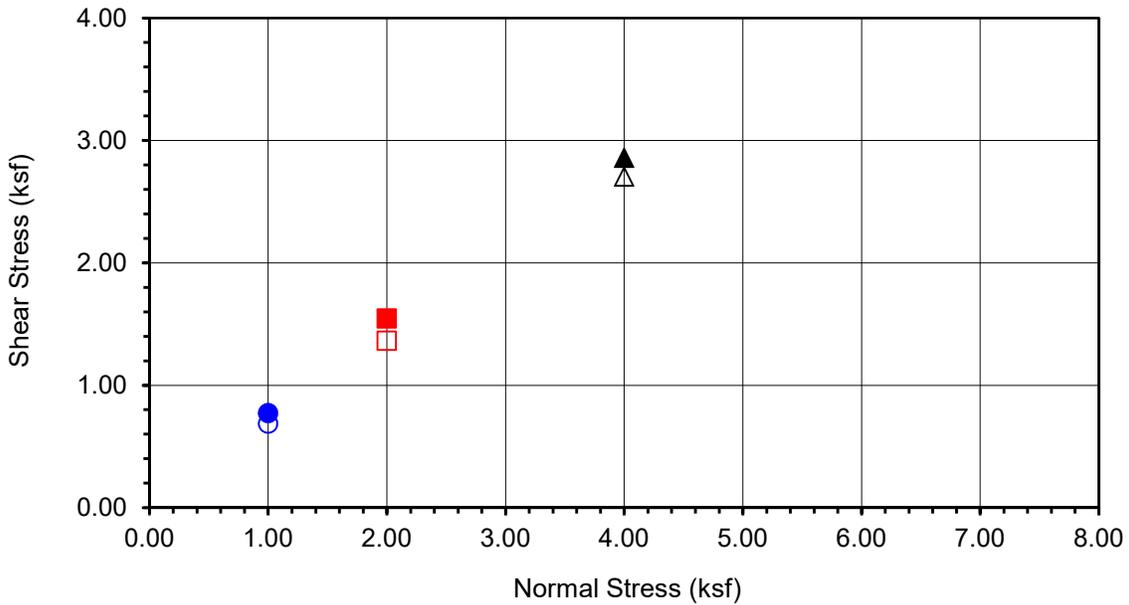
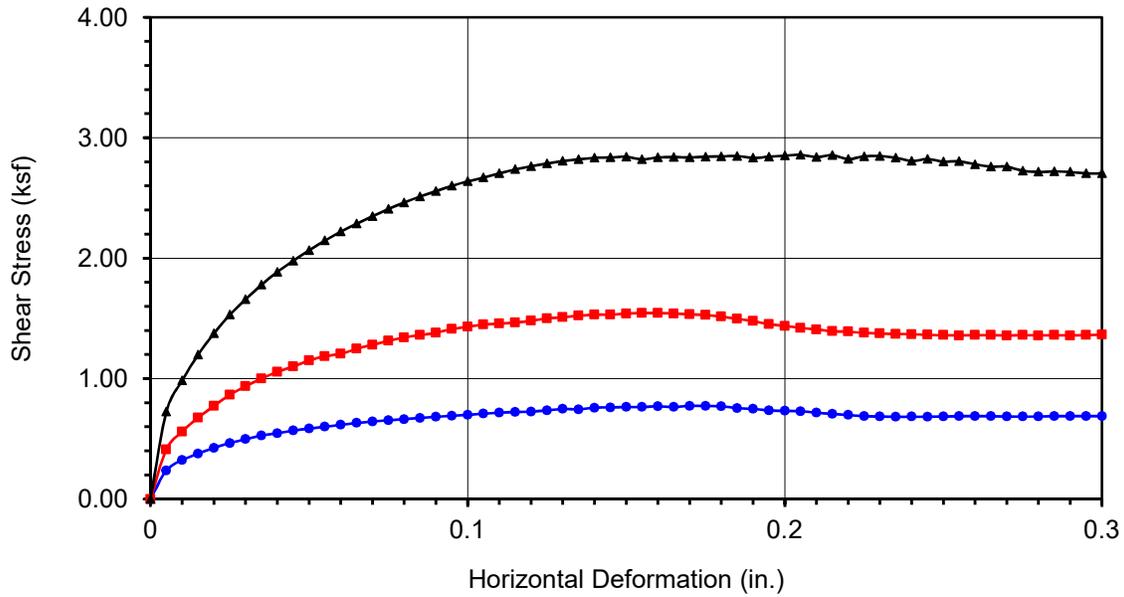
Sample Diameter(in):	2.415	2.415	2.415
Sample Thickness(in.):	1.000	1.000	1.000
Weight of Sample + ring(gm):	177.41	181.99	182.19
Weight of Ring(gm):	43.72	45.58	45.95

**Before Shearing**

Weight of Wet Sample+Cont.(gm):	182.62	182.62	182.62
Weight of Dry Sample+Cont.(gm):	178.05	178.05	178.05
Weight of Container(gm):	58.18	58.18	58.18
Vertical Rdg.(in): Initial	0.0000	0.2562	0.2637
Vertical Rdg.(in): Final	-0.0126	0.2707	0.2918

**After Shearing**

Weight of Wet Sample+Cont.(gm):	208.16	204.29	212.34
Weight of Dry Sample+Cont.(gm):	188.26	184.44	192.59
Weight of Container(gm):	66.34	58.11	67.16
Specific Gravity (Assumed):	2.70	2.70	2.70
Water Density(pcf):	62.43	62.43	62.43



<b>Boring No.</b>	<b>LB-3</b>
<b>Sample No.</b>	<b>R-2</b>
<b>Depth (ft)</b>	<b>7.5</b>
<u>Sample Type:</u>	
Ring	
<u>Soil Identification:</u>	
Olive silty sand (SM)	

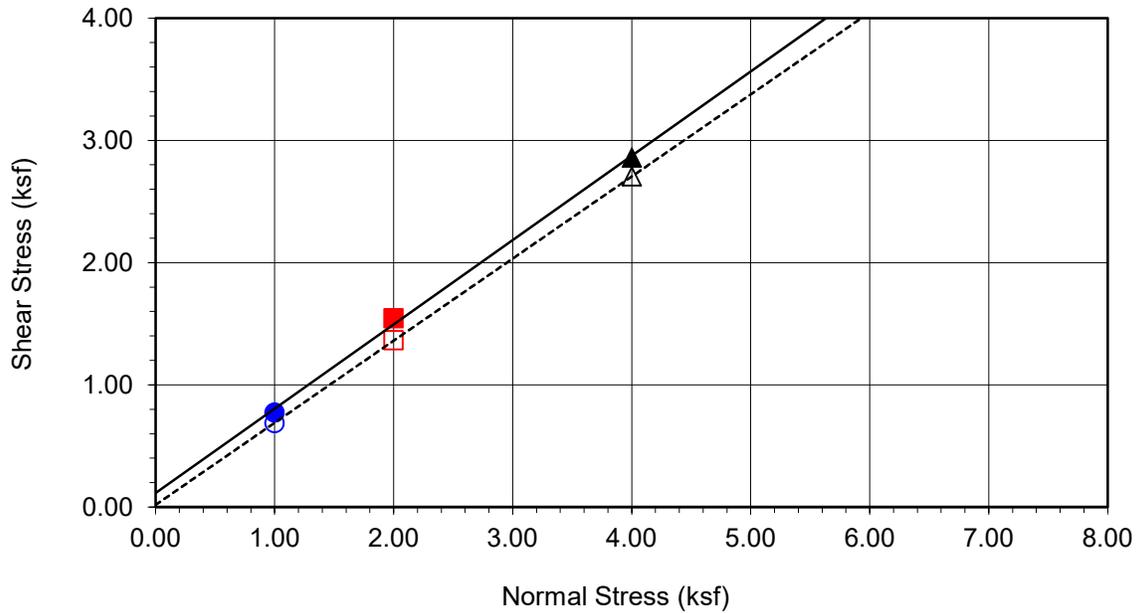
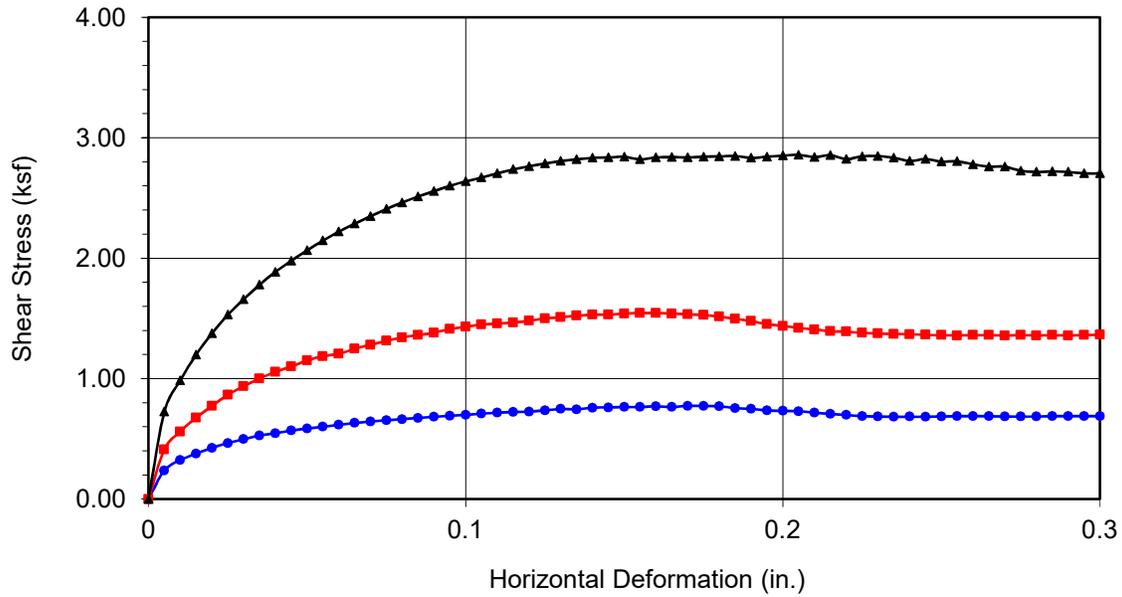
Normal Stress (kip/ft <sup>2</sup> )	1.000	2.000	4.000
Peak Shear Stress (kip/ft <sup>2</sup> )	● 0.773	■ 1.544	▲ 2.858
Shear Stress @ End of Test (ksf)	○ 0.688	□ 1.364	△ 2.704
Deformation Rate (in./min.)	0.0033	0.0033	0.0033
Initial Sample Height (in.)	1.000	1.000	1.000
Diameter (in.)	2.415	2.415	2.415
Initial Moisture Content (%)	3.81	3.81	3.81
Dry Density (pcf)	107.1	109.3	109.1
Saturation (%)	17.9	19.0	18.9
Soil Height Before Shearing (in.)	0.9874	0.9855	0.9719
Final Moisture Content (%)	16.3	15.7	15.7



**DIRECT SHEAR TEST RESULTS**  
Consolidated Drained - ASTM D 3080

Project No.: 13493.001  
Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario CA

04-22



<b>Boring No.</b>	<b>LB-3</b>	
<b>Sample No.</b>	<b>R-2</b>	
<b>Depth (ft)</b>	<b>7.5</b>	
Sample Type:	Ring	
Soil Identification: Olive silty sand (SM)		
<b>Strength Parameters</b>		
	C (psf)	$\phi$ (°)
Peak	116	35
Ultimate	18	34

Normal Stress (kip/ft <sup>2</sup> )	1.000	2.000	4.000
Peak Shear Stress (kip/ft <sup>2</sup> )	● 0.773	■ 1.544	▲ 2.858
Shear Stress @ End of Test (ksf)	○ 0.688	□ 1.364	△ 2.704
Deformation Rate (in./min.)	0.0033	0.0033	0.0033
Initial Sample Height (in.)	1.000	1.000	1.000
Diameter (in.)	2.415	2.415	2.415
Initial Moisture Content (%)	3.81	3.81	3.81
Dry Density (pcf)	107.1	109.3	109.1
Saturation (%)	17.9	19.0	18.9
Soil Height Before Shearing (in.)	0.9874	0.9855	0.9719
Final Moisture Content (%)	16.3	15.7	15.7



**DIRECT SHEAR TEST RESULTS**  
Consolidated Drained - ASTM D 3080

Project No.: 13493.001  
Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario CA

04-22



**EXPANSION INDEX of SOILS**  
ASTM D 4829

Project Name: Legacy-Collier, Proposed Euclid & Walnut  
Mixed-Use, Ontario CA Tested By: G. Berdy Date: 04/13/22  
 Project No.: 13493.001 Checked By: A. Santos Date: 04/25/22  
 Boring No.: LB-1 Depth (ft.): 0-5  
 Sample No.: B-1  
 Soil Identification: Olive brown sandy silt s(ML)

Dry Wt. of Soil + Cont.	(g)	1000.00
Wt. of Container No.	(g)	0.00
Dry Wt. of Soil	(g)	1000.00
Weight Soil Retained on #4 Sieve		0.00
Percent Passing # 4		100.00

MOLDED SPECIMEN	Before Test	After Test
Specimen Diameter (in.)	4.01	4.01
Specimen Height (in.)	1.0000	1.0175
Wt. Comp. Soil + Mold (g)	609.40	443.20
Wt. of Mold (g)	202.10	0.00
Specific Gravity (Assumed)	2.70	2.70
Container No.	0	0
Wet Wt. of Soil + Cont. (g)	819.60	645.30
Dry Wt. of Soil + Cont. (g)	751.90	575.77
Wt. of Container (g)	0.00	202.10
Moisture Content (%)	9.00	18.61
Wet Density (pcf)	122.9	131.4
Dry Density (pcf)	112.7	110.8
Void Ratio	0.496	0.522
Total Porosity	0.331	0.343
Pore Volume (cc)	68.6	72.2
Degree of Saturation (%) [ S <sub>meas</sub> ]	<b>49.0</b>	96.3

**SPECIMEN INUNDATION** in distilled water for the period of 24 h or expansion rate < 0.0002 in./h

Date	Time	Pressure (psi)	Elapsed Time (min.)	Dial Readings (in.)
04/13/22	11:12	1.0	0	0.5855
04/13/22	11:22	1.0	10	0.5855
Add Distilled Water to the Specimen				
04/13/22	11:59	1.0	37	0.6000
04/14/22	5:42	1.0	1100	0.6030
04/14/22	9:53	1.0	1351	0.6030

Expansion Index (EI <sub>meas</sub> ) = ((Final Rdg - Initial Rdg) / Initial Thick.) x 1000	<b>18</b>
---------------------------------------------------------------------------------------------	-----------

Borehole	Depth	Liquid Limit	Plastic Limit	Plasticity Index	Maximum Size (mm)	%<#200 Sieve	Classification	Water Content (%)	Dry Density (pcf)	Saturation (%)	Void Ratio
LB-1	7.5							9.3	94.6		
LB-1	10.0							31.0	88.6		
LB-1	15.0							15.7	111.5		
LB-1	20.0							12.2	120.1		
LB-1	30.0							3.6			
LB-1	40.0							4.4			
LB-1	45.0							2.0	114.9		
LB-1	50.0							3.2			
LB-2	7.5							3.0	101.4		
LB-2	15.0							4.0	102.8		
LB-2	20.0							15.7	111.9		
LB-2	25.0							10.4	108.4		
LB-3	5.0							7.7	110.6		
LB-3	10.0							26.3	90.1		
LB-3	15.0							35.1	87.0		
LB-3	20.0							12.5	121.7		
LB-3	25.0							13.9	113.8		
LP-1	15.0							5.0	104.3		
LP-1	18.5							12.4	119.3		
LP-2	15.0							25.4	91.0		
LP-2	18.5							7.3	115.0		

US LAB SUMMARY 13493.001 BORING LOGS.GPJ ROCKLOG2012.GDT 5/4/22



**Summary of Laboratory Results**

Project Name: Legacy-Collier, Proposed Residential Development

Project Number: 13493.001

Date: 5/4/2022 11:49:57 AM

Figure No. 1



# MODIFIED PROCTOR COMPACTION TEST

ASTM D 1557

Project Name: Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario CA Tested By: J. Gonzalez Date: 04/12/22  
 Project No.: 13493.001 Checked By: A. Santos Date: 04/13/22  
 Boring No.: LB-2 Depth (ft.): 0-5  
 Sample No.: B-1  
 Soil Identification: Olive brown sandy silt s(ML)

Preparation Method:  Moist  Mechanical Ram  
 Dry  Manual Ram  
**Mold Volume (ft<sup>3</sup>)** 0.03330 *Ram Weight = 10 lb.; Drop = 18 in.*

TEST NO.	1	2	3	4	5	6
Wt. Compacted Soil + Mold (g)	3861	3920	3880			
Weight of Mold (g)	1826	1826	1826			
Net Weight of Soil (g)	2035	2094	2054			
Wet Weight of Soil + Cont. (g)	462.6	478.9	498.0			
Dry Weight of Soil + Cont. (g)	423.8	429.5	437.3			
Weight of Container (g)	37.9	36.3	39.6			
Moisture Content (%)	10.05	12.56	15.26			
Wet Density (pcf)	134.7	138.6	136.0			
Dry Density (pcf)	122.4	123.2	118.0			

**Maximum Dry Density (pcf)** 123.5 **Optimum Moisture Content (%)** 11.5

### PROCEDURE USED

**Procedure A**  
 Soil Passing No. 4 (4.75 mm) Sieve  
 Mold : 4 in. (101.6 mm) diameter  
 Layers : 5 (Five)  
 Blows per layer : 25 (twenty-five)  
 May be used if + #4 is 20% or less

**Procedure B**  
 Soil Passing 3/8 in. (9.5 mm) Sieve  
 Mold : 4 in. (101.6 mm) diameter  
 Layers : 5 (Five)  
 Blows per layer : 25 (twenty-five)  
 Use if + #4 is >20% and +3/8 in. is 20% or less

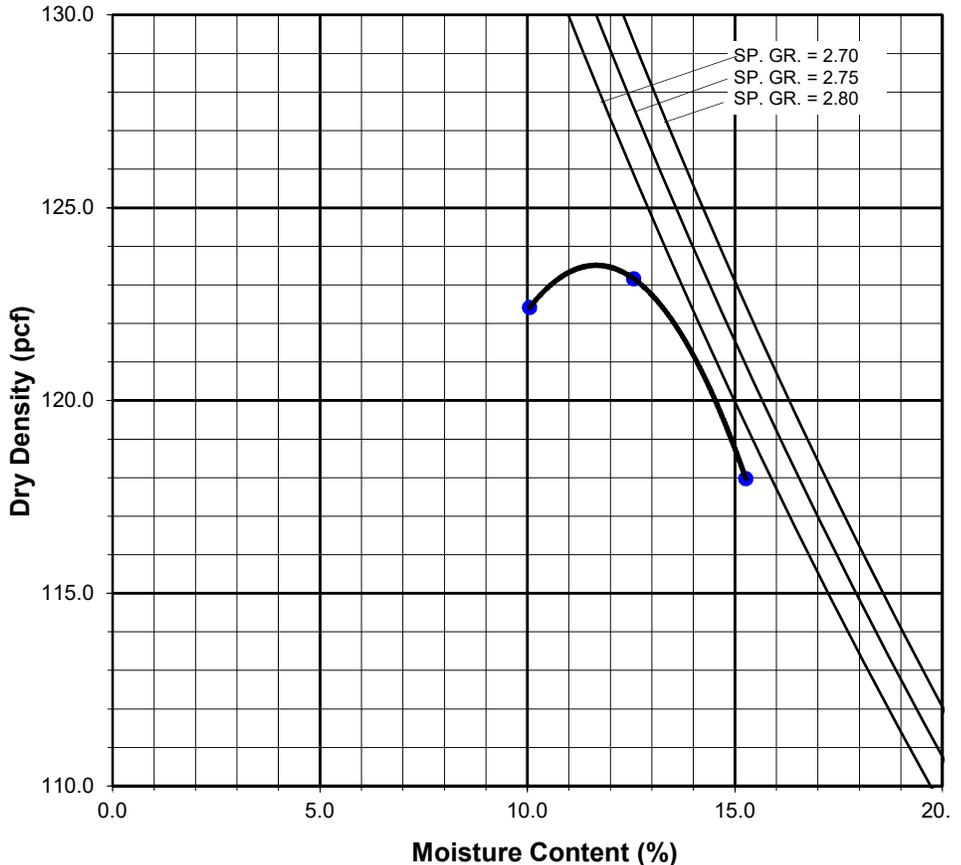
**Procedure C**  
 Soil Passing 3/4 in. (19.0 mm) Sieve  
 Mold : 6 in. (152.4 mm) diameter  
 Layers : 5 (Five)  
 Blows per layer : 56 (fifty-six)  
 Use if +3/8 in. is >20% and +3/4 in. is <30%

### Particle-Size Distribution:

GR:SA:FI

### Atterberg Limits:

LL, PL, PI





# MODIFIED PROCTOR COMPACTION TEST

ASTM D 1557

Project Name: Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario CA Tested By: J. Gonzalez Date: 04/13/22  
 Project No.: 13493.001 Checked By: A. Santos Date: 04/25/22  
 Boring No.: LB-3 Depth (ft.): 0-5  
 Sample No.: B-1  
 Soil Identification: Olive brown silty sand (SM)

Preparation Method:  Moist  Mechanical Ram  
 Dry  Manual Ram  
**Mold Volume (ft<sup>3</sup>)** 0.03330 *Ram Weight = 10 lb.; Drop = 18 in.*

TEST NO.	1	2	3	4	5	6
Wt. Compacted Soil + Mold (g)	3839	3913	3850			
Weight of Mold (g)	1826	1826	1826			
Net Weight of Soil (g)	2013	2087	2024			
Wet Weight of Soil + Cont. (g)	499.8	520.0	518.3			
Dry Weight of Soil + Cont. (g)	469.3	477.3	466.0			
Weight of Container (g)	41.0	39.1	37.8			
Moisture Content (%)	7.12	9.74	12.21			
Wet Density (pcf)	133.3	138.2	134.0			
Dry Density (pcf)	124.4	125.9	119.4			

**Maximum Dry Density (pcf)** 126.4 **Optimum Moisture Content (%)** 9.0

### PROCEDURE USED

**Procedure A**  
 Soil Passing No. 4 (4.75 mm) Sieve  
 Mold : 4 in. (101.6 mm) diameter  
 Layers : 5 (Five)  
 Blows per layer : 25 (twenty-five)  
 May be used if + #4 is 20% or less

**Procedure B**  
 Soil Passing 3/8 in. (9.5 mm) Sieve  
 Mold : 4 in. (101.6 mm) diameter  
 Layers : 5 (Five)  
 Blows per layer : 25 (twenty-five)  
 Use if + #4 is >20% and +3/8 in. is 20% or less

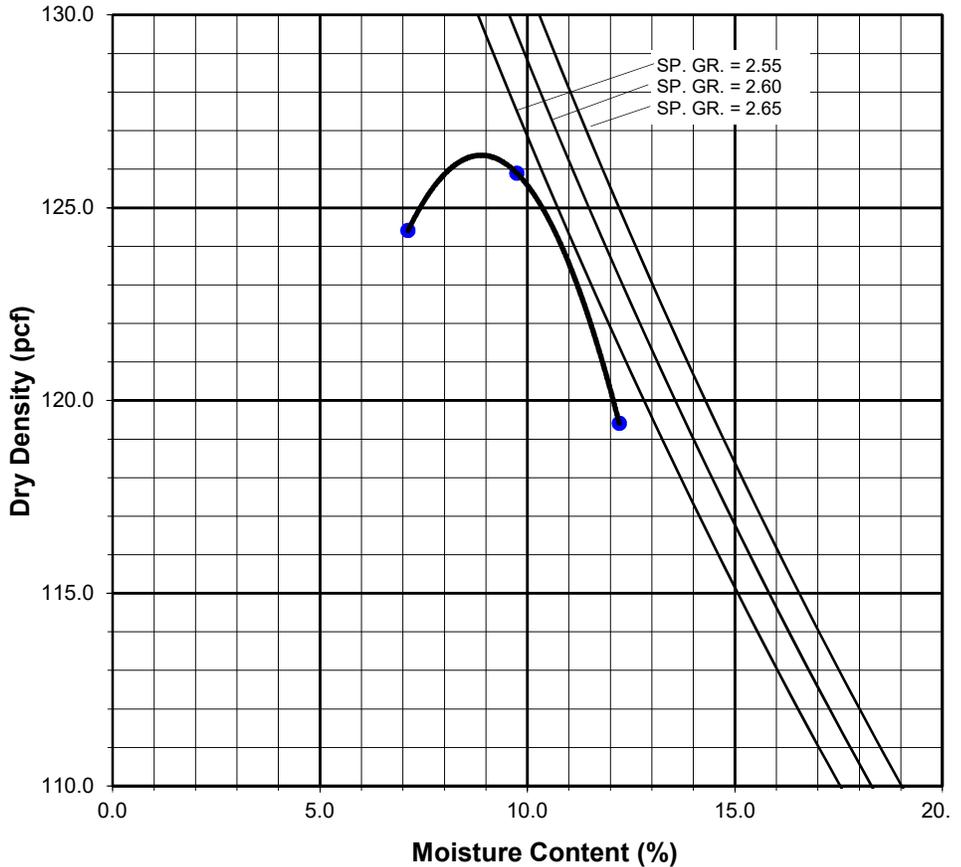
**Procedure C**  
 Soil Passing 3/4 in. (19.0 mm) Sieve  
 Mold : 6 in. (152.4 mm) diameter  
 Layers : 5 (Five)  
 Blows per layer : 56 (fifty-six)  
 Use if +3/8 in. is >20% and +3/4 in. is <30%

### Particle-Size Distribution:

GR:SA:FI

### Atterberg Limits:

LL,PL,PI





## ATTERBERG LIMITS ASTM D 4318

Project Name: Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Onratio CA      Tested By: J. Domingo      Date: 04/22/22  
 Project No. : 13493.001      Input By: G. Bathala      Date: 04/25/22  
 Boring No.: LB-2      Checked By: A. Santos  
 Sample No.: R-3      Depth (ft.) 10.0  
 Soil Identification: Olive gray lean clay (CL)

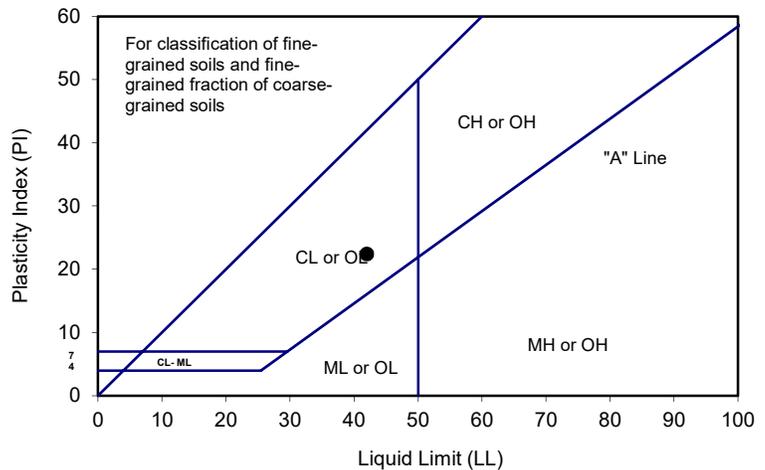
TEST NO.	PLASTIC LIMIT		LIQUID LIMIT			
	1	2	1	2	3	4
Number of Blows [N]			26	21	16	
Wet Wt. of Soil + Cont. (g)	8.64	8.87	20.09	21.49	20.68	
Dry Wt. of Soil + Cont. (g)	7.38	7.61	14.48	15.38	14.70	
Wt. of Container (g)	1.06	1.07	1.11	1.03	1.00	
Moisture Content (%) [Wn]	19.94	19.27	41.96	42.58	43.65	

<b>Liquid Limit</b>	<b>42</b>
<b>Plastic Limit</b>	<b>20</b>
<b>Plasticity Index</b>	<b>22</b>
<b>Classification</b>	<b>CL</b>

PI at "A" - Line =  $0.73(LL-20)$  16.06

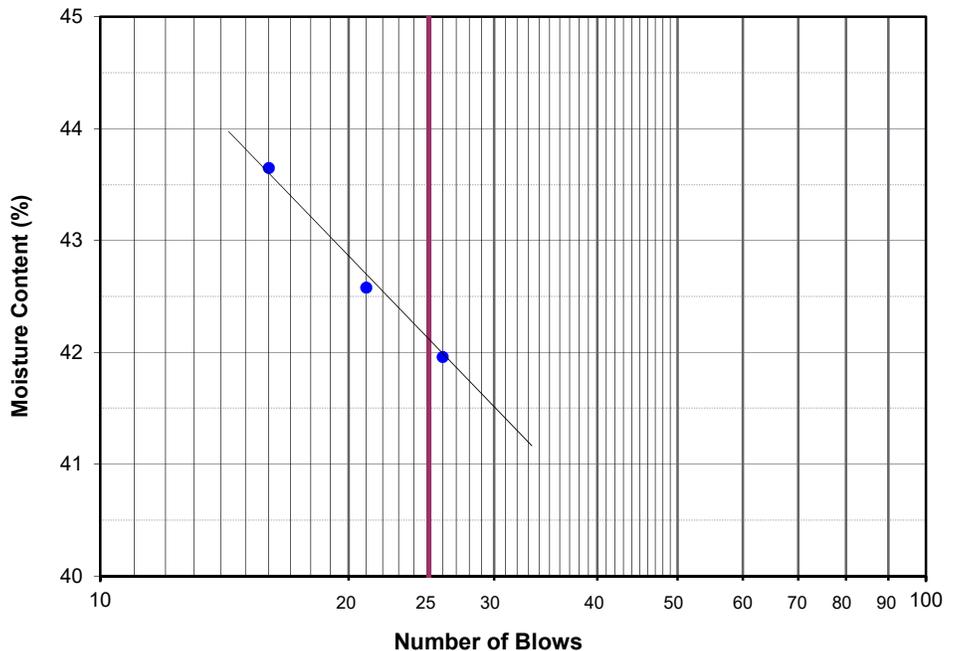
One - Point Liquid Limit Calculation

$$LL = Wn(N/25)^{0.121}$$



### PROCEDURES USED

- Wet Preparation  
Multipoint - Wet
- Dry Preparation  
Multipoint - Dry
- Procedure A  
Multipoint Test
- Procedure B  
One-point Test



Project Name: Legacy-Collier, Proposed Euclid &  
Walnut Mixed-Use, Ontario CA  
Project No.: 13493.001

Summary of Pocket Penetrometer Test Results

Tested by: S. Felter Date: 04/19/22  
Prepared by: G. Bathala Date: 04/22/22

Boring No.	Sample No.	Depth (ft.)	Readings	Remarks
LB-1	R-2	7.5	2.50	
	R-3	10	>4.50	
	R-4	15	4.25	
	R-5	20	>4.50	
	R-10	45	3.50	
LB-2	R-2	7.5	1.75	
	R-4	15	3.75	
	R-5	20	3.50	
	R-6	25	>4.50	
LB-3	R-1	5	>4.50	
	R-3	10	>4.50	
	R-4	15	4.25	
	R-5	20	4.50	
	R-6	25	>4.50	
LP-1	R-3	15	2.75	
	R-4	18.5	>4.50	
LP-2	R-3	15	>4.50	
	R-4	18.5	>4.50	

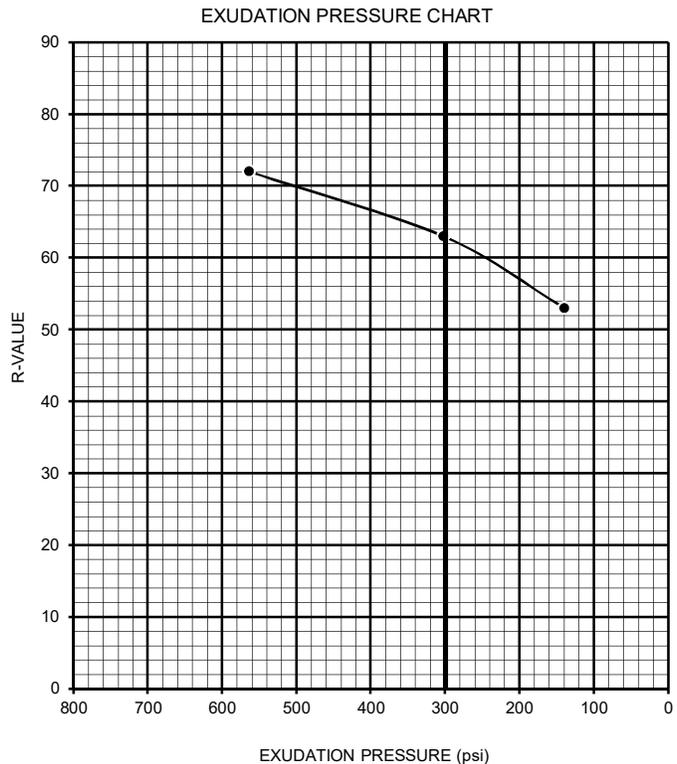
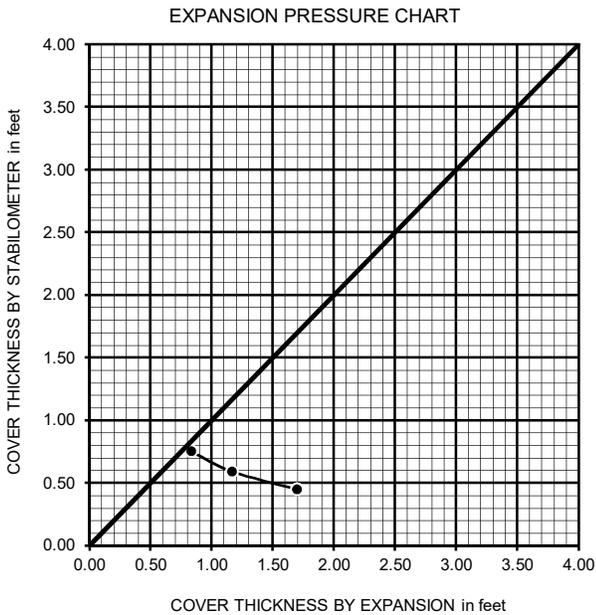


## R-VALUE TEST RESULTS DOT CA Test 301

PROJECT NAME:	Legacy-Collier, Proposed Euclid & Walnut Mixed-Use Ontario CA	PROJECT NUMBER:	13493.001
BORING NUMBER:	LB-1	DEPTH (FT.):	0-5
SAMPLE NUMBER:	B-1	TECHNICIAN:	O. Figueroa
SAMPLE DESCRIPTION:	Olive brown sandy silt s(ML)	DATE COMPLETED:	4/13/2022

TEST SPECIMEN	a	b	c
MOISTURE AT COMPACTION %	12.7	13.7	14.6
HEIGHT OF SAMPLE, Inches	2.45	2.50	2.53
DRY DENSITY, pcf	120.2	118.7	116.2
COMPACTOR PRESSURE, psi	325	250	150
EXUDATION PRESSURE, psi	564	302	139
EXPANSION, Inches x 10exp-4	51	35	25
STABILITY Ph 2,000 lbs (160 psi)	28	36	46
TURNS DISPLACEMENT	4.60	5.13	5.45
R-VALUE UNCORRECTED	72	63	53
R-VALUE CORRECTED	72	63	53

DESIGN CALCULATION DATA	a	b	c
GRAVEL EQUIVALENT FACTOR	1.0	1.0	1.0
TRAFFIC INDEX	5.0	5.0	5.0
STABILOMETER THICKNESS, ft.	0.45	0.59	0.75
EXPANSION PRESSURE THICKNESS, ft.	1.70	1.17	0.83



R-VALUE BY EXPANSION:	50
R-VALUE BY EXUDATION:	63
EQUILIBRIUM R-VALUE:	50



**SAND EQUIVALENT TEST**  
DOT CA Test 217

Project Name: Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario CA

Tested By: A Santos

Date: 04/25/22

Project No. : 13493.001

Input By: J. Ward

Date: 04/25/22

Boring No.	Sample No.	Depth (ft.)	Soil Type	T1	T2	T3	T4	R1	R2	SE	Average SE
LB-2	B-1	0-5	Olive brown sandy silt s(ML)	11:20	11:30	11:33	11:53	13.5	1.2	9	<b>9</b>
				11:24	11:34	11:37	11:57	13.4	1.1	9	
				11:28	11:38	11:41	12:01	13.5	1.1	9	
LB-5	B-1	0-5	Olive brown silty sand (SM)	13:40	13:50	13:53	14:13	12.6	1.4	12	<b>12</b>
				13:44	13:54	13:57	14:17	12.6	1.4	12	
				13:48	13:58	14:01	14:21	12.7	1.3	11	

T1 = Starting Time

T3 = Settlement Starting Time

Sand Equivalent =  $R2 / R1 * 100$

T2 = ( T1 + 10 min) Begin Agitation  
(131 cycles in 45 sec)

T4 = ( T3 + 20 min) Take Clay Reading (R1)  
and Sand Reading (R2)

Record SE as Next Higher Integer



## PARTICLE-SIZE DISTRIBUTION (GRADATION) of SOILS USING SIEVE ANALYSIS

ASTM D 6913

Project Name: [Legacy-Collier, Proposed Euclid & Walnut](#)  
[Mixed-Use, Ontario CA](#) Tested By: [S. Felter](#) Date: [04/20/22](#)  
 Project No.: [13493.001](#) Checked By: [A. Santos](#) Date: [04/25/22](#)  
 Boring No.: [LP-1](#) Depth (feet): [15.0](#)  
 Sample No.: [R-3](#)  
 Soil Identification: [Grayish brown silty sand \(SM\)](#)

		Moisture Content of Total Air - Dry Soil	
Container No.:	2	Wt. of Air-Dry Soil + Cont. (g)	0.0
Wt. of Air-Dried Soil + Cont.(g)	712.3	Wt. of Dry Soil + Cont. (g)	0.0
Wt. of Container (g)	110.0	Wt. of Container No. _____ (g)	1.0
Dry Wt. of Soil (g)	602.3	Moisture Content (%)	0.0

After Wet Sieve	Container No.	2
	Wt. of Dry Soil + Container (g)	582.3
	Wt. of Container (g)	110.0
	Dry Wt. of Soil Retained on # 200 Sieve (g)	472.3

U. S. Sieve Size		Cumulative Weight Dry Soil Retained (g)	Percent Passing (%)
(in.)	(mm.)		
1 1/2"	37.5		
1"	25.0		
3/4"	19.0		
1/2"	12.5		
3/8"	9.5	0.0	100.0
#4	4.75	1.2	99.8
#8	2.36	3.6	99.4
#16	1.18	17.0	97.2
#30	0.600	54.5	91.0
#50	0.300	166.8	72.3
#100	0.150	343.0	43.1
#200	0.075	464.2	22.9
PAN			

GRAVEL: **0 %**  
 SAND: **77 %**  
 FINES: **23 %**  
 GROUP SYMBOL: **SM**

Cu = D60/D10 = \_\_\_\_\_

Cc = (D30)<sup>2</sup>/(D60\*D10) = \_\_\_\_\_

Remarks: \_\_\_\_\_

GRAVEL				SAND				FINES			
COARSE		FINE		COARSE	MEDIUM	FINE		SILT		CLAY	

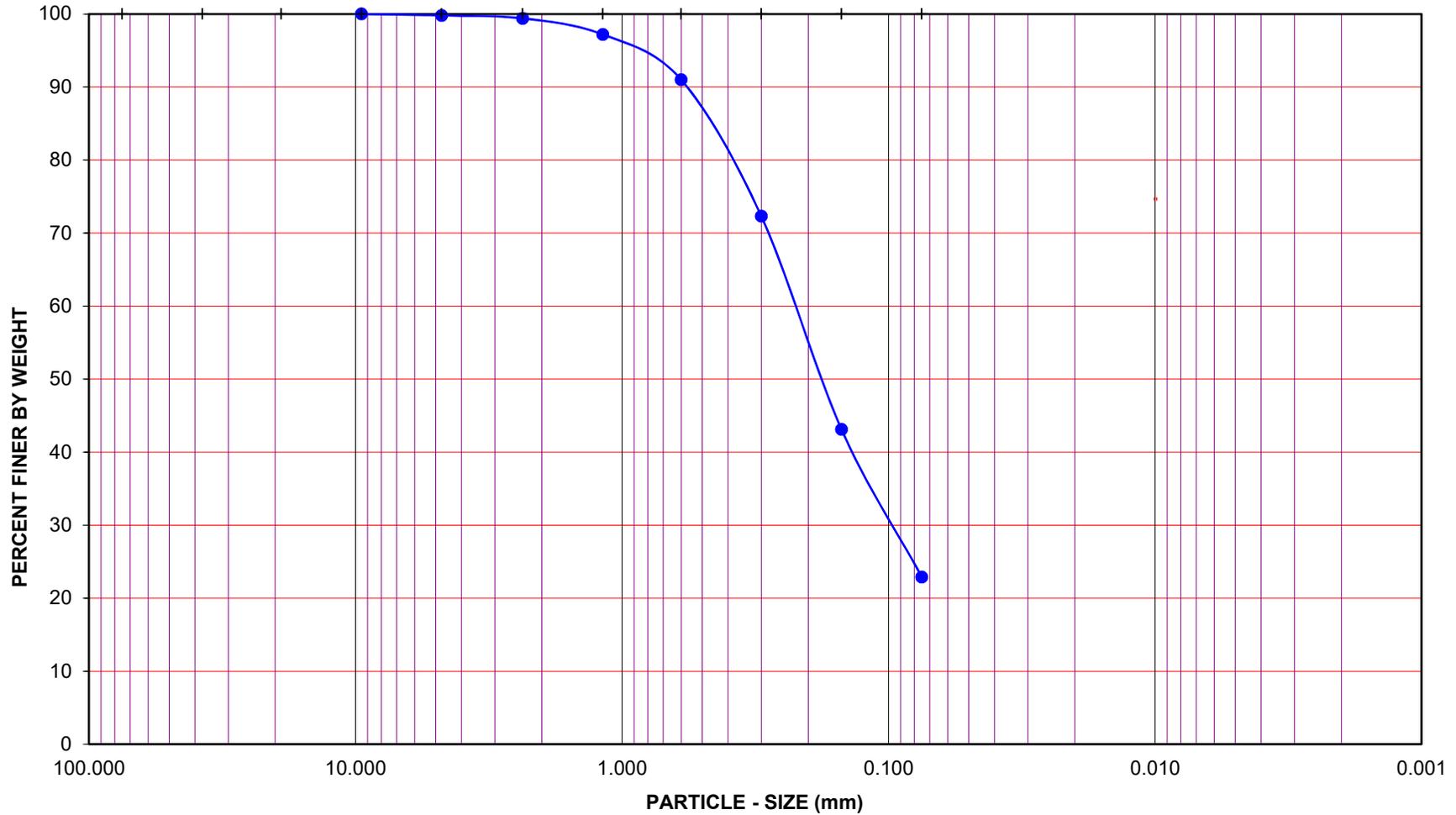
U.S. STANDARD SIEVE OPENING

3.0" 1 1/2" 3/4" 3/8"

U.S. STANDARD SIEVE NUMBER

#4 #8 #16 #30 #50 #100 #200

HYDROMETER



Project Name: Legacy-Collier, Proposed Euclid & Walnut  
Mixed-Use, Ontario CA

Project No.: 13493.001

Boring No.: LP-1

Sample No.: R-3

Depth (feet): 15.0

Soil Type : SM

Soil Identification: Grayish brown silty sand (SM)

**GR:SA:FI : (%)      0 : 77 : 23**



**PARTICLE - SIZE  
DISTRIBUTION  
ASTM D 6913**



## PARTICLE-SIZE DISTRIBUTION (GRADATION) of SOILS USING SIEVE ANALYSIS

ASTM D 6913

Project Name: Legacy-Collier, Proposed Euclid & Walnut  
Mixed Use, Ontario CA      Tested By: S. Felter    Date: 04/20/22  
 Project No.: 13493.001      Checked By: A. Santos    Date: 04/25/22  
 Boring No.: LP-1      Depth (feet): 18.5  
 Sample No.: R-4  
 Soil Identification: Olive brown sandy silt s(ML)

		Moisture Content of Total Air - Dry Soil	
Container No.:	9545	Wt. of Air-Dry Soil + Cont. (g)	0.0
Wt. of Air-Dried Soil + Cont.(g)	774.5	Wt. of Dry Soil + Cont. (g)	0.0
Wt. of Container (g)	106.2	Wt. of Container No. _____ (g)	1.0
Dry Wt. of Soil (g)	668.3	Moisture Content (%)	0.0

After Wet Sieve	Container No.	9545
	Wt. of Dry Soil + Container (g)	426.4
	Wt. of Container (g)	106.2
	Dry Wt. of Soil Retained on # 200 Sieve (g)	320.2

U. S. Sieve Size		Cumulative Weight Dry Soil Retained (g)	Percent Passing (%)
(in.)	(mm.)		
1 1/2"	37.5		
1"	25.0		
3/4"	19.0		
1/2"	12.5		
3/8"	9.5	0.0	100.0
#4	4.75	2.9	99.6
#8	2.36	8.0	98.8
#16	1.18	15.3	97.7
#30	0.600	41.7	93.8
#50	0.300	106.5	84.1
#100	0.150	206.4	69.1
#200	0.075	315.8	52.7
PAN			

GRAVEL:                    **0 %**  
 SAND:                     **47 %**  
 FINES:                    **53 %**  
 GROUP SYMBOL:        **s(ML)**

Cu = D60/D10 = \_\_\_\_\_  
 Cc = (D30)<sup>2</sup>/(D60\*D10) = \_\_\_\_\_

Remarks: \_\_\_\_\_

GRAVEL				SAND				FINES			
COARSE		FINE		COARSE	MEDIUM	FINE		SILT		CLAY	

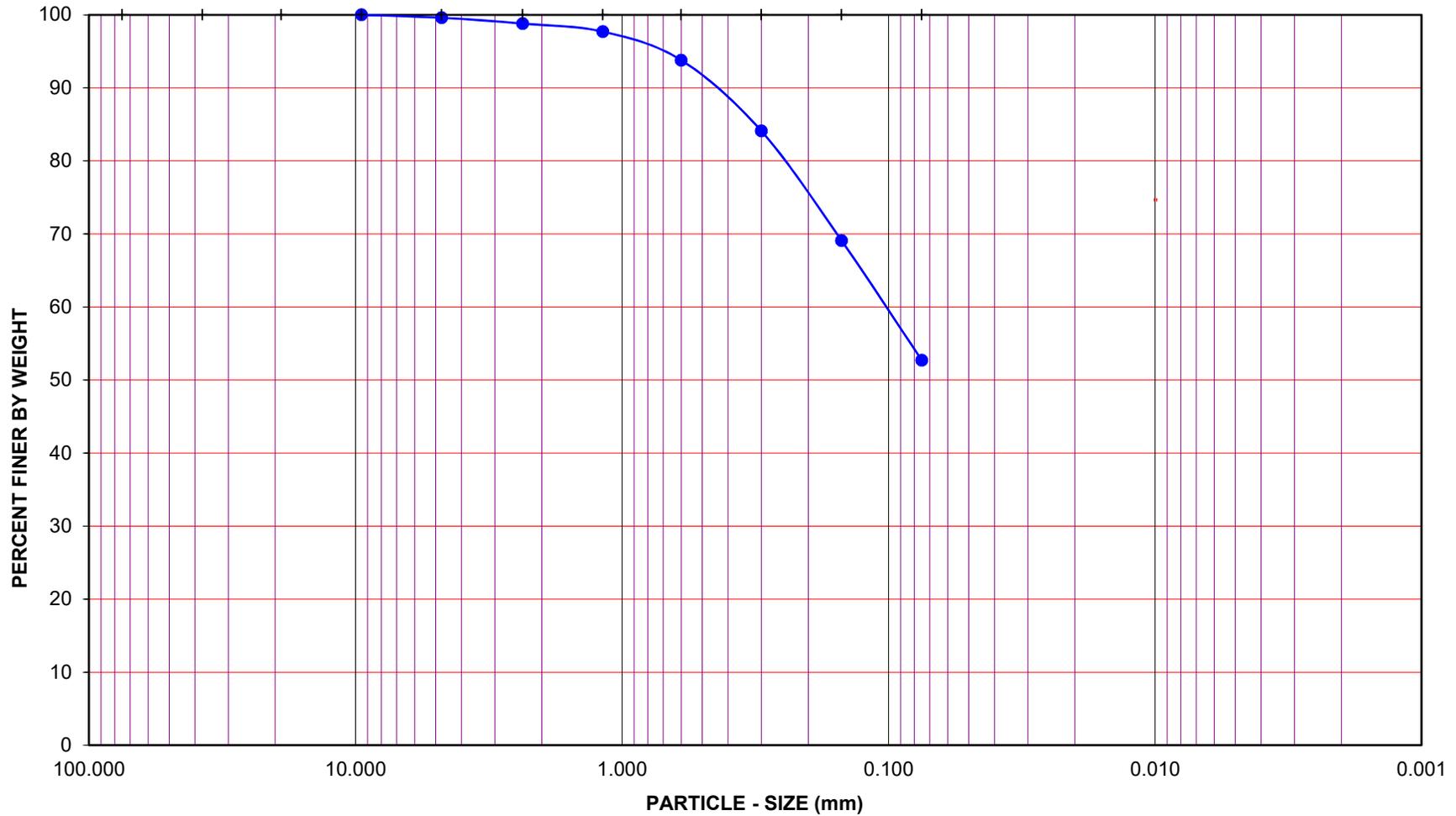
U.S. STANDARD SIEVE OPENING

3.0" 1 1/2" 3/4" 3/8"

U.S. STANDARD SIEVE NUMBER

#4 #8 #16 #30 #50 #100 #200

HYDROMETER



Project Name: Legacy-Collier, Proposed Euclid & Walnut  
Mixed Use, Ontario CA

Project No.: 13493.001

Boring No.: LP-1

Sample No.: R-4

Depth (feet): 18.5

Soil Type : s(ML)

Soil Identification: Olive brown sandy silt s(ML)

**GR:SA:FI : (%)      0 : 47 : 53**



**PARTICLE - SIZE  
DISTRIBUTION  
ASTM D 6913**



## PARTICLE-SIZE DISTRIBUTION (GRADATION) of SOILS USING SIEVE ANALYSIS

ASTM D 6913

Project Name: Legacy-Collier, Proposed Euclid & Walnut  
Mixed-Use, Ontario CA      Tested By: S. Felter    Date: 04/19/22  
 Project No.: 13493.001      Checked By: A. Santos    Date: 04/25/22  
 Boring No.: LP-1      Depth (feet): 23.5  
 Sample No.: S-5  
 Soil Identification: Brown sandy lean clay s(CL)

		Moisture Content of Total Air - Dry Soil	
Container No.:	969	Wt. of Air-Dry Soil + Cont. (g)	0.0
Wt. of Air-Dried Soil + Cont.(g)	538.7	Wt. of Dry Soil + Cont. (g)	0.0
Wt. of Container (g)	109.4	Wt. of Container No. _____ (g)	1.0
Dry Wt. of Soil (g)	429.3	Moisture Content (%)	0.0

After Wet Sieve	Container No.	969
	Wt. of Dry Soil + Container (g)	344.3
	Wt. of Container (g)	109.4
	Dry Wt. of Soil Retained on # 200 Sieve (g)	234.9

U. S. Sieve Size		Cumulative Weight Dry Soil Retained (g)	Percent Passing (%)
(in.)	(mm.)		
1 1/2"	37.5		
1"	25.0		
3/4"	19.0		
1/2"	12.5		
3/8"	9.5	0.0	100.0
#4	4.75	1.1	99.7
#8	2.36	4.2	99.0
#16	1.18	12.8	97.0
#30	0.600	36.0	91.6
#50	0.300	83.7	80.5
#100	0.150	148.7	65.4
#200	0.075	220.7	48.6
PAN			

GRAVEL:                    **0 %**  
 SAND:                     **51 %**  
 FINES:                    **49 %**  
 GROUP SYMBOL:        **s(CL)**

Cu = D60/D10 = \_\_\_\_\_

Cc = (D30)<sup>2</sup>/(D60\*D10) = \_\_\_\_\_

Remarks: \_\_\_\_\_

GRAVEL				SAND				FINES			
COARSE		FINE		COARSE	MEDIUM	FINE		SILT		CLAY	

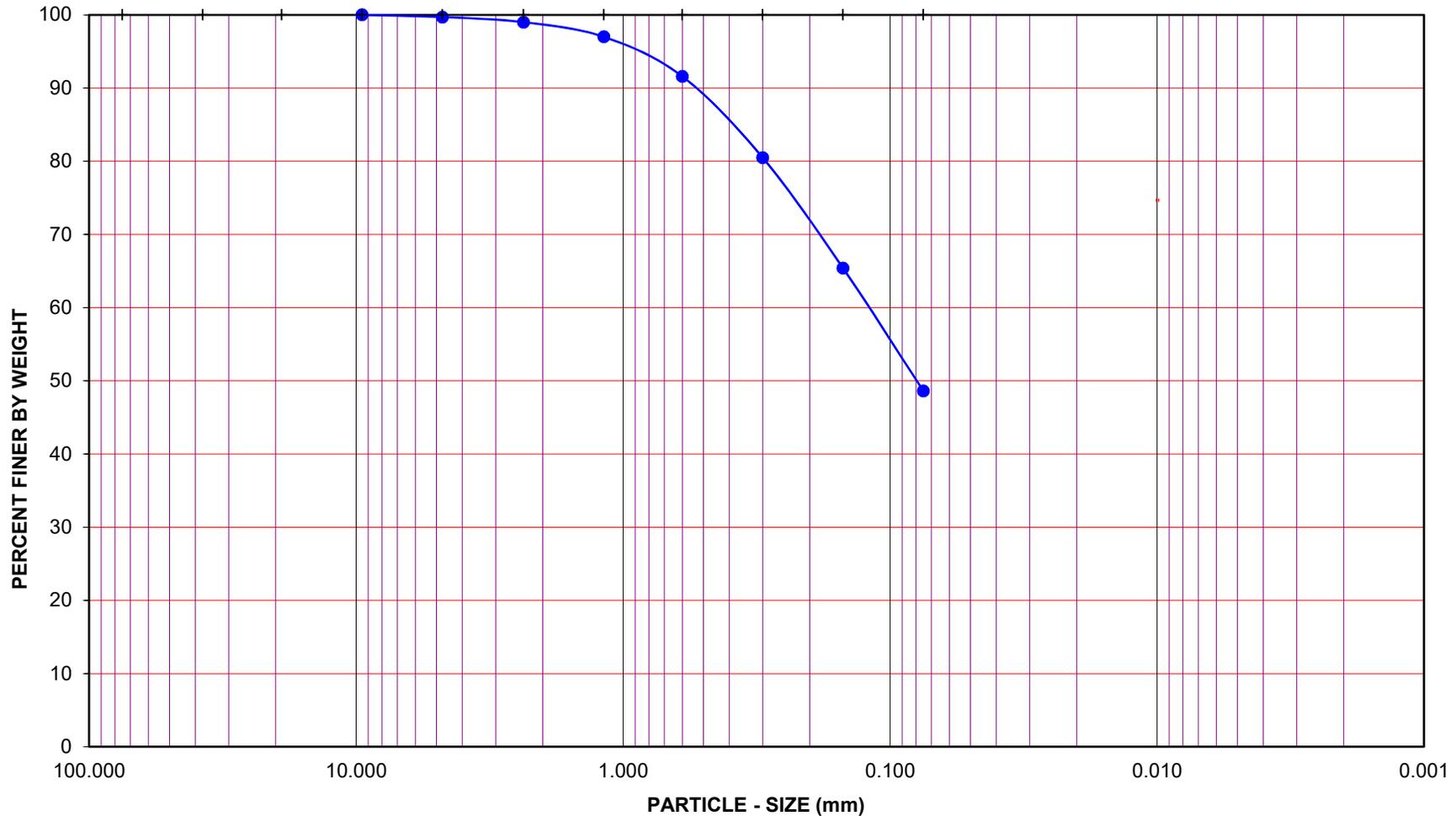
U.S. STANDARD SIEVE OPENING

3.0" 1 1/2" 3/4" 3/8"

U.S. STANDARD SIEVE NUMBER

#4 #8 #16 #30 #50 #100 #200

HYDROMETER



Project Name: Legacy-Collier, Proposed Euclid & Walnut  
Mixed-Use, Ontario CA

Project No.: 13493.001

Boring No.: LP-1

Sample No.: S-5

Depth (feet): 23.5

Soil Type : s(CL)

Soil Identification: Brown sandy lean clay s(CL)

**GR:SA:FI : (%)      0 : 51 : 49**



**PARTICLE - SIZE  
DISTRIBUTION  
ASTM D 6913**



**PARTICLE-SIZE DISTRIBUTION (GRADATION)  
of SOILS USING SIEVE ANALYSIS**

**ASTM D 6913**

Project Name: [Legacy-Collier, Proposed Euclid & Walnut](#)  
[Mixed-Use, Ontario CA](#) Tested By: [S. Felter](#) Date: [04/19/22](#)  
 Project No.: [13493.001](#) Checked By: [A. Santos](#) Date: [04/25/22](#)  
 Boring No.: [LP-2](#) Depth (feet): [15.0](#)  
 Sample No.: [R-3](#)  
 Soil Identification: [Olive brown silty clay \(CL-ML\)](#)

		Moisture Content of Total Air - Dry Soil	
Container No.:	<a href="#">V-1</a>	Wt. of Air-Dry Soil + Cont. (g)	0.0
Wt. of Air-Dried Soil + Cont.(g)	<a href="#">635.6</a>	Wt. of Dry Soil + Cont. (g)	0.0
Wt. of Container (g)	<a href="#">108.7</a>	Wt. of Container No. _____ (g)	1.0
Dry Wt. of Soil (g)	526.9	Moisture Content (%)	0.0

After Wet Sieve	Container No.	V-1
	Wt. of Dry Soil + Container (g)	<a href="#">139.2</a>
	Wt. of Container (g)	108.7
	Dry Wt. of Soil Retained on # 200 Sieve (g)	30.5

U. S. Sieve Size		Cumulative Weight Dry Soil Retained (g)	Percent Passing (%)
(in.)	(mm.)		
1 1/2"	37.5		
1"	25.0		
3/4"	19.0		
1/2"	12.5		
3/8"	9.5		
#4	4.75		
#8	2.36		
#16	1.18	<a href="#">0.0</a>	100.0
#30	0.600	<a href="#">0.4</a>	99.9
#50	0.300	<a href="#">4.4</a>	99.2
#100	0.150	<a href="#">12.6</a>	97.6
#200	0.075	<a href="#">28.4</a>	94.6
PAN			

GRAVEL: **0 %**  
 SAND: **5 %**  
 FINES: **95 %**

GROUP SYMBOL: **CL-ML**

Cu = D60/D10 = \_\_\_\_\_

Cc = (D30)<sup>2</sup>/(D60\*D10) = \_\_\_\_\_

Remarks: \_\_\_\_\_

GRAVEL				SAND				FINES			
COARSE		FINE		COARSE	MEDIUM	FINE		SILT		CLAY	

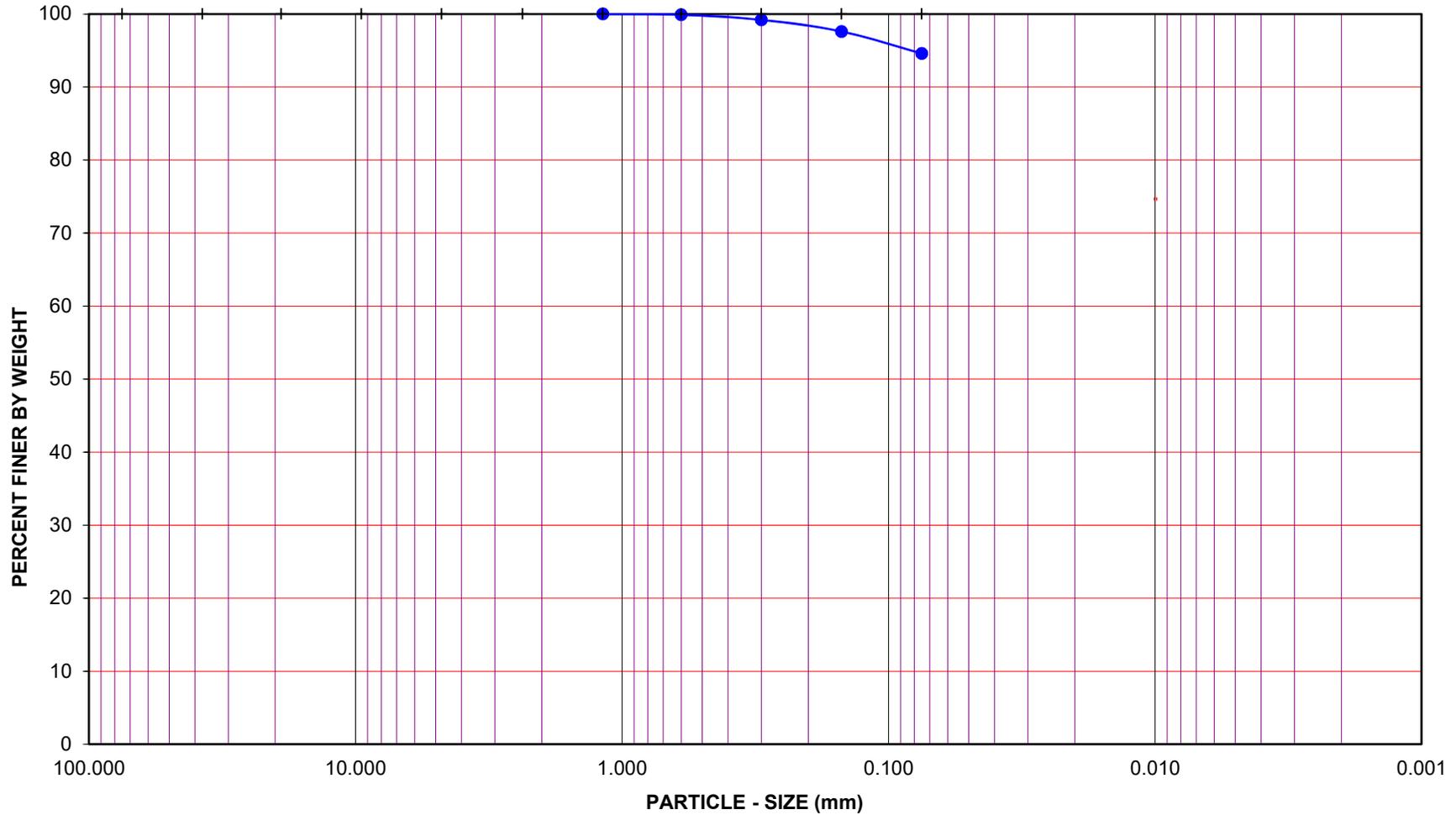
U.S. STANDARD SIEVE OPENING

3.0" 1 1/2" 3/4" 3/8"

U.S. STANDARD SIEVE NUMBER

#4 #8 #16 #30 #50 #100 #200

HYDROMETER



Project Name: Legacy-Collier, Proposed Euclid & Walnut  
Mixed-Use, Ontario CA

Project No.: 13493.001

Boring No.: LP-2

Sample No.: R-3

Depth (feet): 15.0

Soil Type : CL-ML

Soil Identification: Olive brown silty clay (CL-ML)

**GR:SA:FI : (%)      0 : 5 : 95**



**PARTICLE - SIZE  
DISTRIBUTION  
ASTM D 6913**



## PARTICLE-SIZE DISTRIBUTION (GRADATION) of SOILS USING SIEVE ANALYSIS

ASTM D 6913

Project Name: [Legacy-Collier, Proposed Euclid & Walnut](#)  
[Mixed Use, Ontario CA](#) Tested By: [S. Felter](#) Date: [04/20/22](#)  
 Project No.: [13493.001](#) Checked By: [A. Santos](#) Date: [04/25/22](#)  
 Boring No.: [LP-2](#) Depth (feet): [18.5](#)  
 Sample No.: [R-4](#)  
 Soil Identification: [Olive brown silty sand \(SM\)](#)

		Moisture Content of Total Air - Dry Soil	
Container No.:	<a href="#">R-2</a>	Wt. of Air-Dry Soil + Cont. (g)	0.0
Wt. of Air-Dried Soil + Cont.(g)	<a href="#">799.6</a>	Wt. of Dry Soil + Cont. (g)	0.0
Wt. of Container (g)	<a href="#">107.7</a>	Wt. of Container No. _____ (g)	1.0
Dry Wt. of Soil (g)	691.9	Moisture Content (%)	0.0

After Wet Sieve	Container No.	R-2
	Wt. of Dry Soil + Container (g)	<a href="#">576.0</a>
	Wt. of Container (g)	107.7
	Dry Wt. of Soil Retained on # 200 Sieve (g)	468.3

U. S. Sieve Size		Cumulative Weight Dry Soil Retained (g)	Percent Passing (%)
(in.)	(mm.)		
1 1/2"	37.5		
1"	25.0		
3/4"	19.0		
1/2"	12.5		
3/8"	9.5	<a href="#">0.0</a>	100.0
#4	4.75	<a href="#">0.9</a>	99.9
#8	2.36	<a href="#">3.8</a>	99.5
#16	1.18	<a href="#">13.1</a>	98.1
#30	0.600	<a href="#">43.5</a>	93.7
#50	0.300	<a href="#">150.5</a>	78.2
#100	0.150	<a href="#">340.6</a>	50.8
#200	0.075	<a href="#">464.3</a>	32.9
PAN			

GRAVEL: **0 %**  
 SAND: **67 %**  
 FINES: **33 %**  
 GROUP SYMBOL: **SM**

Cu = D60/D10 = \_\_\_\_\_

Cc = (D30)<sup>2</sup>/(D60\*D10) = \_\_\_\_\_

Remarks: \_\_\_\_\_

GRAVEL				SAND				FINES			
COARSE		FINE		COARSE	MEDIUM	FINE		SILT		CLAY	

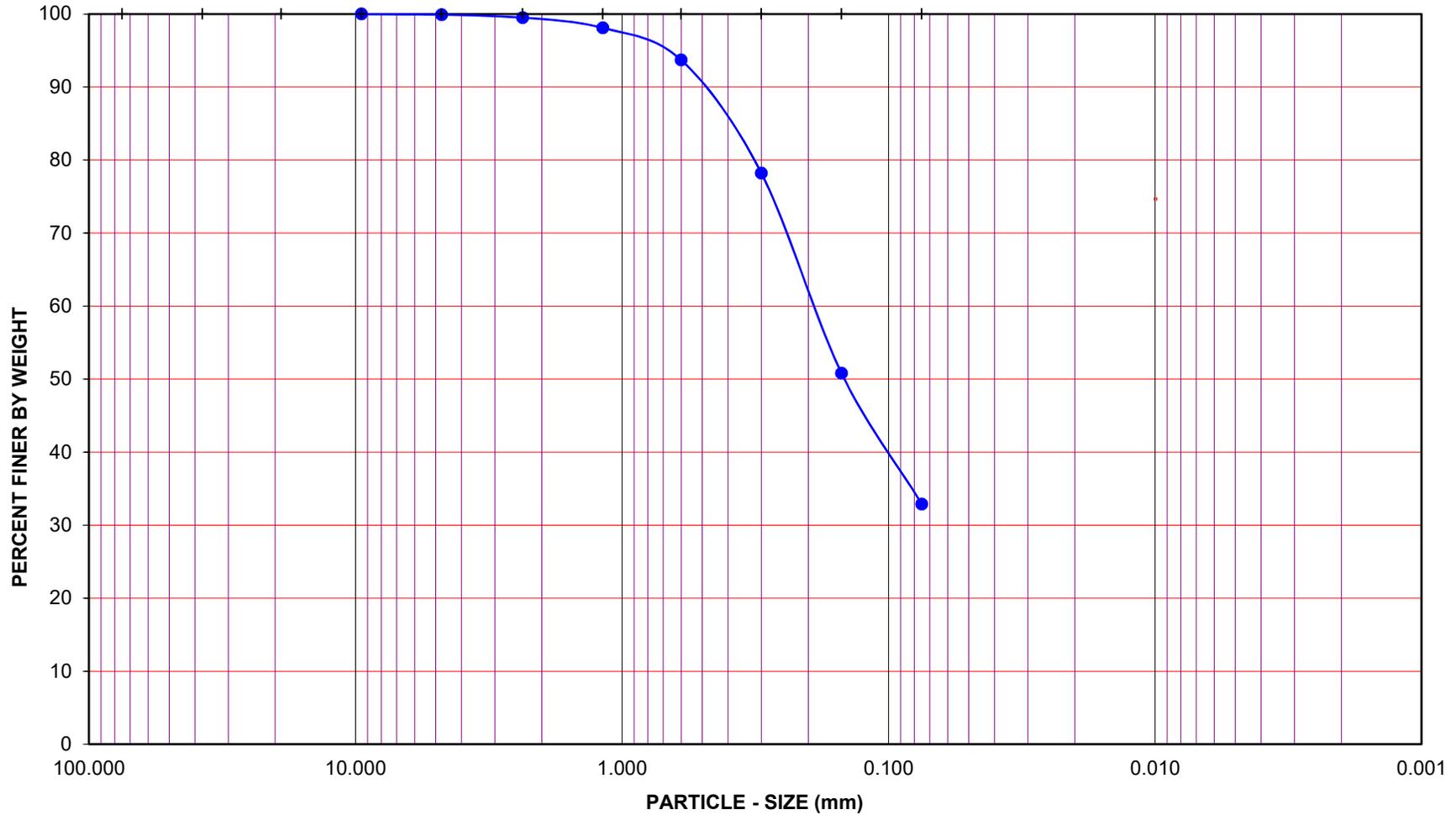
U.S. STANDARD SIEVE OPENING

3.0" 1 1/2" 3/4" 3/8"

U.S. STANDARD SIEVE NUMBER

#4 #8 #16 #30 #50 #100 #200

HYDROMETER



Project Name: Legacy-Collier, Proposed Euclid & Walnut  
Mixed Use, Ontario CA

Project No.: 13493.001

Boring No.: LP-2

Sample No.: R-4

Depth (feet): 18.5

Soil Type : SM

Soil Identification: Olive brown silty sand (SM)

**GR:SA:FI : (%)      0 : 67 : 33**



**PARTICLE - SIZE  
DISTRIBUTION  
ASTM D 6913**



# ONE-DIMENSIONAL SWELL OR SETTLEMENT POTENTIAL OF COHESIVE SOILS ASTM D 4546

Project Name: Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario CA      Tested By: G. Bathala      Date: 04/18/22  
 Project No.: 13493.001      Checked By: A. Santos      Date: 04/26/22  
 Boring No.: LB-1      Sample Type: Ring  
 Sample No.: R-6      Depth (ft.): 25.0  
 Sample Description: Yellowish brown poorly-graded sand with silt (SP-SM)

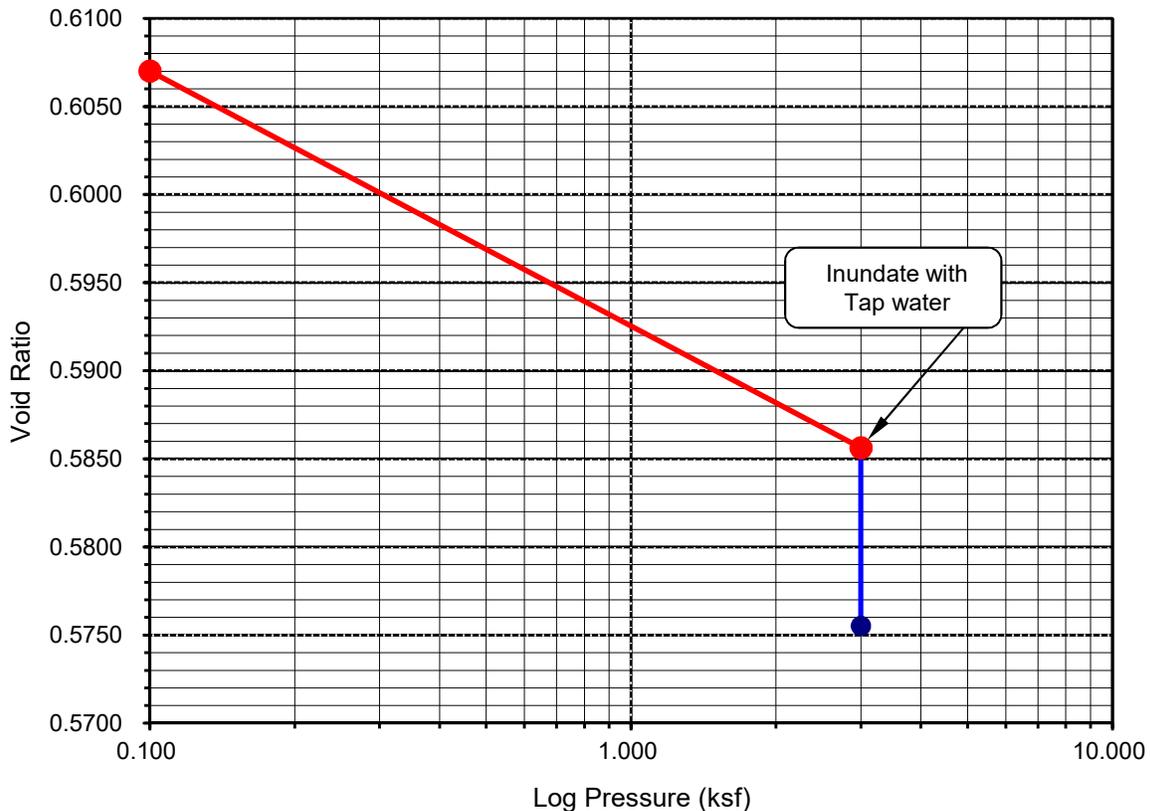
Initial Dry Density (pcf):	104.9
Initial Moisture (%):	3.61
Initial Length (in.):	1.0000
Initial Dial Reading:	0.3076
Diameter(in):	2.415

Final Dry Density (pcf):	107.0
Final Moisture (%):	18.2
Initial Void Ratio:	0.6072
Specific Gravity(assumed):	2.70
Initial Saturation (%):	16.0

Pressure (p) (ksf)	Final Reading (in)	Apparent Thickness (in)	Load Compliance (%)	Swell (+) Settlement (-) % of Sample Thickness	Void Ratio	Corrected Deformation (%)
0.100	0.3075	0.9999	0.00	-0.01	0.6070	-0.01
3.000	0.2890	0.9814	0.52	-1.86	0.5856	-1.34
H2O	0.2827	0.9751	0.52	-2.49	0.5755	-1.97

**Percent Swell (+) / Settlement (-) After Inundation = -0.64**

**Void Ratio - Log Pressure Curve**





# ONE-DIMENSIONAL SWELL OR SETTLEMENT POTENTIAL OF COHESIVE SOILS ASTM D 4546

Project Name: Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario CA      Tested By: G. Bathala      Date: 04/18/22  
 Project No.: 13493.001      Checked By: A. Santos      Date: 04/26/22  
 Boring No.: LB-1      Sample Type: Ring  
 Sample No.: R-8      Depth (ft.): 35.0  
 Sample Description: Yellowish brown poorly-graded sand with silt (SP-SM)

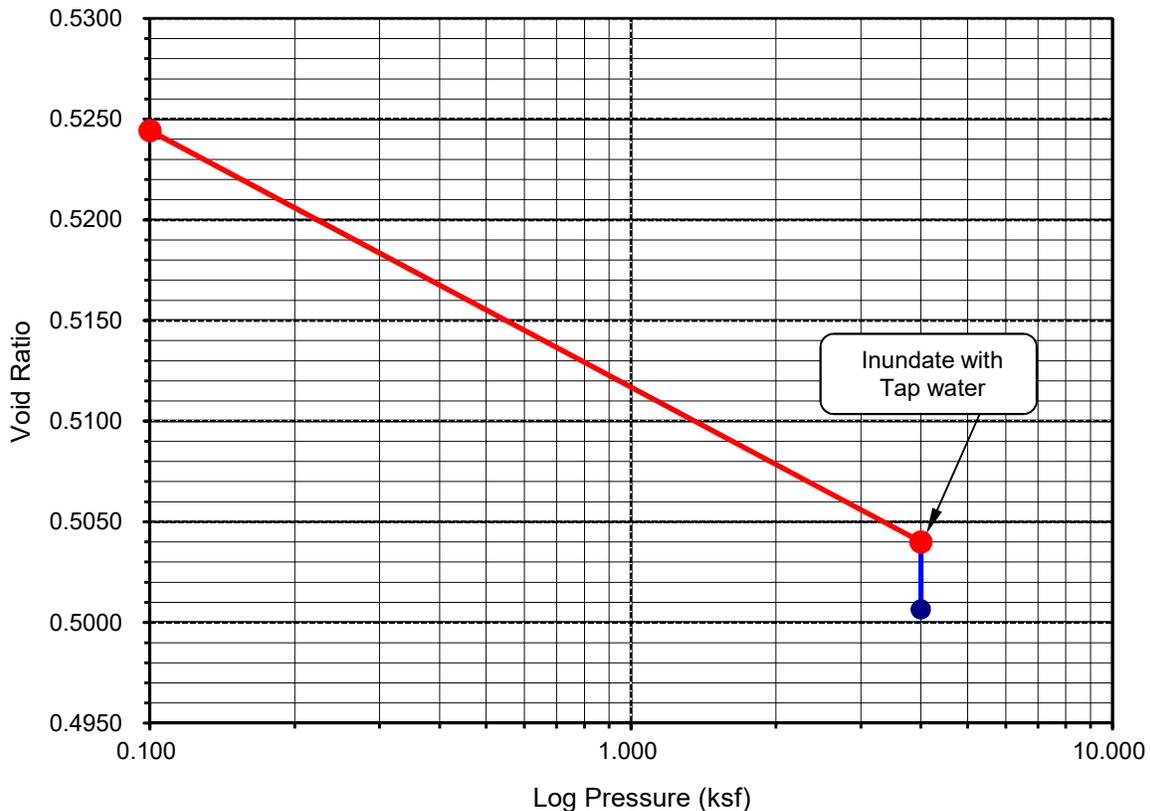
Initial Dry Density (pcf):	110.6
Initial Moisture (%):	3.30
Initial Length (in.):	1.0000
Initial Dial Reading:	0.3373
Diameter(in):	2.415

Final Dry Density (pcf):	112.3
Final Moisture (%):	15.9
Initial Void Ratio:	0.5246
Specific Gravity(assumed):	2.70
Initial Saturation (%):	17.0

Pressure (p) (ksf)	Final Reading (in)	Apparent Thickness (in)	Load Compliance (%)	Swell (+) Settlement (-) % of Sample Thickness	Void Ratio	Corrected Deformation (%)
0.100	0.3372	0.9999	0.00	-0.01	0.5244	-0.01
4.000	0.3220	0.9847	0.18	-1.53	0.5040	-1.35
H2O	0.3198	0.9825	0.18	-1.75	0.5007	-1.57

**Percent Swell (+) / Settlement (-) After Inundation = -0.22**

**Void Ratio - Log Pressure Curve**





**APPENDIX D**

**GENERAL EARTHWORKS AND GRADING  
RECOMMENDATIONS**

**APPENDIX D**  
**LEIGHTON AND ASSOCIATES, INC.**  
**GENERAL EARTHWORK AND GRADING SPECIFICATIONS FOR ROUGH GRADING**

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## 1.0 GENERAL

### 1.1 Intent

These General Earthwork and Grading Specifications are for the grading and earthwork shown on the approved grading plan(s) and/or indicated in the geotechnical report(s). These Specifications are a part of the recommendations contained in the geotechnical report(s). In case of conflict, the specific recommendations in the geotechnical report shall supersede these more general Specifications. Observations of the earthwork by the project Geotechnical Consultant during the course of grading may result in new or revised recommendations that could supersede these specifications or the recommendations in the geotechnical report(s).

### 1.2 The Geotechnical Consultant of Record

Prior to commencement of work, the owner shall employ the Geotechnical Consultant of Record (Geotechnical Consultant). The Geotechnical Consultants shall be responsible for reviewing the approved geotechnical report(s) and accepting the adequacy of the preliminary geotechnical findings, conclusions, and recommendations prior to the commencement of the grading.

Prior to commencement of grading, the Geotechnical Consultant shall review the "work plan" prepared by the Earthwork Contractor (Contractor) and schedule sufficient personnel to perform the appropriate level of observation, mapping, and compaction testing.

During the grading and earthwork operations, the Geotechnical Consultant shall observe, map, and document the subsurface exposures to verify the geotechnical design assumptions. If the observed conditions are found to be significantly different than the interpreted assumptions during the design phase, the Geotechnical Consultant shall inform the owner, recommend appropriate changes in design to accommodate the observed conditions, and notify the review agency where required. Subsurface areas to be geotechnically observed, mapped, elevations recorded, and/or tested include natural ground after it has been cleared for receiving fill but before fill is placed, bottoms of all "remedial removal" areas, all key bottoms, and benches made on sloping ground to receive fill.

The Geotechnical Consultant shall observe the moisture-conditioning and processing of the subgrade and fill materials and perform relative compaction testing of fill to determine the attained level of compaction.

The Geotechnical Consultant shall provide the test results to the owner and the Contractor on a routine and frequent basis.

### **1.3 The Earthwork Contractor**

The Earthwork Contractor (Contractor) shall be qualified, experienced, and knowledgeable in earthwork logistics, preparation and processing of ground to receive fill, moisture-conditioning and processing of fill, and compacting fill. The Contractor shall review and accept the plans, geotechnical report(s), and these Specifications prior to commencement of grading. The Contractor shall be solely responsible for performing the grading in accordance with the plans and specifications.

The Contractor shall prepare and submit to the owner and the Geotechnical Consultant a work plan that indicates the sequence of earthwork grading, the number of "spreads" of work and the estimated quantities of daily earthwork contemplated for the site prior to commencement of grading. The Contractor shall inform the owner and the Geotechnical Consultant of changes in work schedules and updates to the work plan at least 24 hours in advance of such changes so that appropriate observations and tests can be planned and accomplished. The Contractor shall not assume that the Geotechnical Consultant is aware of all grading operations.

The Contractor shall have the sole responsibility to provide adequate equipment and methods to accomplish the earthwork in accordance with the applicable grading codes and agency ordinances, these Specifications, and the recommendations in the approved geotechnical report(s) and grading plan(s). If, in the opinion of the Geotechnical Consultant, unsatisfactory conditions, such as unsuitable soil, improper moisture condition, inadequate compaction, insufficient buttress key size, adverse weather, etc., are resulting in a quality of work less than required in these specifications, the Geotechnical Consultant shall reject the work and may recommend to the owner that construction be stopped until the conditions are rectified.

## **2.0 PREPARATION OF AREAS TO BE FILLED**

### **2.1 Clearing and Grubbing**

Vegetation, such as brush, grass, roots, and other deleterious material shall be sufficiently removed and properly disposed of in a method acceptable to the owner, governing agencies, and the Geotechnical Consultant.

The Geotechnical Consultant shall evaluate the extent of these removals depending on specific site conditions. Earth fill material shall not contain more than 1 percent of organic materials (by volume). No fill lift shall contain more than 5 percent of organic matter. Nesting of the organic materials shall not be allowed.

If potentially hazardous materials are encountered, the Contractor shall stop work in the affected area, and a hazardous material specialist shall be informed immediately for proper evaluation and handling of these materials prior to continuing to work in that area.

As presently defined by the State of California, most refined petroleum products (gasoline, diesel fuel, motor oil, grease, coolant, etc.) have chemical constituents that are considered to be hazardous waste. As such, the indiscriminate dumping or spillage of these fluids onto the ground may constitute a misdemeanor, punishable by fines and/or imprisonment, and shall not be allowed.

## **2.2 Processing**

Existing ground that has been declared satisfactory for support of fill by the Geotechnical Consultant shall be scarified to a minimum depth of 6 inches. Existing ground that is not satisfactory shall be overexcavated as specified in the following section. Scarification shall continue until soils are broken down and free of large clay lumps or clods and the working surface is reasonably uniform, flat, and free of uneven features that would inhibit uniform compaction.

## **2.3 Overexcavation**

In addition to removals and overexcavations recommended in the approved geotechnical report(s) and the grading plan, soft, loose, dry, saturated, spongy, organic-rich, highly fractured or otherwise unsuitable ground shall be overexcavated to competent ground as evaluated by the Geotechnical Consultant during grading.

## **2.4 Benching**

Where fills are to be placed on ground with slopes steeper than 5:1 (horizontal to vertical units), the ground shall be stepped or benched. Please see the Standard Details for a graphic illustration. The lowest bench or key shall be a minimum of 15 feet wide and at least 2 feet deep, into competent material as evaluated by the Geotechnical Consultant. Other benches shall be excavated a minimum height of 4 feet into competent material or as otherwise recommended by the Geotechnical

Consultant. Fill placed on ground sloping flatter than 5:1 shall also be benched or otherwise overexcavated to provide a flat subgrade for the fill.

## **2.5 Evaluation/Acceptance of Fill Areas**

All areas to receive fill, including removal and processed areas, key bottoms, and benches, shall be observed, mapped, elevations recorded, and/or tested prior to being accepted by the Geotechnical Consultant as suitable to receive fill. The Contractor shall obtain a written acceptance from the Geotechnical Consultant prior to fill placement. A licensed surveyor shall provide the survey control for determining elevations of processed areas, keys, and benches.

## **3.0 FILL MATERIAL**

### **3.1 General**

Material to be used as fill shall be essentially free of organic matter and other deleterious substances evaluated and accepted by the Geotechnical Consultant prior to placement. Soils of poor quality, such as those with unacceptable gradation, high expansion potential, or low strength shall be placed in areas acceptable to the Geotechnical Consultant or mixed with other soils to achieve satisfactory fill material.

### **3.2 Oversize**

Oversize material defined as rock, or other irreducible material with a maximum dimension greater than 8 inches, shall not be buried or placed in fill unless location, materials, and placement methods are specifically accepted by the Geotechnical Consultant. Placement operations shall be such that nesting of oversized material does not occur and such that oversize material is completely surrounded by compacted or densified fill. Oversize material shall not be placed within 10 vertical feet of finish grade or within 2 feet of future utilities or underground construction.

### **3.3 Import**

If importing of fill material is required for grading, proposed import material shall meet the requirements of Section 3.1. The potential import source shall be given to the Geotechnical Consultant at least 48 hours (2 working days) before importing begins so that its suitability can be determined and appropriate tests performed.

## **4.0 FILL PLACEMENT AND COMPACTION**

### **4.1 Fill Layers**

Approved fill material shall be placed in areas prepared to receive fill (per Section 3.0) in near-horizontal layers not exceeding 8 inches in loose thickness. The Geotechnical Consultant may accept thicker layers if testing indicates the grading procedures can adequately compact the thicker layers. Each layer shall be spread evenly and mixed thoroughly to attain relative uniformity of material and moisture throughout.

### **4.2 Fill Moisture Conditioning**

Fill soils shall be watered, dried back, blended, and/or mixed, as necessary to attain a relatively uniform moisture content at or slightly over optimum. Maximum density and optimum soil moisture content tests shall be performed in accordance with the American Society of Testing and Materials (ASTM Test Method D1557).

### **4.3 Compaction of Fill**

After each layer has been moisture-conditioned, mixed, and evenly spread, it shall be uniformly compacted to not less than 90 percent of maximum dry density (ASTM Test Method D1557). Compaction equipment shall be adequately sized and be either specifically designed for soil compaction or of proven reliability to efficiently achieve the specified level of compaction with uniformity.

### **4.4 Compaction of Fill Slopes**

In addition to normal compaction procedures specified above, compaction of slopes shall be accomplished by backrolling of slopes with sheepfoot rollers at increments of 3 to 4 feet in fill elevation, or by other methods producing satisfactory results acceptable to the Geotechnical Consultant. Upon completion of grading, relative compaction of the fill, out to the slope face, shall be at least 90 percent of maximum density per ASTM Test Method D1557.

### **4.5 Compaction Testing**

Field-tests for moisture content and relative compaction of the fill soils shall be performed by the Geotechnical Consultant. Location and frequency of tests shall be at the Consultant's discretion based on field conditions encountered. Compaction test locations will not necessarily be selected on a random basis. Test locations shall be selected to verify

adequacy of compaction levels in areas that are judged to be prone to inadequate compaction (such as close to slope faces and at the fill/bedrock benches).

#### **4.6 Frequency of Compaction Testing**

Tests shall be taken at intervals not exceeding 2 feet in vertical rise and/or 1,000 cubic yards of compacted fill soils embankment. In addition, as a guideline, at least one test shall be taken on slope faces for each 5,000 square feet of slope face and/or each 10 feet of vertical height of slope. The Contractor shall assure that fill construction is such that the testing schedule can be accomplished by the Geotechnical Consultant. The Contractor shall stop or slow down the earthwork construction if these minimum standards are not met.

#### **4.7 Compaction Test Locations**

The Geotechnical Consultant shall document the approximate elevation and horizontal coordinates of each test location. The Contractor shall coordinate with the project surveyor to assure that sufficient grade stakes are established so that the Geotechnical Consultant can determine the test locations with sufficient accuracy. At a minimum, two grade stakes within a horizontal distance of 100 feet and vertically less than 5 feet apart from potential test locations shall be provided.

### **5.0 SUBDRAIN INSTALLATION**

Subdrain systems shall be installed in accordance with the approved geotechnical report(s), the grading plan, and the Standard Details. The Geotechnical Consultant may recommend additional subdrains and/or changes in subdrain extent, location, grade, or material depending on conditions encountered during grading. All subdrains shall be surveyed by a land surveyor/civil engineer for line and grade after installation and prior to burial. Sufficient time should be allowed by the Contractor for these surveys.

### **6.0 EXCAVATION**

Excavations, as well as over-excavation for remedial purposes, shall be evaluated by the Geotechnical Consultant during grading. Remedial removal depths shown on geotechnical plans are estimates only. The actual extent of removal shall be determined by the Geotechnical Consultant based on the field evaluation of exposed conditions during grading. Where fill-over-cut slopes are to be graded, the cut portion of the slope shall be made, evaluated, and accepted by the Geotechnical Consultant prior to placement of materials for construction of

the fill portion of the slope, unless otherwise recommended by the Geotechnical Consultant.

## **7.0 TRENCH BACKFILLS**

### **7.1 Safety**

The Contractor shall follow all OSHA and Cal/OSHA requirements for safety of trench excavations.

### **7.2 Bedding and Backfill**

All bedding and backfill of utility trenches shall be performed in accordance with the applicable provisions of Standard Specifications of Public Works Construction. Bedding material shall have a Sand Equivalent greater than 30 ( $SE > 30$ ). The bedding shall be placed to 1 foot over the top of the conduit and densified by jetting. Backfill shall be placed and densified to a minimum of 90 percent of relative compaction from 1 foot above the top of the conduit to the surface.

The Geotechnical Consultant shall test the trench backfill for relative compaction. At least one test should be made for every 300 feet of trench and 2 feet of fill.

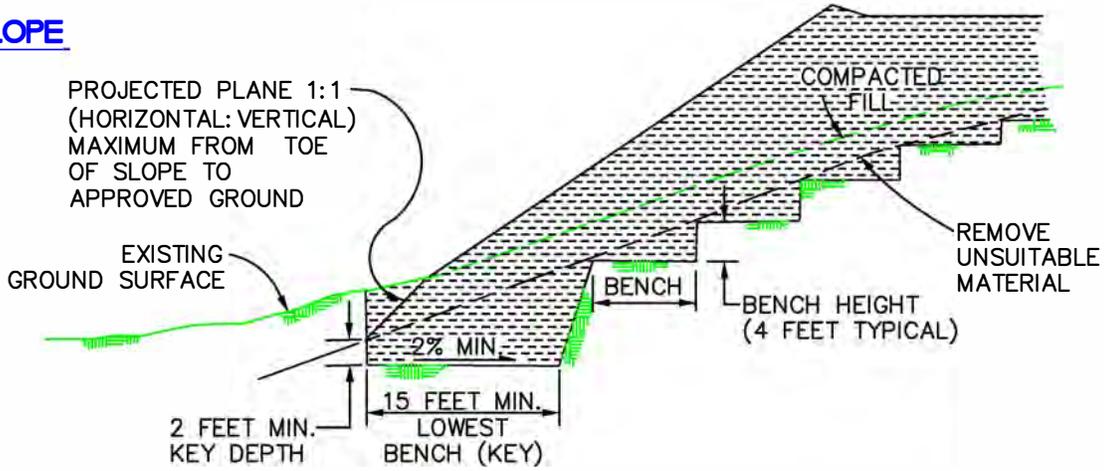
### **7.3 Lift Thickness**

Lift thickness of trench backfill shall not exceed those allowed in the Standard Specifications of Public Works Construction unless the Contractor can demonstrate to the Geotechnical Consultant that the fill lift can be compacted to the minimum relative compaction by his alternative equipment and method.

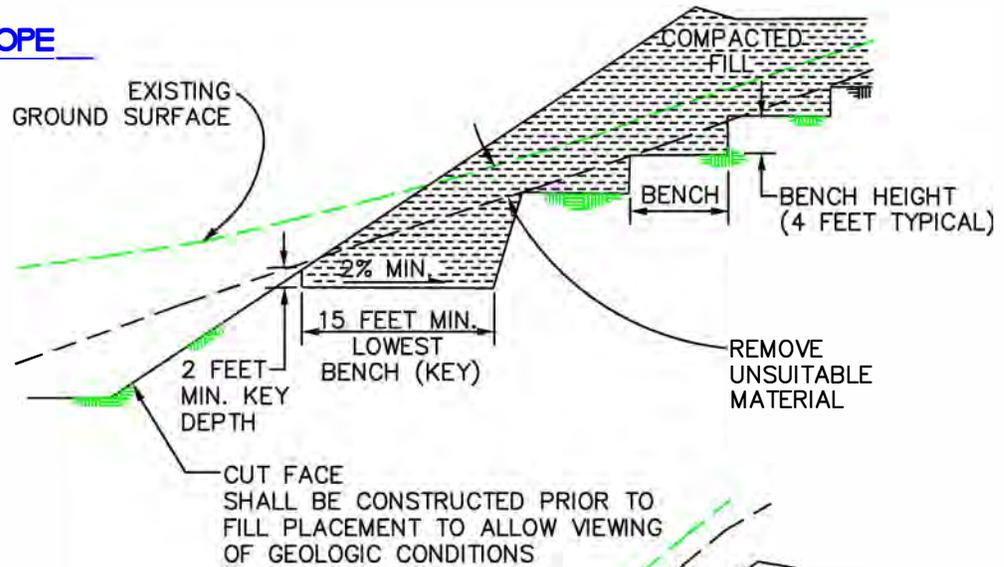
### **7.4 Observation and Testing**

The jetting of the bedding around the conduits shall be observed by the Geotechnical Consultant.

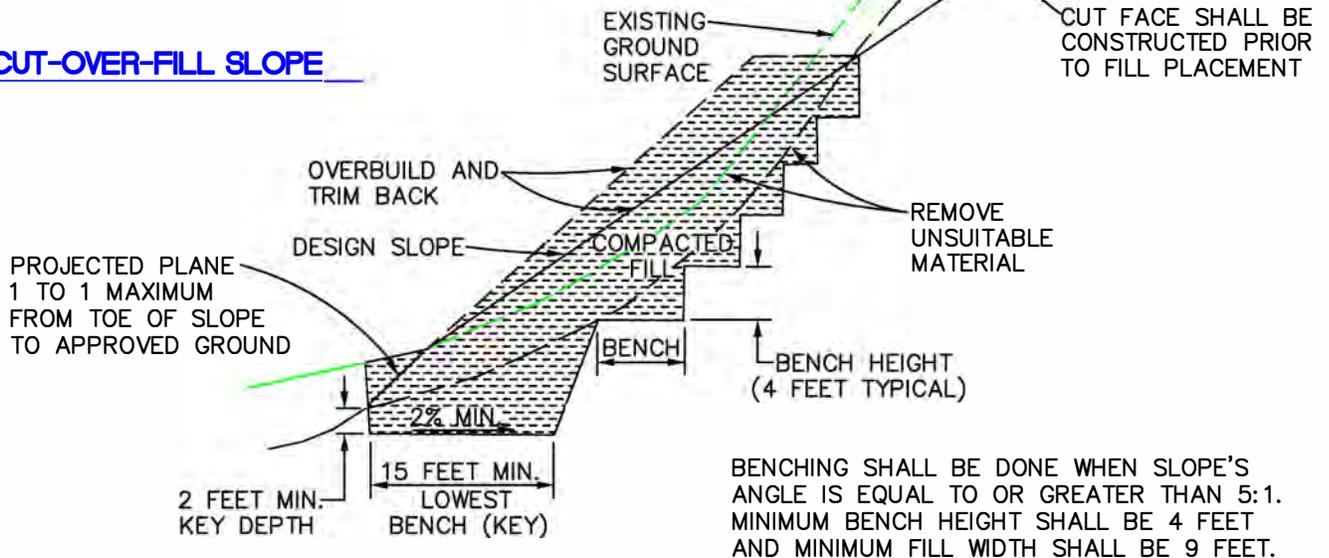
**FILL SLOPE**



**FILL-OVER-CUT SLOPE**



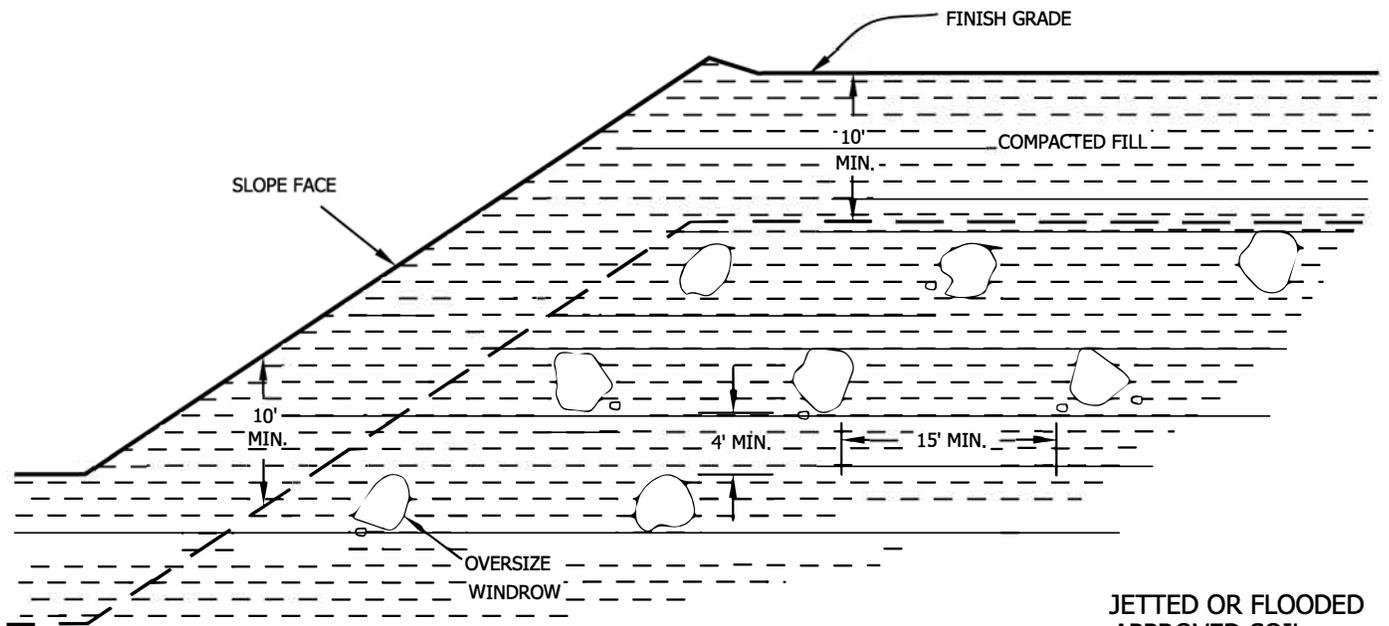
**CUT-OVER-FILL SLOPE**



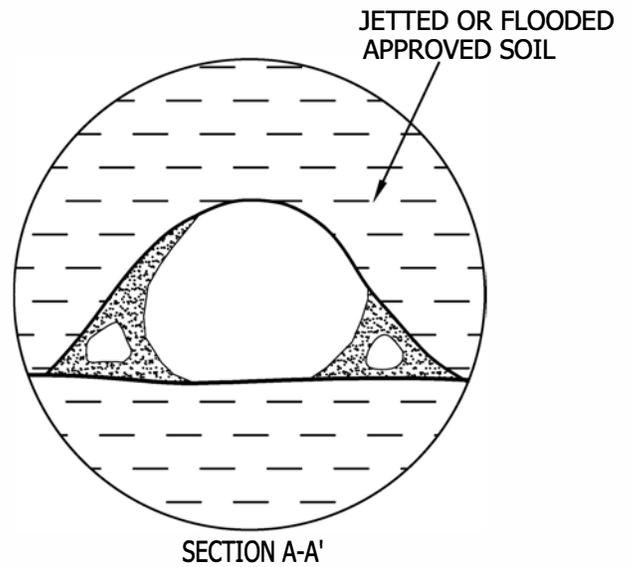
KEYING AND BENCHING

GENERAL EARTHWORK AND GRADING  
SPECIFICATIONS  
STANDARD DETAILS A

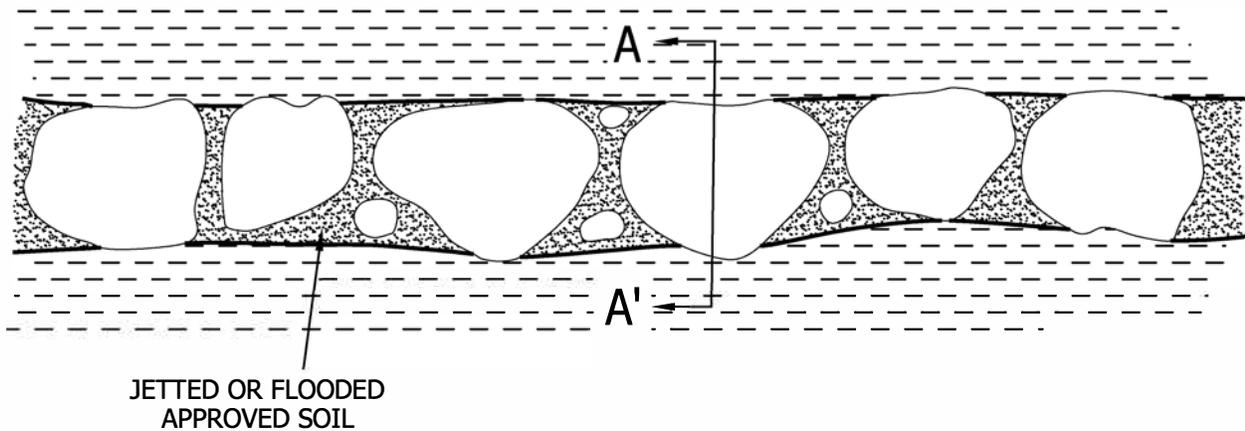




- Oversize rock is larger than 8 inches in largest dimension.
- Backfill with approved soil jetted or flooded in place to fill all the voids.
- Do not bury rock within 10 feet of finish grade.
- Windrow of buried rock shall be parallel to the finished slope face.



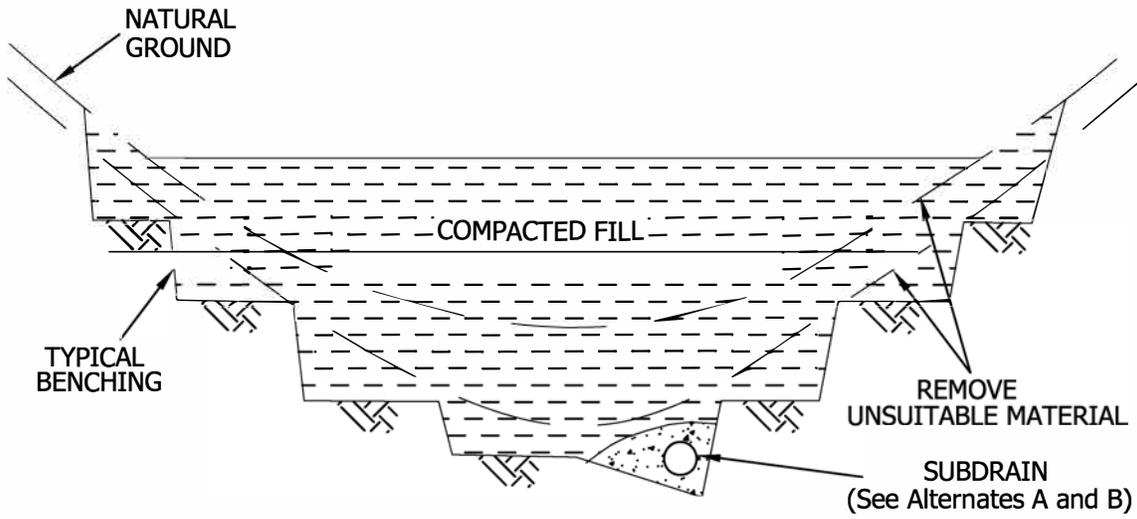
PROFILE ALONG WINDROW



**OVERSIZE ROCK DISPOSAL**

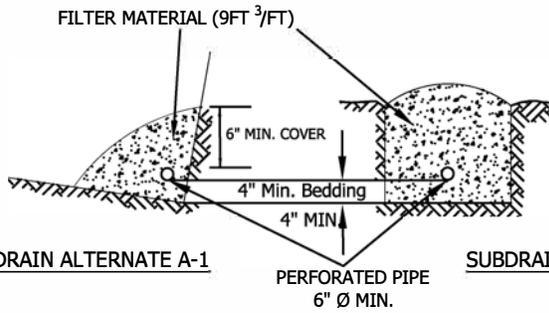
GENERAL EARTHWORK AND GRADING  
SPECIFICATIONS  
STANDARD DETAILS B





**SUBDRAIN ALTERNATE A**

PERFORATED PIPE SURROUNDED WITH FILTER MATERIAL

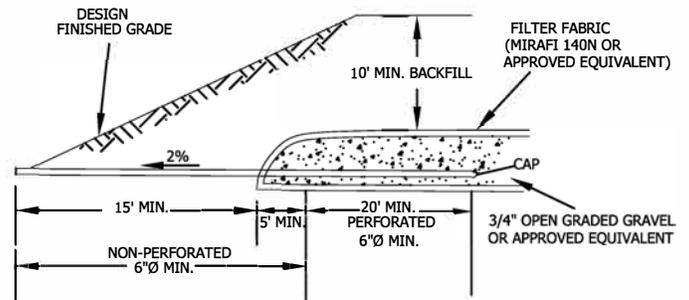
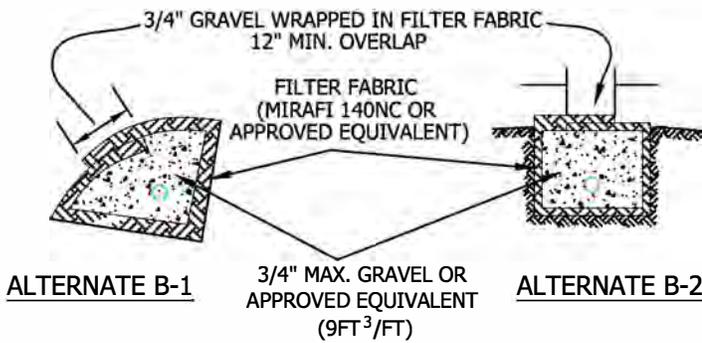


**FILTER MATERIAL**  
 FILTER MATERIAL SHALL BE CLASS 2 PERMEABLE MATERIAL PER STATE OF CALIFORNIA STANDARD SPECIFICATION, OR APPROVED ALTERNATE. CLASS 2 GRADING AS FOLLOWS:

Sieve Size	Percent Passing
1"	100
3/4"	90-100
3/8"	40-100
No. 4	25-40
No. 8	18-33
No. 30	5-15
No. 50	0-7
No. 200	0-3

**SUBDRAIN ALTERNATE B**

**DETAIL OF CANYON SUBDRAIN TERMINAL**



○ PERFORATED PIPE IS OPTIONAL PER GOVERNING AGENCY'S REQUIREMENTS

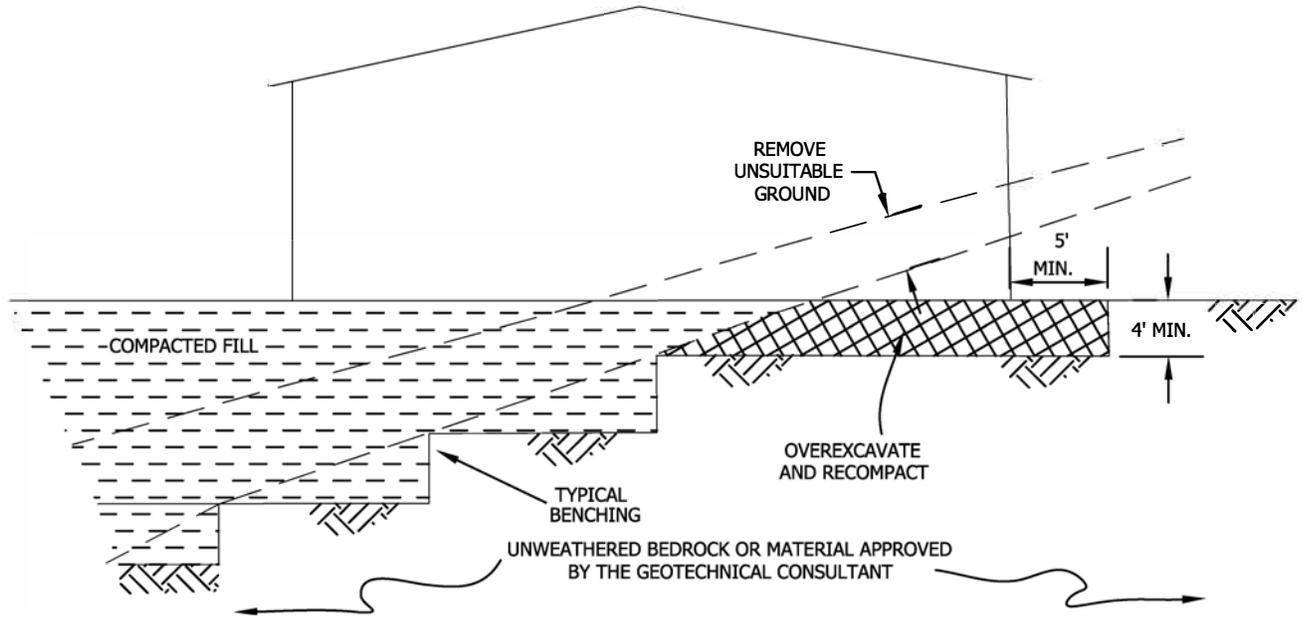
CANYON  
SUBDRAIN

GENERAL EARTHWORK AND GRADING  
SPECIFICATIONS  
STANDARD DETAILS C

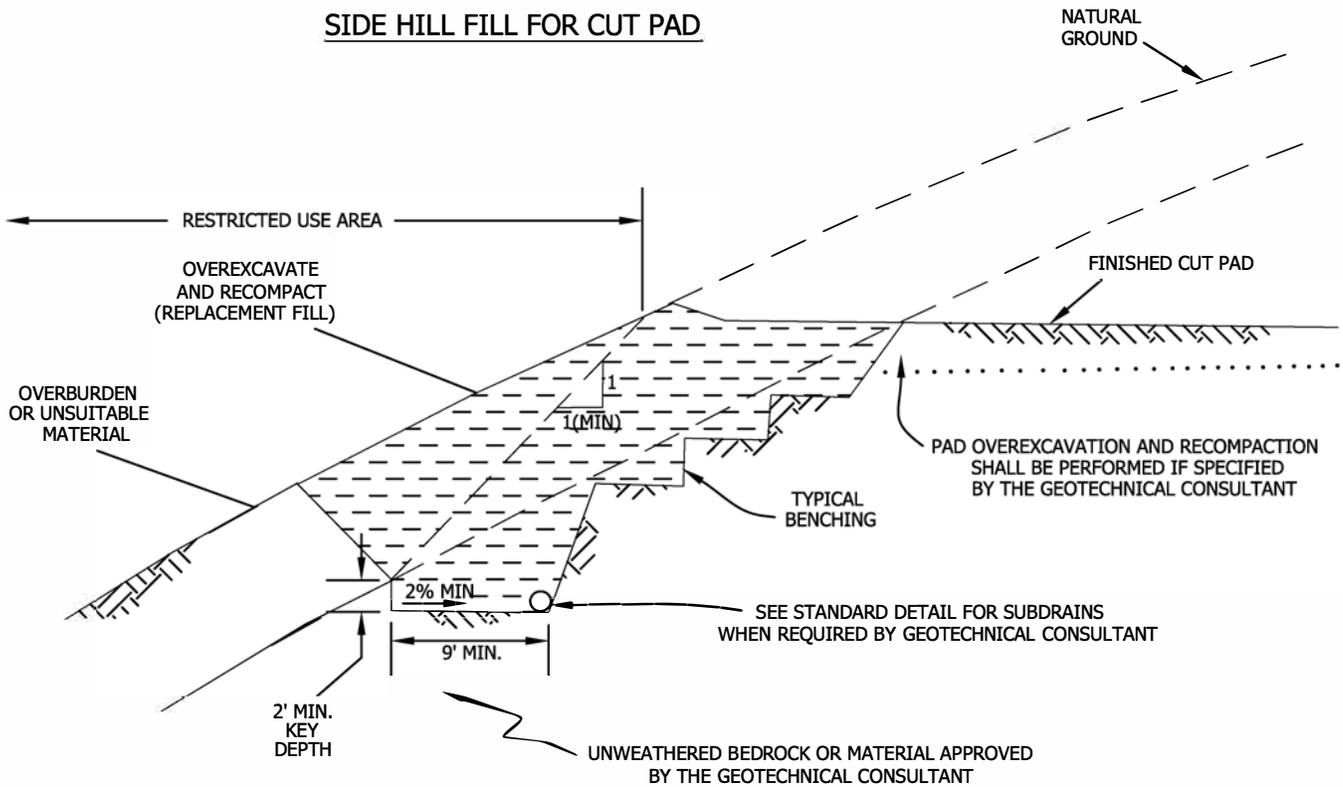




**CUT-FILL TRANSITION LOT OVEREXCAVATION**



**SIDE HILL FILL FOR CUT PAD**



**TRANSITION LOT FILLS  
AND SIDE HILL FILLS**

**GENERAL EARTHWORK AND GRADING  
SPECIFICATIONS  
STANDARD DETAILS E**



November 29, 2022

Project No. 13493.002

Legacy/Collier Residential, LLC  
5154 California Avenue  
Irvine, California 92617

Attention: Mr. David Pinto

**Subject: Addendum to Geotechnical Exploration Report  
Infiltration Testing  
Proposed “Euclid and Walnut Mixed Use” Development  
112 Walnut Street, 2502 and 2530 Euclid Avenue  
Ontario, San Bernardino County, California**

Reference: Leighton and Associates, Inc., 2022, *Geotechnical Exploration Report, Proposed “Euclid and Walnut Mixed Use” Development, 112 Walnut Street, 2502 and 2530 Euclid Avenue, Ontario, California*, Project No. 13493.001, dated May 13, 2022.

## **Introduction**

Per your request, Leighton and Associates, Inc. (Leighton) performed supplemental infiltration testing for the subject mixed use development. Additional field infiltration testing was performed in coordination with Mr. Steve Ellis of Fuscoe Engineering, Inc. (project civil engineer) to target the locations and depths planned for infiltration. While official infiltration plans were not available, we understand that stormwater infiltration is intended to be achieved utilizing a drywell system to be located in the southern portion of the site extending to approximate depths of no greater than 45 feet below ground surface (bgs).

## **Purpose and Scope**

Purpose of our exploration was to perform field infiltration tests at the proposed device locations and invert depths. The test locations and depths were selected by the project civil engineer. Our Scope of Work included the following:

- ***Pre-Field Exploration Activities*** – Site reconnaissance performed by a professional geologist to mark the proposed infiltration test locations. Underground Service Alert

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(USA) was notified to locate and mark existing underground utilities prior to our subsurface exploration.

- **Field Exploration** – Our supplemental subsurface exploration was performed on August 24, 2022 and included drilling, logging, and sampling of two (2) hollow-stem auger borings (designated LP-3 and LP-4) to depths ranging from approximately 40 to 45 feet below the existing ground surface. The approximate locations of these explorations are shown on Figure 1, *Geotechnical Map*. The corresponding boring logs are presented in Appendix A, *Exploration Logs*.

During drilling of the hollow-stem auger borings drive samples were obtained from the borings for geotechnical laboratory testing. Sample collection was performed by conducting the Standard Penetration Test (SPT) within the borings in accordance with ASTM Test Method D 1586. Samples were collected within the proposed test infiltration zone at 5-foot intervals. During sampling, the sampler was driven below the bottom of the borehole by a 140-pound weight (hammer) free-falling 30 inches. The drilling rig was equipped with an automatic hammer to provide greater consistency in the drop height and striking frequency. The number of blows to drive the sampler the final 12 inches of the 18-inch drive interval is termed the “blowcount” or SPT N-value. N-values provide a measure of relative density in granular (non-cohesive) soils and comparative consistency in cohesive soils. Number of blows per 6 inches of penetration was recorded on the boring logs included in Appendix A.

The borings were logged in the field by a geologist from our firm. Each soil sample collected was reviewed and described in accordance with the Unified Soil Classification System (USCS). The samples were sealed and packaged for transportation to our laboratory for testing. After completion of drilling, the borings were converted to percolation wells for subsequent testing.

- **Percolation Testing** – Borings LP-3 and LP-4 (Figure 1) were converted to temporary percolation test wells upon completion of drilling and sampling. The test wells consisted of 2-inch diameter slotted (0.020-inch) PVC well casing screened within the proposed test zone. In-situ percolation testing was performed in general accordance with the County of San Bernardino guidelines. Upon completion of the percolation testing, the well casing was removed from each boring and the borings were backfilled with soil cuttings and patched at the surface to match existing site conditions.
- **Laboratory Testing** – Selected soil samples obtained from our hollow-stem-auger borings were tested at our in-house geotechnical laboratory. This laboratory testing

program was designed to evaluate the fines content of the soils within the tested zone (i.e. soil particles finer than the No. 200 sieve). Results are included in Appendix C.

- **Report Preparation** – This report presents our findings, conclusions, and recommendations for the proposed infiltration devices.

### **Infiltration Testing**

Percolation testing was performed in temporary wells installed within borings LP-3 and LP-4 located in the southern region of the site with test zone at depths of 25 to 45 feet bgs and 25 to 40 feet bgs, respectively. The percolation tests were conducted in general accordance with the *San Bernardino County Technical Guidance Document (TGD) for Water Quality Management Plans (2013)*. Results of the percolation testing are presented in Appendix B. The test locations and tested depth intervals are shown on Plate 1.

A boring percolation test is useful for field measurements of the infiltration rate of soils, and is suited for testing when the design depth of the infiltration device is deeper than current existing grades, especially in areas where it is difficult to dig test pits, or where the depths of these test pits would be considerably deep. At the subject site, testing consisted of advancing the borings to the anticipated depth for the invert of the proposed infiltration devices.

The *Percolation Test Procedure* (falling-head test method) as outlined in the County Guidelines was implemented at each percolation test well location. The infiltration rate was calculated by dividing the rate of discharge by the infiltration surface area, or flow area. The volume of discharge was calculated by adding the total volume of water that dropped within the PVC pipe and within the annulus, and incorporating a porosity reduction factor to account for the porosity of the annulus material. The flow area was based on the average water height within the test well.

Detailed results of the field testing data and measured infiltration rate for the test well are presented in Appendix B. The test results are summarized in the table below:

**Table 1 – Measured (Unfactored) Infiltration Rate**

<b>Test Well Designation</b>	<b>Approximate Depth of Test Zone (feet bgs)</b>	<b>Measured Infiltration Rate (inches per hour)</b>
LB-3	25 to 45	0.14
LP-4	25 to 40	0.47

Based on the results of our field percolation testing that was performed at the site, the measured (unfactored) infiltration rates for the two (2) tests performed were 0.14 inches per hour (LP-3) and 0.47 inches per hour (LP-2), respectively. According to the *San Bernardino County Technical Guidance Document (TGD) for Water Quality Management Plans* (2013), the measured infiltration rate at the LP-4 well location technically exceeds the minimum feasibility criteria of 0.3 inch per hour. However, implementation of a minimum factor of safety of 2.0 as required for the design infiltration rate indicates the depth and location tested for both wells are considered infeasible for infiltration.

### Closure

We appreciate the opportunity to work with you on this project. If you have any questions regarding this report, please contact us directly at the phone extensions and/or e-mail addresses listed below.



Respectfully submitted,

LEIGHTON AND ASSOCIATES, INC.

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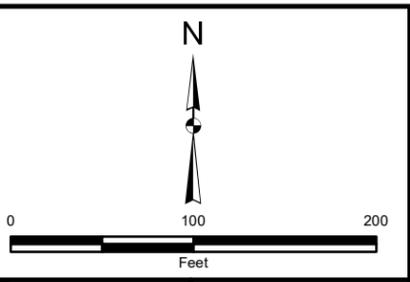
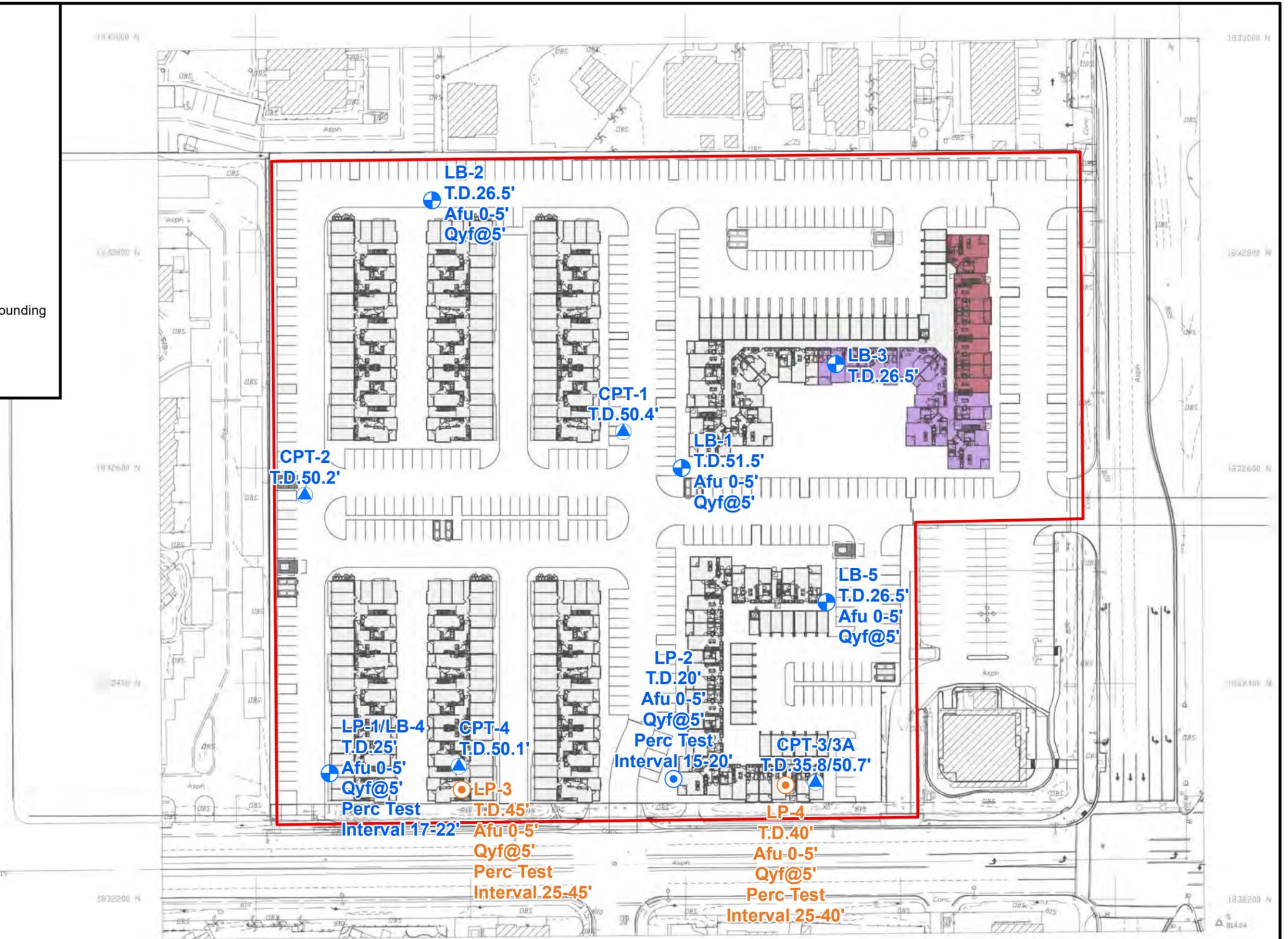
EMH/JEH/lr

Attachments: Figure 1 – *Geotechnical Map*  
Appendix A - *Exploration Logs*  
Appendix B - *Percolation Test Data*  
Appendix C - *Geotechnical Laboratory Testing*

Distribution: (1) Addressee

**LEGEND**

- Afu** Artificial Fill
- Qyf** Quaternary Young Alluvial Fan Deposits
- LP-4** Approximate location of current percolation test well showing percolation test interval in feet below ground surface.
- LB-5** Approximate location of previous hollow-stem auger boring showing total depth (T.D.) and depth to earth units in feet below ground surface. (Leighton, 2022)
- LP-2** Approximate location of previous percolation test well showing percolation test interval in feet below ground surface. (Leighton, 2022)
- CPT-4** Approximate location of previous cone penetrometer test sounding showing total depth (T.D.) in feet below ground surface (Leighton, 2022)
- Approximate Site Boundary



Project: 13493.002    Eng/Geol: JEH/EMH  
 Scale: 1" = 100'    Date: November 2022  
 Base Map: Option A Site Plan, Euclid and Walnut Mixed Use  
 Sheet 01, Dated: 03/10/2022  
 by AO Architecture Design Relationships

**GEOTECHNICAL MAP**  
 Proposed Euclid and Walnut Mixed-Use Development  
 2502 and 2530 S. Euclid Avenue  
 Ontario, California

**FIGURE 1**



**APPENDIX A**  
**Exploration Logs**

# GEOTECHNICAL BORING LOG LP-3

**Project No.** 13493.002  
**Project** Proposed Euclid and Walnut Mixed-Use Development  
**Drilling Co.** Martini Drilling, Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** See Figure 1 - Geotechnical Map

**Date Drilled** 8-24-22  
**Logged By** BTM  
**Hole Diameter** 8"  
**Ground Elevation** '  
**Sampled By** BTM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	<b>SOIL DESCRIPTION</b>	Type of Tests
	0	N S							This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.  @Surface: 3 -inches Asphalt Concrete over 6 -inches Base SM <b>Artificial Fill, undocumented (Afu)</b> @0.75': Silty SAND, brown, slightly moist, very fine sand, trace medium to coarse sand and fine subrounded gravel	
	5								----- <b>Quaternary-Aged Young Alluvial Valley Deposits (Qyf)</b> -----	
	20			S-1	3 7 11			SM-ML	@20': Clayey Sandy SILT to Clayey Silty SAND, medium dense/very stiff, olive brown, slightly moist, very fine sand, low plasticity, slightly micaceous, friable, pockets of higher clay content	
	25			S-2	4 8 9			SM	@25': Silty SAND, medium dense, mottled reddish brown and grayish brown, slightly moist, very fine sand, nonplastic, slightly micaceous, friable, grading slightly finer toward bottom	-200
	30									

**SAMPLE TYPES:**

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

**TYPE OF TESTS:**

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



\*\*\* This log is a part of a report by Leighton and should not be used as a stand-alone document. \*\*\*

# GEOTECHNICAL BORING LOG LP-3

**Project No.** 13493.002  
**Project** Proposed Euclid and Walnut Mixed-Use Development  
**Drilling Co.** Martini Drilling, Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** See Figure 1 - Geotechnical Map

**Date Drilled** 8-24-22  
**Logged By** BTM  
**Hole Diameter** 8"  
**Ground Elevation** '  
**Sampled By** BTM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S			Bulk Driven				This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
30				S-3	9 11 11			ML	@30': Sandy SILT, very stiff, mottled orange brown and grayish brown, slightly moist, very fine sand, trace coarse sand, nonplastic, friable, slightly micaceous	
35				S-4	7 11 14			SM	@35': Silty SAND, medium dense, olive brown, moist, very fine sand, micaceous, friable	-200
40				S-5	10 11 11			ML	@38.5': Sandy SILT, medium dense, brown, moist, very fine sand, nonplastic, micaceous, friable, trace medium sand	
45				S-6	7 14 37			SM-ML	@43.5': Interbedded Clayey Sandy SILT and Silty SAND; Clayey Sandy SILT, hard, brown, slightly moist, fine to medium sand, low plasticity, slightly micaceous Silty SAND, very dense, yellowish brown, slightly moist, very fine to fine sand, micaceous, nonplastic, friable	
50									Total Depth: 45' bgs No groundwater encountered during drilling Temporary percolation well installed; screened from 25-45' Upon completion of percolation testing, boring backfilled with soil cuttings and patched with asphalt concrete.	
55										
60										

**SAMPLE TYPES:**

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

**TYPE OF TESTS:**

- 200 % FINES PASSING
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- UC UNCONFINED COMPRESSIVE STRENGTH



# GEOTECHNICAL BORING LOG LP-4

**Project No.** 13493.002  
**Project** Proposed Euclid and Walnut Mixed-Use Development  
**Drilling Co.** Martini Drilling, Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** See Figure 1 - Geotechnical Map

**Date Drilled** 8-24-22  
**Logged By** BTM  
**Hole Diameter** 8"  
**Ground Elevation** '  
**Sampled By** BTM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S							This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
	0							SM	@Surface: 4 -inches Asphalt Concrete over 5 -inches Base <b>Artificial Fill, undocumented (Afu)</b> @0.75': Silty SAND, brown, slightly moist, very fine sand, trace medium to coarse sand and fine subrounded gravel	
	5								<b>Quaternary-Aged Young Alluvial Valley Deposits (Qyf)</b>	
	10									
	15									
	20			S-1	4 5 5			CL/SM	@20': Silty CLAY, stiff, gray-brown, slightly moist, medium plasticity, few very fine sand; grading to Silty SAND, loose, brown, slightly moist, very fine sand, some silt, nonplastic, trace fine subangular gravel	-200
	25			S-2	5 7 8			SM-SC	@25': Silty SAND, medium dense, grayish brown to yellowish brown, slightly moist, very fine to fine sand, slightly micaceous, some silt; grading to Sandy CLAY/Clayey SAND, medium dense/stiff, reddish brown, slightly moist, very fine to fine sand, low plasticity, slightly micaceous	
	30									

**SAMPLE TYPES:**

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

**TYPE OF TESTS:**

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
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- DS DIRECT SHEAR
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- SG SPECIFIC GRAVITY
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# GEOTECHNICAL BORING LOG LP-4

**Project No.** 13493.002  
**Project** Proposed Euclid and Walnut Mixed-Use Development  
**Drilling Co.** Martini Drilling, Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** See Figure 1 - Geotechnical Map

**Date Drilled** 8-24-22  
**Logged By** BTM  
**Hole Diameter** 8"  
**Ground Elevation** '  
**Sampled By** BTM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S			Bulk Driven				This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
30		•••••		S-3	8 9 12			SM	@30': Silty SAND, medium dense, orange brown, slightly moist, very fine sand, slightly micaceous, nonplastic, friable	
35		•••••		S-4	8 38 50/5"			SP	@35': Grading to Silty Gravelly SAND, very dense, whitish tan, slightly moist, fine to coarse sand, some fine subangular to subrounded gravel (granitic)	-200
40		•••••		S-5	15 21 25			SM	@38.5': Silty SAND, dense, brown, slightly moist, very fine to fine sand, some silt, nonplastic, slightly micaceous, friable	
45									Total Depth: 40' bgs No groundwater encountered during drilling Temporary percolation well installed; screened from 25-40' Upon completion of percolation testing, boring backfilled with soil cuttings and patched with asphalt concrete.	
50										
55										
60										

**SAMPLE TYPES:**

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

**TYPE OF TESTS:**

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
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- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
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**APPENDIX B**  
**Percolation Test Data**

**Boring Percolation Test Data Sheet**

<b>Project Number:</b>	13493.002	<b>Test Hole Number:</b>	LP-3
<b>Project Name:</b>	Legacy - Collier	<b>Date Excavated:</b>	8/24/2022
<b>Earth Description:</b>	Alluvium	<b>Date Tested:</b>	8/24/2022
<b>Liquid Description:</b>	Tap water	<b>Depth of boring (ft):</b>	45
<b>Tested By:</b>	BTM	<b>Radius of boring (in):</b>	4
<b><u>Time Interval Standard</u></b>		<b>Radius of casing (in):</b>	1
<b>Start Time for Pre-Soak:</b>	11:25	<b>Length of slotted of casing (ft):</b>	20
<b>Start Time for Standard:</b>	12:21	<b>Depth to Initial Water Depth (ft):</b>	25.05
<b>Standard Time Interval</b>		<b>Porosity of Annulus Material, n :</b>	1
<b>Between Readings, mins:</b>	10	<b>Bentonite Plug at Bottom:</b>	No

**Percolation Data**

Reading	Time	Time Interval, Δt (min.)	Initial/Final Depth to Water (ft.)	Initial/Final Water Height, H <sub>0</sub> /H <sub>f</sub> (in.)	Total Water Drop, Δd (in.)	Percolation Rate (min./in.)	Infiltration Rate (in./hr.)
1	11:25	25	25.05	239.4	17.5	1.43	0.36
	11:50		26.51	221.9			
2	11:54	25	25.00	240.0	15.4	1.63	0.31
	12:19		26.28	224.6			
3	12:21	10	25.00	240.0	6.4	1.57	0.32
	12:31		25.53	233.6			
4	12:33	10	25.00	240.0	5.4	1.85	0.27
	12:43		25.45	234.6			
5	12:44	10	25.00	240.0	4.6	2.19	0.23
	12:54		25.38	235.4			
6	12:58	10	25.00	240.0	4.2	2.38	0.21
	13:08		25.35	235.8			
7	13:17	10	25.00	240.0	3.1	3.21	0.16
	13:27		25.26	236.9			
8	13:29	10	25.00	240.0	2.9	3.47	0.14
	13:39		25.24	237.1			

Infiltration Rate (I) = Discharge Volume/Surface Area of Test Section/Time Interval

**Infiltration Rate, I (Last Reading) = 0.14 in./hr.**

**Boring Percolation Test Data Sheet**

<b>Project Number:</b>	13493.002	<b>Test Hole Number:</b>	LP-4
<b>Project Name:</b>	Legacy - Collier	<b>Date Excavated:</b>	8/24/2022
<b>Earth Description:</b>	Alluvium	<b>Date Tested:</b>	8/24/2022
<b>Liquid Description:</b>	Tap water	<b>Depth of boring (ft):</b>	40
<b>Tested By:</b>	BTM	<b>Radius of boring (in):</b>	4
<b><u>Time Interval Standard</u></b>		<b>Radius of casing (in):</b>	1
<b>Start Time for Pre-Soak:</b>	10:21	<b>Length of slotted of casing (ft):</b>	15
<b>Start Time for Standard:</b>	11:20	<b>Depth to Initial Water Depth (ft):</b>	25.00
<b>Standard Time Interval</b>		<b>Porosity of Annulus Material, n :</b>	1
<b>Between Readings, mins:</b>	10	<b>Bentonite Plug at Bottom:</b>	No

**Percolation Data**

Reading	Time	Time Interval, Δt (min.)	Initial/Final Depth to Water (ft.)	Initial/Final Water Height, H <sub>0</sub> /H <sub>f</sub> (in.)	Total Water Drop, Δd (in.)	Percolation Rate (min./in.)	Infiltration Rate (in./hr.)
1	10:21	25	25.00	180.0	38.6	0.65	1.14
	10:46		28.22	141.4			
2	10:51	25	25.02	179.8	32.5	0.77	0.94
	11:16		27.73	147.2			
3	11:20	10	25.00	180.0	12.6	0.79	0.86
	11:30		26.05	167.4			
4	11:32	10	25.00	180.0	10.8	0.93	0.73
	11:42		25.90	169.2			
5	11:46	10	25.00	180.0	10.2	0.98	0.69
	11:56		25.85	169.8			
6	12:00	10	25.00	180.0	8.5	1.17	0.58
	12:10		25.71	171.5			
7	12:13	10	25.00	180.0	8.4	1.19	0.57
	12:23		25.70	171.6			
8	12:27	10	25.00	180.0	7.0	1.44	0.47
	12:37		25.58	173.0			
9	12:38	10	25.02	179.8	6.8	1.46	0.46
	12:48		25.59	172.9			
10	12:50	10	25.00	180.0	7.0	1.44	0.47
	13:00		25.58	173.0			

Infiltration Rate (I) = Discharge Volume/Surface Area of Test Section/Time Interval

**Infiltration Rate, I (Last Reading) = 0.47 in./hr.**

---

## **APPENDIX C**

# **Geotechnical Laboratory Testing**

Boring No.	LP-3	LP-3	LP-4	LP-4				
Sample No.	S-2	S-4	S-1	S-4				
Depth (ft.)	25.0	35.0	20.0	35.0				
Sample Type	SPT	SPT	SPT	SPT				
Soil Identification	Yellowish brown silty sand (SM)	Light olive brown silty sand (SM)	Light olive brown sandy silt s(ML)	Light olive brown silty sand with gravel (SM)g				
<b>Moisture Correction</b>								
Wet Weight of Soil + Container (g)	0.00	0.00	0.00	0.00				
Dry Weight of Soil + Container (g)	0.00	0.00	0.00	0.00				
Weight of Container (g)	1.00	1.00	1.00	1.00				
Moisture Content (%)	0.00	0.00	0.00	0.00				
<b>Sample Dry Weight Determination</b>								
Weight of Sample + Container (g)	616.90	794.40	588.90	847.80				
Weight of Container (g)	108.60	108.50	107.30	108.00				
Weight of Dry Sample (g)	508.30	685.90	481.60	739.80				
Container No.:	V-1	927	936	957				
<b>After Wash</b>								
Method (A or B)	A	A	A	A				
Dry Weight of Sample + Cont. (g)	411.10	609.70	340.00	732.50				
Weight of Container (g)	108.60	108.50	107.30	108.00				
Dry Weight of Sample (g)	302.50	501.20	232.70	624.50				
<b>% Passing No. 200 Sieve</b>	<b>40.5</b>	<b>26.9</b>	<b>51.7</b>	<b>15.6</b>				
<b>% Retained No. 200 Sieve</b>	59.5	73.1	48.3	84.4				
	<b>PERCENT PASSING No. 200 SIEVE ASTM D 1140</b>			Project Name: <u>Legacy - Ontario</u>				
				Project No.: <u>13493.002</u>				
				Tested By: <u>J. Domingo</u>		Date: <u>09/12/22</u>		



## Preliminary Water Quality Management Plan (PWQMP)

For compliance with Santa Ana Regional Water Quality Control Board  
Order Number R8-2010-0036 (NPDES Permit No. CAS618036)

**Project Name:** EUCLID AND WALNUT MIXED USE

**Ontario Project #:** PDEV22-027

**Applicant Name:** LEGACY PARTNERS, CONTACT: DAVID PINTO

**Applicant Address:** 5141 CALIFORNIA AVE., STE 100, IRVINE, CA 92617

**Project Address:** NW CORNER OF E. EUCLID AND WALNUT STREET

**Project Size (acres):** 9.82 ACRES

**Project Description:** Redevelopment of existing commercial site  
to residential development

**Submittal Date:** June 27, 2023

# Preliminary Water Quality Management Plan (PWQMP)

## 1. Introduction

The Preliminary Water Quality Management Plan (PWQMP) is a planning tool to improve integration of required water quality elements, stormwater management, water conservation, rainwater harvesting and re-use, and flood management in land use planning and the City’s development process. The Preliminary WQMP will assist project applicants and planners in properly designing and laying out project sites so that water quality may be incorporated in the most effective manner and at the lowest cost for the developer.

The San Bernardino County Municipal Separate Storm Sewer System Permit (MS4 Permit) requires project-specific Water Quality Management plans (WQMP) to be prepared for all priority new development and significant redevelopment projects listed in Section 2 of this document. The MS4 Permit stipulates that the City of Ontario require priority project applicants to submit a Preliminary project-specific WQMP, as early as possible, during the environmental review or planning phase of a development project and that the Preliminary WQMP be approved prior to the issuance of land use entitlement.

## 2. Priority Projects (requiring a Preliminary WQMP)

Land Use entitlement shall not be issued for any of the listed projects, below, until a Preliminary WQMP has been approved by the City’s Engineering Department. For construction projects not going through entitlement, a Preliminary and Final project specific WQMP shall be approved, prior to the issuance of construction permits:

Check the appropriate project category below, for this project:

**Check  
below**

### Project Categories

✓	1. All significant re-development projects. Significant re-development is defined as the addition or replacement of 5,000 or more square feet of impervious surface on an already developed site subject to discretionary approval of the Permittee. Redevelopment does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, original purpose of the facility, or emergency redevelopment activity required to protect public health and safety. Where redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing developed site, and the existing development was not subject to WQMP requirements, the numeric sizing criteria discussed below applies only to the addition or replacement, and not to the entire developed site. Where redevelopment results in an increase of fifty percent or more of the impervious surfaces of a previously existing developed site, the numeric sizing criteria applies to the entire development (new and existing).
	2. New development projects that create 10,000 square feet or more of impervious surface (collectively over the entire project site) including commercial, industrial, residential housing subdivisions (i.e., detached single family home subdivisions, multi-family attached subdivisions or townhomes, condominiums, apartments, etc.), mixed-use, and public projects. This category includes development projects on public and private land, which fall under the planning and building authority of the permitting agency.

**Check  
below**

**Project Categories**

	3. Automotive repair shops (with SIC codes 5013, 5014, 5541, 7532- 7534, 7536-7539).
✓	4. Restaurants and Food Service Establishments where the land area of development is 5,000 square feet or more.
	5. Developments of 2,500 square feet of impervious surface or more adjacent to (within 200 feet) or discharging directly into environmentally sensitive areas (ESA's) such as areas designated in the Ocean Plan as areas of special biological significance or waterbodies listed on the CWA Section 303(d) list of impaired waters.
✓	6. Parking lots of 5,000 square feet or more exposed to storm water. Parking lot is defined as land area or facility for the temporary storage of motor vehicles.
	7. Retail Gasoline Outlets (RGOs) that are either 5,000 sq ft or more or have a projected average daily traffic of 100 or more vehicles per day.
	8. *This project is not covered under any of the categories listed above.

\* If the development is not covered under any of the project categories listed in Section 2, the project is not required to design and install Site Design/LID BMPs or Treatment Control BMPs to treat the design storm event (Design Capture Volume) described in Section 4.

**3. Preliminary WQMP Objectives**

Through a combination of Site Design/LID BMPs (where feasible), Source Control, and/or Treatment Control BMPs, project-specific WQMPs shall address all identified pollutants and hydrologic conditions of concern from new development and significant re-development projects for the categories of projects (priority projects) listed in Section 2. Under each type of BMP, listed below, please indicate which BMPs are planned to be implemented and included in the Final WQMP for the project:

**A. Site Design/LID (Low Impact Design) for Reducing Stormwater Runoff:**

The MS4 Permit requires each priority development project to infiltrate, harvest and use, evapotranspire, or bio-treat the runoff from a 2-yr, 24-hour storm event (Design Capture Volume). If site conditions do not permit infiltration, harvest and use, evapotranspiration, and/or bio-treatment of the entire Design Capture Volume, at the project site, Site Design/LID techniques are required to be implemented to the Maximum Extent Practicable, at the project site, and the remainder of the DCV shall be infiltrated, harvested, bio-treated or treated by alternative measures. Project applicants shall submit a Preliminary WQMP that documents the LID/Site Design BMPs, proposed for the project. Please indicate, in the table below, which Site Design/LID BMPs will be utilized on this project to accomplish this requirement:

Site Design/LID Practice	Planned	Not Planned
Provide at least the minimum effective area required for LID BMPs, to comply with the WQMP (see Table 3-1 below).		✓
Grade parking lot areas/drive aisles/roof drains to sheet flow runoff into landscaped swales, via curb cuts or zero-face curbs or otherwise disconnect direct drainage from MS4.		✓
Design landscaped areas as swales and grade to accept runoff from building roofs, parking lots and project roadways.		✓
Install surface retention basins or infiltration trenches to receive impervious area runoff.		✓
Install pervious pavement in parking stalls, alleys, driveways, gutters, walkways, trails or patios.		✓
Install underground stormwater retention chambers where downstream landscaped areas are limited.		✓
Install approved Stormwater Drywells in detention areas.		✓
Construct streets, sidewalks, and parking lot stalls to the minimum widths necessary.	✓	
Install on-site Biotreatment basins/trenches with underdrains, where soil type is poorly draining.	✓	
Install "Engineered Soil" to increase uptake/soil storage capacity and/or evapotranspiration.		✓
Install Rainwater Harvesting/Use Equipment.		✓
Regional LID BMP facilities are installed, off-site, with the capacity and conveyances to accept post-development storm water runoff from this project and reserved capacity allocation credits have been assigned to the project, in a Certificate or other legally binding document, attached herein		✓

Table 3-1 Minimum Effective Area<sup>1</sup> Required for LID BMPs (surface + subsurface facilities) for Project WQMP to Demonstrate Infeasibility<sup>2</sup> (% of site)

Project Type	New Development	Re-Development
SF/MF Residential < 7 du/ac	10%	5%
SF/MF Residential < 7 - 18 du/ac	7%	3.5%
SF/MF Residential > 18 du/ac	5%	2.5%
Mixed Use, Commercial/Industrial w/FAR< 1.0	10%	5%
Mixed Use, Commercial/Industrial w/FAR 1.0-2.0	7%	3.5%
Mixed Use, Commercial/Industrial w/FAR> 2.0	5%	2.5%
Podium (parking under > 75% of project)	3%	1.5%
Zoning allowing development to property lines	2%	1%
Transit Oriented Development <sup>3</sup>	5%	2.5%
Parking	5%	2.5%

<sup>1</sup> “Effective area” is defined as land area which 1) is suitable for a retention/infiltration BMP (based on infeasibility criteria) and 2) is located down-gradient from building roof or paved areas, so that it may receive gravity flow runoff.

<sup>2</sup> Criteria only required if the project WQMP seeks to demonstrate that the full DCV cannot be feasibly managed on-site.

<sup>3</sup> Transit oriented development is defined as a project with development center within one half mile of a mass transit center.

Key: du/ac = dwelling units/acre, FAR = Floor Area Ratio = ratio of gross floor area of building to gross lot area, MF = Multi Family, SF = Single Family

**B. Source Control BMPs** – The following BMPs are designed to control stormwater pollutants and runoff water at the location where it is generated. Please indicate which of the listed BMPs are planned to be implemented for the project:

Source Control BMPs	Planned	Not Planned
Minimize non-stormwater site runoff through efficient irrigation system design and controllers.	✓	
Minimize trash and debris in storm runoff through a regular parking lot, storage yard and roadway sweeping program.	✓	
Provide proper covers/roofs and secondary containment for outside material storage & work areas.		✓
Provide solid roofs over all trash enclosures.	✓	
Site Owner(s)/Property Manager/HOA or POA will be familiar with the project WQMP and stormwater BMPs.	✓	
Owner or HOA or POA to provide Education/Training of site occupants and employees on stormwater BMPs.	✓	
Install stormwater placards/stenciled messages with a “No Dumping” message on all on-site/off-site storm drain inlets.	✓	
Provide contained equipment/vehicle wash rack areas that discharge to sanitary sewer.		✓

**C. Treatment Control BMPs** – The following BMPs are designed to control stormwater pollutants where it is not feasible to install on-site or off-site Site Design/LID BMPs, with the requisite capacity to treat the Design Capture Volume for identified Pollutants of Concern or where pretreatment of stormwater runoff is required, ahead of infiltration BMPs. Please indicate which of the listed BMPs are planned to be implemented for the project:

Treatment Control BMP	Planned	Not Planned
Gravity Separator devices for pretreatment of sediment, trash/litter or Oil & Grease		✓
Proprietary Biofiltration vaults/devices	✓	
Media Cartridge Filtration Vaults		✓
Proprietary Filter Inserts for on-site storm drain inlets or retention basin/trench overflow drains		✓

#### 4. Volume-based calculation (approximate) for sizing on-site or off-site Stormwater Retention/Infiltration, Harvest & Re-Use or Biotreatment facilities

- 1) After calculating the “Watershed Imperviousness Ratio”,  $i$ , which is equal to the percent of impervious area in each Drainage Management Area, divided by 100, calculate the composite runoff coefficient  $C_{BMP}$  for the Drainage Area above using the following equation:

$$C_{BMP} = 0.858i^3 - 0.78i^2 + 0.774i + 0.04$$

where:  $C_{BMP}$  = composite runoff coefficient; and,  
 $i$  = watershed imperviousness ratio.

- 3) Determine the area-averaged “6-hour Mean Storm Rainfall”,  $P_6$ , for the Drainage Area. This is calculated by multiplying the area averaged 2-year 1-hour value (0.5”-0.6”) by the appropriate regression coefficient (1.4807). The 2-yr, 1-hr value for southern Ontario is approximately to 0.5” ( $P_6 = 0.5 \cdot 1.4807 = 0.74$  and northern Ontario is approximately 0.6” in/hr ( $P_6 = 0.6 \cdot 1.4807 = 0.89$ ).
- 4) Determine the appropriate drawdown time. Use the regression constant  $a = 1.582$  for 24 hours and  $a = 1.963$  for 48 hours. *Note: Regression constants are provided for both 24 hour and 48-hour drawdown times; however, 48-hour drawdown times should be used in most areas of California. Drawdown times in excess of 48 hours should be used with caution as vector breeding can be a problem after water has stood in excess of 72 hours. (Use of the 24-hour drawdown time should be limited to drainage areas with coarse soils (Class ‘A’ soils that readily drain.)*
- 5) Calculate the “Maximized Detention Volume”,  $P_0$ , using the following equation:

$$P_0 = a \cdot C_{BMP} \cdot P_6$$

where:  $P_0$  = Maximized Detention Volume, in inches  
 $a = 1.582$  for 24 hour and  $a = 1.963$  for 48-hour drawdown,  
 $C_{BMP}$  = composite runoff coefficient; and,  
 $P_6$  = 6-hour Mean Storm Rainfall, in inches

- 6) Calculate the “Target Capture Volume”,  $V_0$ , using the following equation:

$$V_0 = (P_0 \cdot A) / 12$$

where:  $V_0$  = Target Capture Volume, in acre-feet  
 $P_0$  = Maximized Detention Volume, in inches; and,  
 $A$  = BMP Drainage Area, in acres

**Project Volume-based calculation (approximate) for planned on-site or off-site Stormwater Retention/Infiltration, Harvest & Re-Use or Biotreatment facilities: N/A**

Variable	Factor/Formula	DA1, DMA A	DA2 DMA B	DA3 DMA C	DA4 DMA D	DA5 DMA E
Impervious surface/total surface, ratio	(i)					
C <sub>BMP</sub> = runoff coefficient	$0.858i^3 - 0.78i^2 + 0.774i + 0.04$					
P <sub>6</sub>	**P <sub>6</sub> = 2-yr, 1-hr depth*1.4807 =					
Detention Volume (acre inches)	P <sub>0</sub> = a * C <sub>BMP</sub> * P <sub>6</sub> =					
Drawdown rate of basin/trench (a)	1.963 for 48-hr drawdown =					
Project Total Area (acre)	(A)					
Design Capture Volume in cu. ft.	V <sub>0</sub> = [(P <sub>0</sub> * A)/12] *43560 =					
Runoff Volume infiltrated in first 3 hours of storm (not applicable for underground systems)	Vol= in/hr/12 x ft <sup>2</sup> of infiltration area x 3 hrs					
Retention Volume provided in cubic feet.	Retention capacity of basins, trenches, underground storage or biotreatment basin					

\*\*For P<sub>6</sub> value, use site coordinates and NOAA website to determine project's average 2-yr, 1-hr rainfall depth, at: [http://hdsc.nws.noaa.gov/hdsc/pfds/sa/sca\\_pfds.html](http://hdsc.nws.noaa.gov/hdsc/pfds/sa/sca_pfds.html) .

**5. Flow-Based calculation (approximate) for sizing on-site or off-site Biotreatment facilities and proprietary treatment technology BMPs:**

- 1) After calculating the "Watershed Imperviousness Ratio", i, which is equal to the percent of impervious area in each Drainage Management Area divided by 100, calculate the composite runoff coefficient C<sub>BMP</sub> for the Drainage Area above using the following equation:

$$C_{BMP} = 0.858i^3 - 0.78i^2 + 0.774i + 0.04$$

where: C<sub>BMP</sub> = composite runoff coefficient; and,  
i = watershed imperviousness ratio.

- 2) Determine BMP design rainfall intensity,  $I_{BMP}$ , using the project site geo-coordinates and the NOAA website to determine project's average 2-yr, 1-hr rainfall intensity, at: [http://hdsc.nws.noaa.gov/hdsc/pfds/sa/sca\\_pfds.html](http://hdsc.nws.noaa.gov/hdsc/pfds/sa/sca_pfds.html) .Multiply this value by 0.2787 (regression coefficient for Ontario) and a minimum safety factor of 2.
- 4) Calculate the target BMP flowrate, Q, using the following formula (for each DMA <50 acres\*):

$$Q = C_{BMP} \cdot I_{BMP} \cdot A$$

Where:  $Q$  = flow in cfs (Cubic feet per second)  
 $I_{BMP}$  = BMP design rainfall intensity, in/hr  
 $A$  = Drainage Area in acres

\*For DMAs >50 acres, with  $C_{BMP} < 0.5$ , the project applicant shall use the unit hydrograph method specified in the San Bernardino County Hydrology Manual, using the design storm pattern with rainfall return frequency such that the peak 1-hr rainfall intensity equals the 85<sup>th</sup> percentile 1-hr rainfall, multiplied by 2.

**Project Flow-based calculation (approximate) for planned on-site or off-site flow-based Biotreatment facilities or Stormwater Treatment BMPs:**

Variable	Factor/Formula	DA1 DMA A	DA2 DMA B	DA3 DMA C	DA4 DMA D	DA5 DMA E
Impervious surface/ total surface, ratio	(i)	0.89	0.89	0.89	0.89	0.89
$C_{BMP}$ = composite runoff coefficient	$0.858i^3 + 0.78i^2 + 0.774i + 0.04$	0.712	0.712	0.712	0.712	0.712
$I_{BMP}$	$I_{BMP} = 2\text{-yr, 1-hr storm intensity} \cdot 0.2787 \cdot \text{safety factor}$	0.333	0.333	0.333	0.333	0.333
Drainage area (ac)	$A = \text{DMA sq ft} / 43,560$	1.77	1.46	1.50	1.32	1.90
Target BMP flowrate	$Q = C_{BMP} \cdot I_{BMP} \cdot A$	0.423	0.348	0.357	0.316	0.453

**Please see next sheet for additional DRAINAGE AREA Treatment BMPs**

**Project Flow-based calculation (approximate) for planned on-site or off-site flow-based Biotreatment facilities or Stormwater Treatment BMPs: (Continued)**

Variable	Factor/Formula	DA6 DMA A	DA7 DMA B	DA8 DMA C	DA9 DMA D	DA10 DMA E
Impervious surface/ total surface, ratio	(i)	0.89	0.89			
C <sub>BMP</sub> = composite runoff coefficient	$0.858i^3 + 0.78i^2 + 0.774i + 0.04$	0.712	0.712			
I <sub>BMP</sub>	I <sub>BMP</sub> = 2-yr, 1-hr storm intensity*0.2787*safety factor	0.333	0.333			
Drainage area (ac)	A = DMA sq ft/43,560	0.69	0.97			
Target BMP flowrate	Q = C <sub>BMP</sub> * I <sub>BMP</sub> * A	0.165	0.232			

**6. Hydrologic Conditions of Concern (HCOC) and use of the on-line San Bernardino County HCOC Map for determining necessary mitigation steps necessary if there are HCOCs downstream of a project:**

Project applicants may access the on-line HCOC Map at: <http://permitrack.sbcounty.gov/WAP/>. The map will indicate any hydrology concerns with downstream waterways that are hydraulically connected to the project and will indicate if there are any approved regional projects downstream that could be utilized for off-site mitigation of HCOCs. Please indicate here if the project will or will not be able to retain/infiltrate, harvest and use or biotreat and detain the DCV, on-site, as calculated in Section 4 and if there are HCOCs identified downstream of the project:

Retain or Harvest/Use the DCV on site?	Yes		No	✓
Biotreat the DCV but not infiltrate the runoff?	Yes	✓	No	
HCOCs identified downstream of site?	Yes		No	✓

If the entire DCV will not be retained on site, the DCV is biotreated but not infiltrated or additional detention capacity is needed to address identified HCOCs, downstream of the site, please list here, what additional mitigation measures will be utilized (on-site or off-site) to address HCOCs (see Section 4.2.1-4.2.3 of the SB County WQMP Technical Guidance):

**NO HCOC EXISTS FOR THIS SITE**

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**7. Site Plan and Conceptual Grading/Drainage Plan requirements for submission with the Preliminary WQMP:**

Provide a Site Plan and Conceptual Grading/Drainage Plan along with this Preliminary WQMP, which conceptually shows the proposed locations of buildings, homes, parking lots, parks, new paved roadways, landscaped areas, drainage patterns and drainage sub-areas, methods of conveyance, proposed retention/infiltration, harvest & use or biotreatment facilities that are planned for installation. Where it is determined to be infeasible to capture and detain design storm runoff volumes, on-site, please include other design features, as described in Section 3, above. Include numbered or lettered notes on the Site Plan with a legend detailing other BMPs, as described in Section 3.

**8. BMP Maintenance and Funding Mechanism & Description:**

**BMP Maintenance and funding will be the responsibility of the owner/lessee.**

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**9. Acknowledgment:**

As the property owner or developer, I understand that this project is required to install and implement permanent LID Storm Water Best Management Practices pursuant to the requirements of the San Bernardino County MS4 Permit and to document those BMPs in the submittal of a Water Quality Management Plan, which is binding on any current or successive owners of this property.

Yes	✓	No	
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**10. Exemption Signature:**

As the property owner or developer, I understand that this project is not required by the San Bernardino County MS4 Permit to install and implement permanent LID Storm Water Best Management Practices and will not be required to submit a Water Quality Management Plan.

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Signature of Owner or Developer

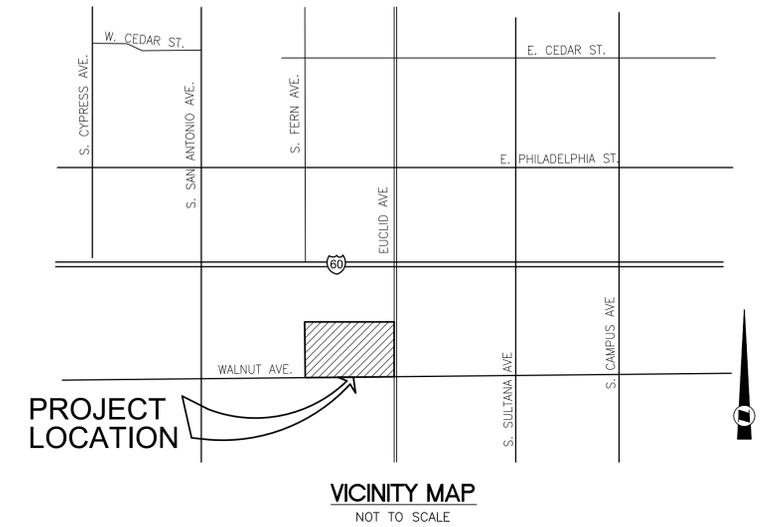
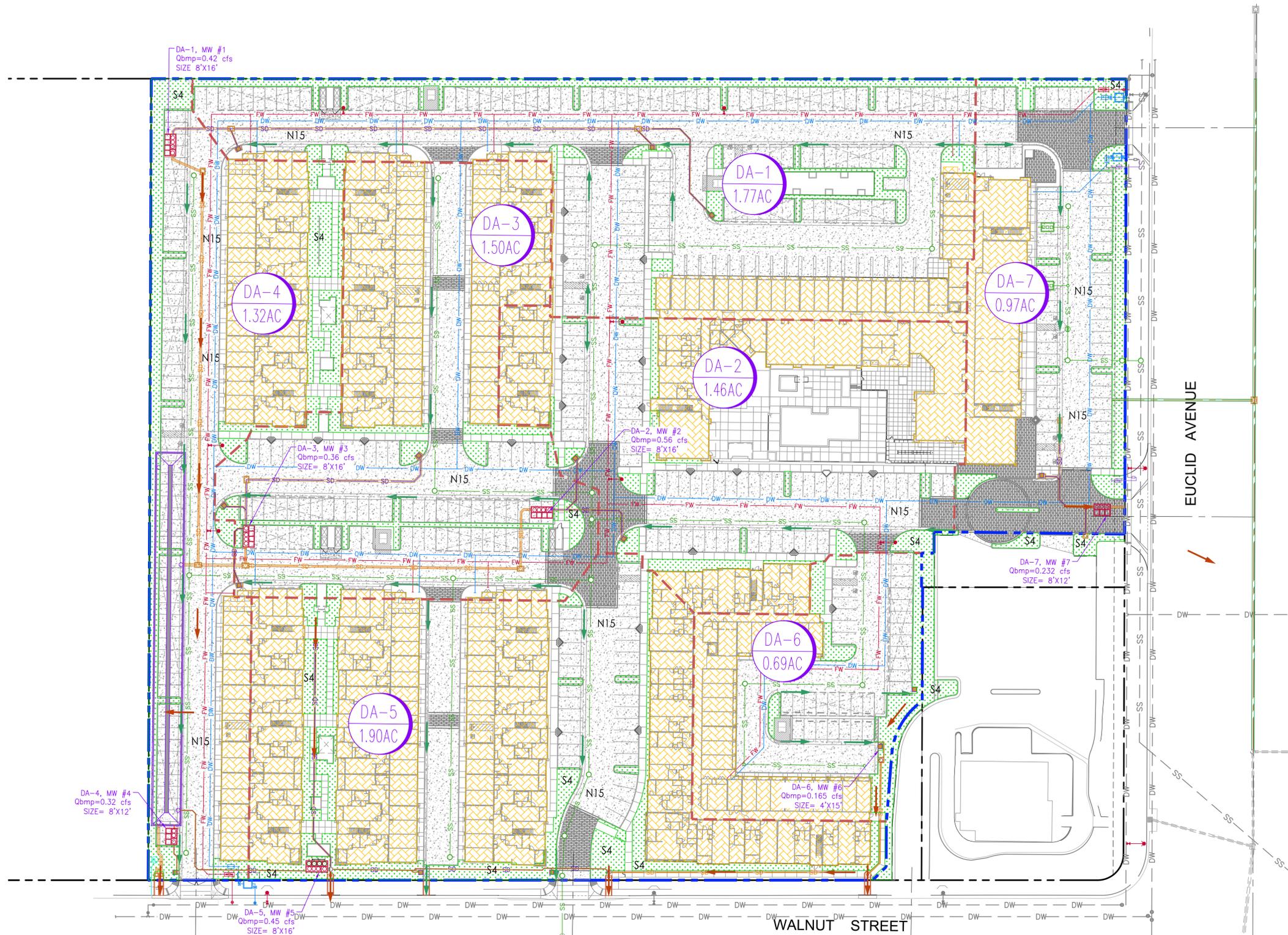
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Date

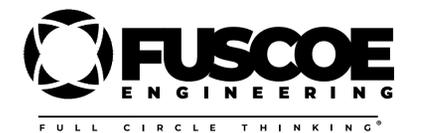
# WQMP PLAN AND DRAINAGE PLAN

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- Vicinity Map
- Site Plan, Drainage Flow and LID BMP Plan
- Conceptual Grading Plan (For reference only)



- LEGEND**
- PROJECT BOUNDARY
  - DRAINAGE AREA BOUNDARY
  - FLOW DIRECTION (SURFACE)
  - FLOW DIRECTION (PIPE)
  - PROPOSED STORM DRAIN LINE (PUBLIC)
  - PROPOSED STORM DRAIN LINE (PRIVATE)
  - CATCH BASIN STENCILING AND COMMON AREA CATCH BASIN INSPECTION
  - STREET VACUUMING AND CLEANING
  - EFFICIENT IRRIGATION
  - LANDSCAPE AREA
  - ROOF
  - PAVEMENT/HARDSCAPE
  - DRAINAGE AREA ID AND ACREAGE
  - UNDERGROUND RETENTION/INFILTRATION CHAMBERS
  - MODULAR WETLAND BY CONTECH (PROPRIETARY BIO RETENTION BASIN)
  - PROPOSED STORM DRAIN DRAINING TO MODULAR WETLAND



N  
 Scale: 1" = 40'  
 Exhibit Date: 06.27.23  
 PWQMP EXHIBIT-OPTION 2  
 EUCLID AND WALNUT MIXED USE  
 NW CORNER OF E. EUCLID  
 AND WALNUT STREET  
 ONTARIO, CA

# CONCEPTUAL GRADING PLAN FOR ONTARIO APARTMENTS

IN THE CITY OF ONTARIO, COUNTY OF SAN BERNARDINO  
STATE OF CALIFORNIA



**PROJECT LOCATION**  
**VICINITY MAP**  
NOT TO SCALE

**OWNER:**  
LEGACY PARTNERS  
ATTN: DAVID PINTO  
5141 CALIFORNIA AVENUE, SUITE 100  
IRVINE, CA 92617  
PHONE: (949) 939-7712  
DPINTO@LEGACYPARTNERS.COM

**ARCHITECT:**  
ARCHITECTS ORANGE  
ATTN: SERAFIN MARIANAN  
144 NORTH ORANGE STREET  
ORANGE, CA 92665  
PHONE: (714) 639-9860

- LEGEND**
- CARPORTS
  - TREE WELLS
  - GRIND AND OVERLAY
  - DECORATIVE PAVERS

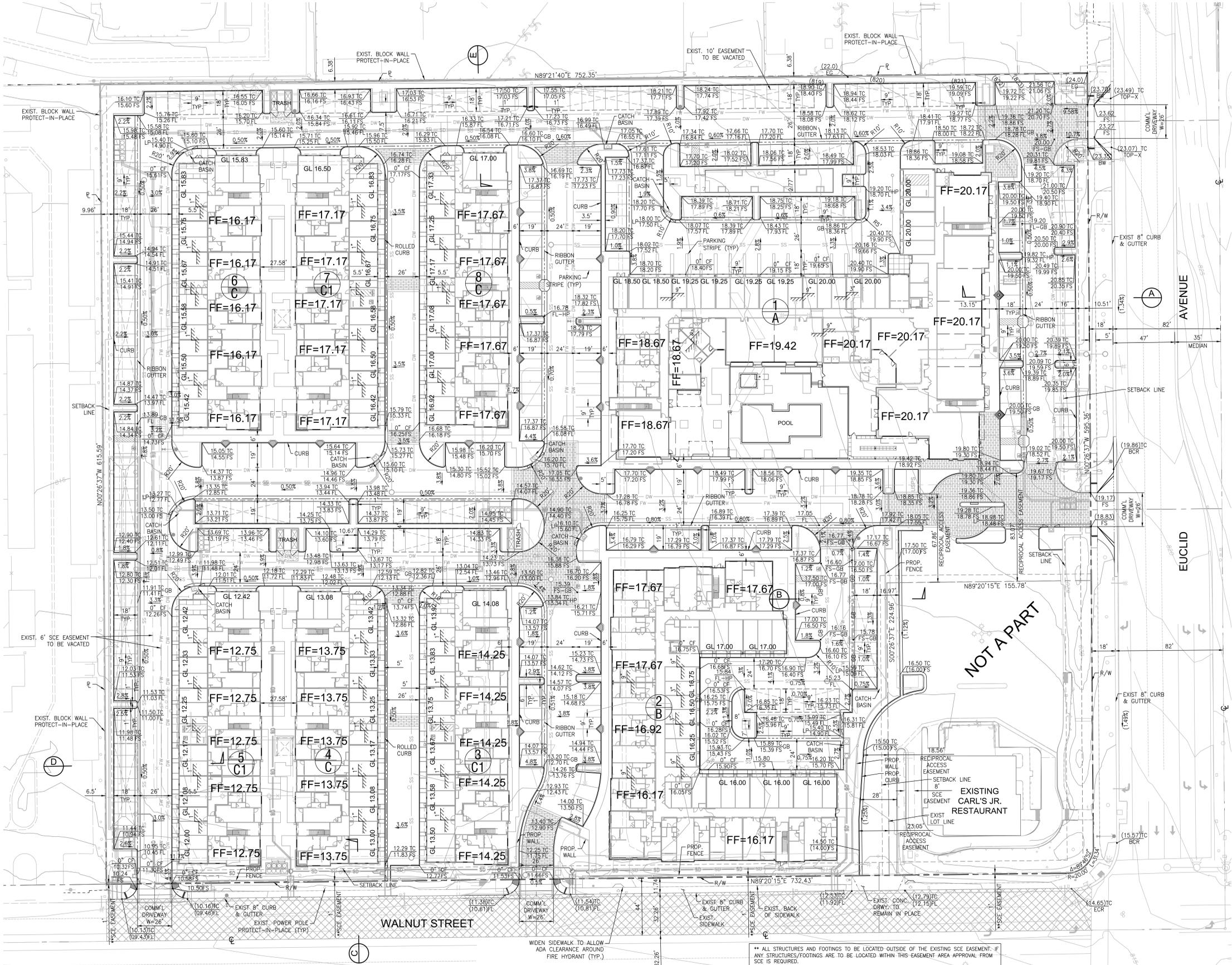
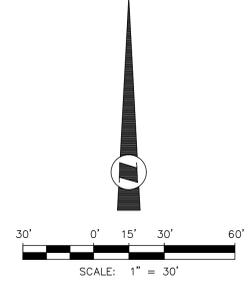
**NOTE:**

- EUCLID AVENUE IS MAINTAINED BY CALTRANS. DRIVEWAY APPROACH TYPE AND SIZE AND LOCATION, SIDEWALK AND CURB & GUTTER IMPROVEMENTS TO BE COORDINATED WITH CALTRANS.
- COMPACTION TO BE NO GREATER THAN 85% IN LANDSCAPE AREAS. ALL FINISHED GRADES AT 1" BELOW FINISHED SURFACES. SLOPE TO BE MAXIMUM 3:1.
- LANDSCAPE AREAS WHERE COMPACTION HAS OCCURRED DUE TO GRADING ACTIVITIES AND WHERE TREES OR STORMWATER INFILTRATION AREAS ARE LOCATED SHALL BE LOOSENEED BY SOIL FRACTURING. FOR TREES, A 12"x12"x18" DEEP AREA, FOR STORMWATER INFILTRATION, THE ENTIRE AREA SHALL BE LOOSENEED. ADD THE FOLLOWING INFORMATION ON THE PLANS: THE BACKHOE METHOD OF SOIL FRACTURING SHALL BE USED TO BREAK UP COMPACTION. A 4" LAYER OF COMPOST IS SPREAD OVER THE SOIL SURFACE BEFORE FRACTURING IS BEGUN. THE BACKHOE SHALL DIG INTO THE SOIL LIFTING AND THE DROP THE SOIL IMMEDIATELY BACK INTO THE HOLE. THE BUCKET THEN MOVES TO THE ADJACENT SOIL AND REPEATS. THE COMPOST FALLS INTO THE SPACES BETWEEN THE SOIL CHUNKS CREATED. FRACTURING SHALL LEAVE THE SOIL SURFACE QUITE ROUGH WITH LARGE SOIL CLOUDS. THESE MUST BE BROKEN BY ADDITIONAL TILLING. TILLING IN MORE COMPOST TO THE SURFACE AFTER FRACTURING PER THE SOIL REPORT WILL HELP CREATE AN HORIZON SOIL IMPROVED OR REUSED TOPSOIL CAN BE ADDED ON TOP OF THE FRACTURED SOIL AS NEEDED FOR GRADING. THE LANDSCAPE ARCHITECT SHALL BE PRESENT DURING THIS PROCESS AND PROVIDE CERTIFICATION OF THE SOIL FRACTURING. FOR ADDITIONAL REFERENCE, SEE URBAN TREE FOUNDATION-PLANTING SOIL SPECIFICATION.

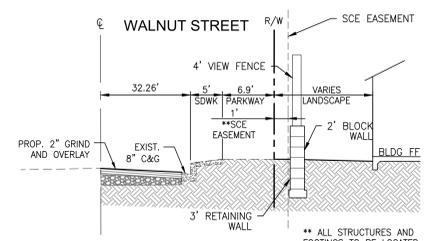
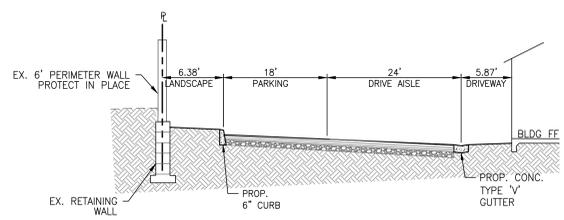
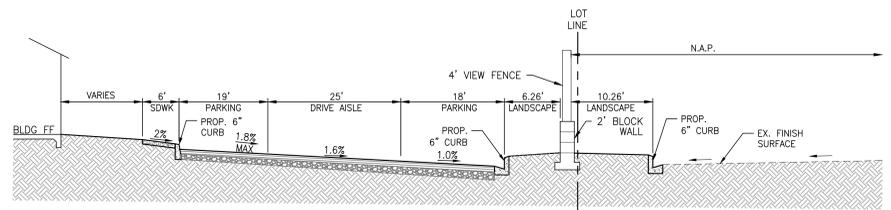
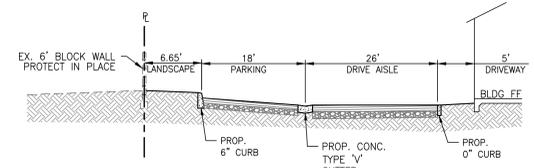
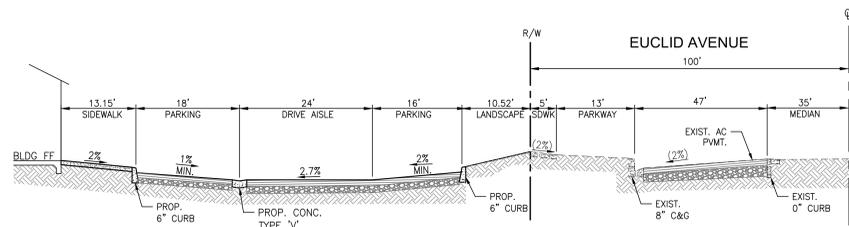
**EARTHWORK QUANTITY ESTIMATE**

	CUT (C.Y.)	FILL (C.Y.)
RAW VOLUME	13,314	2,853
SHRINKAGE (15%)		1,997
SUBSIDENCE (427.972 SF x 0.1"/27)		1580
BLDG OVER-EX	14,570	14,570
OVER-EX SHRINKAGE (15%)		2186
TOTAL	27,884	23,186
NET (EXPORT)		4,698

NOTE: QUANTITIES SHOWN HEREON ARE FOR BUDGETARY PURPOSES ONLY AND SHALL NOT BE USED FOR BIDDING. CONTRACTOR SHALL DETERMINE HIS OWN QUANTITIES AND BID A COMPLETE JOB.



\*\* ALL STRUCTURES AND FOOTINGS TO BE LOCATED OUTSIDE OF THE EXISTING SCE EASEMENT. IF ANY STRUCTURES/FOOTINGS ARE TO BE LOCATED WITHIN THIS EASEMENT AREA APPROVAL FROM SCE IS REQUIRED.



\*\* ALL STRUCTURES AND FOOTINGS TO BE LOCATED OUTSIDE OF THE EXISTING SCE EASEMENT. IF ANY STRUCTURES/FOOTINGS ARE TO BE LOCATED WITHIN THIS EASEMENT AREA APPROVAL FROM SCE IS REQUIRED.

F:\PROJECTS\14-027\14-027-01\SUBMITTALS\CONCEPTUAL GRADING PLAN 14-024-001\_CSD.MXD (04-21-21 8:10:39AM) Plotted by: gspoonce

# BMP SIZING CALCULATIONS

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- Precipitation Data
- Treatment control BMP sizing calculations (Proposed Modular Wetland by Contech) for DA-1 through DA-7



NOAA Atlas 14, Volume 6, Version 2  
 Location name: Ontario, California, USA\*  
 Latitude: 34.0275°, Longitude: -117.6526°  
 Elevation: m/ft\*\*  
 \* source: ESRI Maps  
 \*\* source: USGS



**POINT PRECIPITATION FREQUENCY ESTIMATES**

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

[PF\\_tabular](#) | [PF\\_graphical](#) | [Maps\\_&\\_aerials](#)

**PF tabular**

<b>PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)<sup>1</sup></b>										
<b>Duration</b>	<b>Average recurrence interval (years)</b>									
	<b>1</b>	<b>2</b>	<b>5</b>	<b>10</b>	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>	<b>1000</b>
<b>5-min</b>	<b>0.116</b> (0.097-0.141)	<b>0.153</b> (0.127-0.185)	<b>0.199</b> (0.166-0.242)	<b>0.237</b> (0.196-0.291)	<b>0.289</b> (0.230-0.366)	<b>0.328</b> (0.255-0.425)	<b>0.367</b> (0.279-0.489)	<b>0.408</b> (0.301-0.559)	<b>0.463</b> (0.327-0.663)	<b>0.506</b> (0.345-0.751)
<b>10-min</b>	<b>0.167</b> (0.139-0.202)	<b>0.219</b> (0.182-0.265)	<b>0.286</b> (0.238-0.347)	<b>0.340</b> (0.280-0.417)	<b>0.414</b> (0.329-0.525)	<b>0.470</b> (0.366-0.609)	<b>0.526</b> (0.400-0.701)	<b>0.585</b> (0.431-0.802)	<b>0.664</b> (0.469-0.950)	<b>0.726</b> (0.494-1.08)
<b>15-min</b>	<b>0.202</b> (0.168-0.244)	<b>0.264</b> (0.220-0.320)	<b>0.346</b> (0.287-0.420)	<b>0.411</b> (0.339-0.504)	<b>0.500</b> (0.398-0.635)	<b>0.568</b> (0.442-0.737)	<b>0.637</b> (0.483-0.847)	<b>0.707</b> (0.521-0.969)	<b>0.803</b> (0.567-1.15)	<b>0.878</b> (0.598-1.30)
<b>30-min</b>	<b>0.305</b> (0.255-0.370)	<b>0.401</b> (0.334-0.485)	<b>0.524</b> (0.435-0.636)	<b>0.623</b> (0.514-0.764)	<b>0.758</b> (0.603-0.961)	<b>0.860</b> (0.670-1.12)	<b>0.964</b> (0.732-1.28)	<b>1.07</b> (0.790-1.47)	<b>1.22</b> (0.859-1.74)	<b>1.33</b> (0.905-1.97)
<b>60-min</b>	<b>0.456</b> (0.381-0.552)	<b>0.598</b> (0.498-0.724)	<b>0.782</b> (0.650-0.950)	<b>0.930</b> (0.767-1.14)	<b>1.13</b> (0.900-1.44)	<b>1.28</b> (1.00-1.67)	<b>1.44</b> (1.09-1.92)	<b>1.60</b> (1.18-2.19)	<b>1.82</b> (1.28-2.60)	<b>1.98</b> (1.35-2.94)
<b>2-hr</b>	<b>0.682</b> (0.570-0.826)	<b>0.894</b> (0.745-1.08)	<b>1.16</b> (0.965-1.41)	<b>1.37</b> (1.13-1.68)	<b>1.65</b> (1.31-2.09)	<b>1.85</b> (1.44-2.40)	<b>2.06</b> (1.56-2.74)	<b>2.26</b> (1.66-3.09)	<b>2.52</b> (1.78-3.61)	<b>2.72</b> (1.86-4.04)
<b>3-hr</b>	<b>0.858</b> (0.716-1.04)	<b>1.12</b> (0.936-1.36)	<b>1.45</b> (1.21-1.77)	<b>1.71</b> (1.41-2.10)	<b>2.05</b> (1.63-2.60)	<b>2.30</b> (1.79-2.98)	<b>2.54</b> (1.93-3.38)	<b>2.78</b> (2.05-3.81)	<b>3.10</b> (2.19-4.43)	<b>3.33</b> (2.27-4.94)
<b>6-hr</b>	<b>1.19</b> (0.996-1.44)	<b>1.56</b> (1.30-1.89)	<b>2.01</b> (1.67-2.45)	<b>2.37</b> (1.95-2.90)	<b>2.83</b> (2.25-3.59)	<b>3.16</b> (2.46-4.10)	<b>3.49</b> (2.65-4.64)	<b>3.82</b> (2.81-5.23)	<b>4.24</b> (2.99-6.06)	<b>4.55</b> (3.10-6.75)
<b>12-hr</b>	<b>1.55</b> (1.29-1.88)	<b>2.03</b> (1.69-2.45)	<b>2.63</b> (2.18-3.19)	<b>3.10</b> (2.55-3.79)	<b>3.71</b> (2.95-4.71)	<b>4.17</b> (3.24-5.40)	<b>4.61</b> (3.50-6.14)	<b>5.06</b> (3.73-6.94)	<b>5.64</b> (3.98-8.08)	<b>6.08</b> (4.14-9.02)
<b>24-hr</b>	<b>2.02</b> (1.79-2.33)	<b>2.65</b> (2.35-3.06)	<b>3.47</b> (3.06-4.02)	<b>4.13</b> (3.61-4.82)	<b>5.00</b> (4.23-6.03)	<b>5.66</b> (4.69-6.96)	<b>6.32</b> (5.12-7.96)	<b>6.98</b> (5.50-9.05)	<b>7.88</b> (5.96-10.6)	<b>8.56</b> (6.26-11.9)
<b>2-day</b>	<b>2.41</b> (2.13-2.78)	<b>3.23</b> (2.85-3.73)	<b>4.31</b> (3.80-4.99)	<b>5.19</b> (4.54-6.06)	<b>6.40</b> (5.42-7.72)	<b>7.34</b> (6.08-9.03)	<b>8.29</b> (6.71-10.4)	<b>9.28</b> (7.31-12.0)	<b>10.6</b> (8.05-14.3)	<b>11.7</b> (8.55-16.3)
<b>3-day</b>	<b>2.58</b> (2.28-2.97)	<b>3.50</b> (3.10-4.04)	<b>4.73</b> (4.17-5.48)	<b>5.75</b> (5.03-6.71)	<b>7.16</b> (6.06-8.63)	<b>8.27</b> (6.86-10.2)	<b>9.40</b> (7.62-11.9)	<b>10.6</b> (8.35-13.7)	<b>12.3</b> (9.27-16.5)	<b>13.6</b> (9.92-18.9)
<b>4-day</b>	<b>2.77</b> (2.45-3.20)	<b>3.80</b> (3.36-4.38)	<b>5.16</b> (4.55-5.98)	<b>6.30</b> (5.51-7.35)	<b>7.86</b> (6.66-9.48)	<b>9.09</b> (7.54-11.2)	<b>10.4</b> (8.39-13.1)	<b>11.7</b> (9.21-15.1)	<b>13.5</b> (10.2-18.3)	<b>15.0</b> (11.0-20.9)
<b>7-day</b>	<b>3.22</b> (2.85-3.71)	<b>4.43</b> (3.91-5.11)	<b>6.03</b> (5.32-6.98)	<b>7.35</b> (6.43-8.58)	<b>9.17</b> (7.76-11.1)	<b>10.6</b> (8.78-13.0)	<b>12.0</b> (9.75-15.2)	<b>13.6</b> (10.7-17.6)	<b>15.6</b> (11.8-21.1)	<b>17.3</b> (12.6-24.1)
<b>10-day</b>	<b>3.51</b> (3.11-4.05)	<b>4.85</b> (4.28-5.59)	<b>6.61</b> (5.83-7.65)	<b>8.06</b> (7.05-9.41)	<b>10.1</b> (8.51-12.1)	<b>11.6</b> (9.62-14.3)	<b>13.2</b> (10.7-16.6)	<b>14.8</b> (11.7-19.2)	<b>17.1</b> (12.9-23.0)	<b>18.8</b> (13.8-26.3)
<b>20-day</b>	<b>4.26</b> (3.77-4.91)	<b>5.94</b> (5.25-6.86)	<b>8.19</b> (7.22-9.48)	<b>10.0</b> (8.79-11.7)	<b>12.6</b> (10.7-15.2)	<b>14.6</b> (12.1-18.0)	<b>16.7</b> (13.5-21.0)	<b>18.8</b> (14.9-24.4)	<b>21.8</b> (16.5-29.4)	<b>24.2</b> (17.7-33.7)
<b>30-day</b>	<b>5.00</b> (4.43-5.77)	<b>7.01</b> (6.19-8.09)	<b>9.72</b> (8.57-11.2)	<b>12.0</b> (10.5-14.0)	<b>15.2</b> (12.8-18.3)	<b>17.7</b> (14.6-21.7)	<b>20.3</b> (16.4-25.5)	<b>23.0</b> (18.1-29.8)	<b>26.8</b> (20.3-36.2)	<b>29.9</b> (21.9-41.7)
<b>45-day</b>	<b>5.97</b> (5.29-6.89)	<b>8.35</b> (7.38-9.64)	<b>11.6</b> (10.2-13.4)	<b>14.4</b> (12.6-16.8)	<b>18.3</b> (15.5-22.1)	<b>21.5</b> (17.8-26.5)	<b>24.9</b> (20.1-31.3)	<b>28.4</b> (22.4-36.8)	<b>33.5</b> (25.4-45.2)	<b>37.6</b> (27.5-52.5)
<b>60-day</b>	<b>6.94</b> (6.14-8.00)	<b>9.62</b> (8.50-11.1)	<b>13.4</b> (11.8-15.5)	<b>16.6</b> (14.5-19.3)	<b>21.2</b> (18.0-25.6)	<b>25.1</b> (20.8-30.8)	<b>29.1</b> (23.6-36.7)	<b>33.6</b> (26.4-43.5)	<b>39.9</b> (30.2-53.8)	<b>45.2</b> (33.0-63.0)

<sup>1</sup> Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.

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**PF graphical**

<b>MODULAR WETLAND #1</b>			
<b>Tributary Area DA-1</b>	77121	sf	Step 1
Pervious area	8483	sf	Site condition
Impervious area	68638	sf	Site condition
Percent Imperviousness	89%		Site condition
Runoff coefficient=	0.716		Step 3
P2yr-1hr=	0.598		Step 4 (See Attached)
C1 Valley =	1.4807		Step 5
P6 =	0.885		Step 5
Drawdown Time =	48	hour	Step 6
C2 (For 48 hour)=	1.963		Step 7
DCV =	<b>7997</b>	cft	Step 7
P0=	1.244		

<b>MODULAR WETLAND #2</b>			
<b>Tributary Area DA-2</b>	63501	sf	Step 1
Pervious area	6985	sf	Site condition
Impervious area	56516	sf	Site condition
Percent Imperviousness	89%		Site condition
Runoff coefficient=	0.716		Step 3
P2yr-1hr=	0.598		Step 4 (See Attached)
C1 Valley =	1.4807		Step 5
P6 =	0.885		Step 5
Drawdown Time =	48	hour	Step 6
C2 (For 48 hour)=	1.963		Step 7
DCV =	<b>6585</b>	cft	Step 7
P0=	1.244		

<b>MODULAR WETLAND #3</b>			
<b>Tributary Area DA-3</b>	65174	sf	Step 1
Pervious area	7169	sf	Site condition
Impervious area	58005	sf	Site condition
Percent Imperviousness	89%		Site condition
Runoff coefficient=	0.716		Step 3
P2yr-1hr=	0.598		Step 4 (See Attached)
C1 Valley =	1.4807		Step 5
P6 =	0.885		Step 5
Drawdown Time =	48	hour	Step 6
C2 (For 48 hour)=	1.963		Step 7
DCV =	<b>6758</b>	cft	Step 7
P0=	1.244		

**Qbmp Euclid and Walnut, ONTARIO (PWQMP)**

<b>Biotreatment (Modular Wetland) Sizing Calculation</b>			
Area =	1.77	AC	
Ibmp=	0.167		
FS=	2		
Required Ibmp=	0.333		
Qbmp =	0.423	cfs	Flow control BMP
Modular Wetland MW-1	8X16	ftXft	Proposed Size
Proposed treatment Capacity	<b>0.462</b>	cfs	> Required flow rate

**Qbmp Euclid and Walnut, ONTARIO (PWQMP)**

<b>Biotreatment (Modular Wetland) Sizing Calculation</b>			
Area =	1.46	AC	
Ibmp=	0.167		
FS=	2		
Required Ibmp=	0.333		
Qbmp =	0.348	cfs	Flow control BMP
Modular Wetland MW-2	8X16	ftXft	Proposed Size
Proposed treatment Capacity	<b>0.462</b>	cfs	> Required flow rate

**Qbmp Euclid and Walnut, ONTARIO (PWQMP)**

<b>Biotreatment (Modular Wetland) Sizing Calculation</b>			
Area =	1.50	AC	
Ibmp=	0.167		
FS=	2		
Required Ibmp=	0.333		
Qbmp =	0.357	cfs	Flow control BMP
Modular Wetland MW-3	8X16	ftXft	Proposed Size
Proposed treatment Capacity	<b>0.462</b>	cfs	> Required flow rate

<b>MODULAR WETLAND #4</b>			
<b>Tributary Area DA-4</b>	57596	sf	Step 1
Pervious area	6336	sf	Site condition
Impervious area	51260	sf	Site condition
Percent Imperviousness	89%		Site condition
Runoff coefficient=	0.716		Step 3
P2yr-1hr=	0.598		Step 4 (See Attached)
C1 Valley =	1.4807		Step 5
P6 =	0.885		Step 5
Drawdown Time =	48	hour	Step 6
C2 (For 48 hour)=	1.963		Step 7
DCV =	<b>5972</b>	cft	Step 7
P0=	1.244		

<b>MODULAR WETLAND #5</b>			
<b>Tributary Area DA-5</b>	82585	sf	Step 1
Pervious area	9084	sf	Site condition
Impervious area	73501	sf	Site condition
Percent Imperviousness	89%		Site condition
Runoff coefficient=	0.716		Step 3
P2yr-1hr=	0.598		Step 4 (See Attached)
C1 Valley =	1.4807		Step 5
P6 =	0.885		Step 5
Drawdown Time =	48	hour	Step 6
C2 (For 48 hour)=	1.963		Step 7
DCV =	<b>8564</b>	cft	Step 7
P0=	1.244		

<b>MODULAR WETLAND #6</b>			
<b>Tributary Area DA-6</b>	30034	sf	Step 1
Pervious area	3304	sf	Site condition
Impervious area	26730	sf	Site condition
Percent Imperviousness	89%		Site condition
Runoff coefficient=	0.716		Step 3
P2yr-1hr=	0.598		Step 4 (See Attached)
C1 Valley =	1.4807		Step 5
P6 =	0.885		Step 5
Drawdown Time =	48	hour	Step 6
C2 (For 48 hour)=	1.963		Step 7
DCV =	<b>3114</b>	cft	Step 7
P0=	1.244		

**Qbmp Euclid and Walnut, ONTARIO (PWQMP)**

<b>Biotreatment (Modular Wetland) Sizing Calculation</b>			
Area =	1.32	AC	
lbmp=	0.167		
FS=	2		
Required lbmp=	0.333		
Qbmp =	0.316	cfs	Flow control BMP
Modular Wetland MW-4	8X12	ftXft	Proposed Size
Proposed treatment Capacity	<b>0.346</b>	cfs	> Required flow rate

**Qbmp Euclid and Walnut, ONTARIO (PWQMP)**

<b>Biotreatment (Modular Wetland) Sizing Calculation</b>			
Area =	1.90	AC	
lbmp=	0.167		
FS=	2		
Required lbmp=	0.333		
Qbmp =	0.453	cfs	Flow control BMP
Modular Wetland MW-5	8X16	ftXft	Proposed Size
Proposed treatment Capacity	<b>0.462</b>	cfs	> Required flow rate

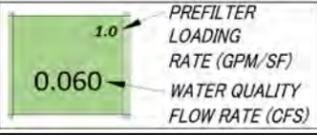
**Qbmp Euclid and Walnut, ONTARIO (PWQMP)**

<b>Biotreatment (Modular Wetland) Sizing Calculation</b>			
Area =	0.69	AC	
lbmp=	0.167		
FS=	2		
Required lbmp=	0.333		
Qbmp =	0.165	cfs	Flow control BMP
Modular Wetland MW-6	8X8	ftXft	Proposed Size
Proposed treatment Capacity	<b>0.231</b>	cfs	> Required flow rate

MODULAR WETLAND #7			
Tributary Area DA-7	42385	sf	Step 1
Pervious area	4662	sf	Site condition
Impervious area	37723	sf	Site condition
Percent Imperviousness	89%		Site condition
Runoff coefficient=	0.716		Step 3
P2yr-1hr=	0.598		Step 4 (See Attached)
C1 Valley =	1.4807		Step 5
P6 =	0.885		Step 5
Drawdown Time =	48	hour	Step 6
C2 (For 48 hour)=	1.963		Step 7
DCV =	4395	cft	Step 7
P0=	1.244		

**Qbmp Euclid and Walnut, ONTARIO (PWQMP)**

Biotreatment (Modular Wetland) Sizing Calculation			
Area =	0.97	AC	
Ibmp=	0.167		
FS=	2		
Required Ibmp=	0.333		
Qbmp =	0.232	cfs	Flow control BMP
Modular Wetland MW-6	8X12	ftXft	Proposed Size
Proposed treatment Capacity	0.346	cfs	> Required flow rate



# MWS LINEAR 2.0 HGL SIZING MATRIX - 2.1 GPM/SF PREFILTER

## HIGH DENSITY PROJECTS



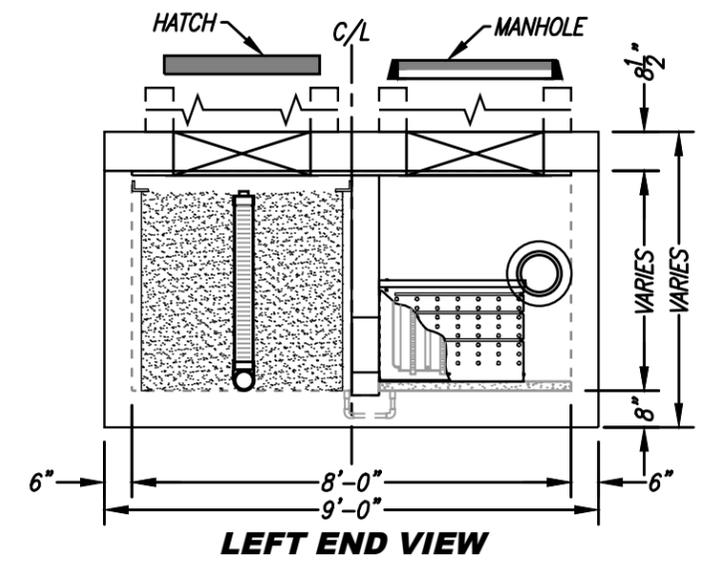
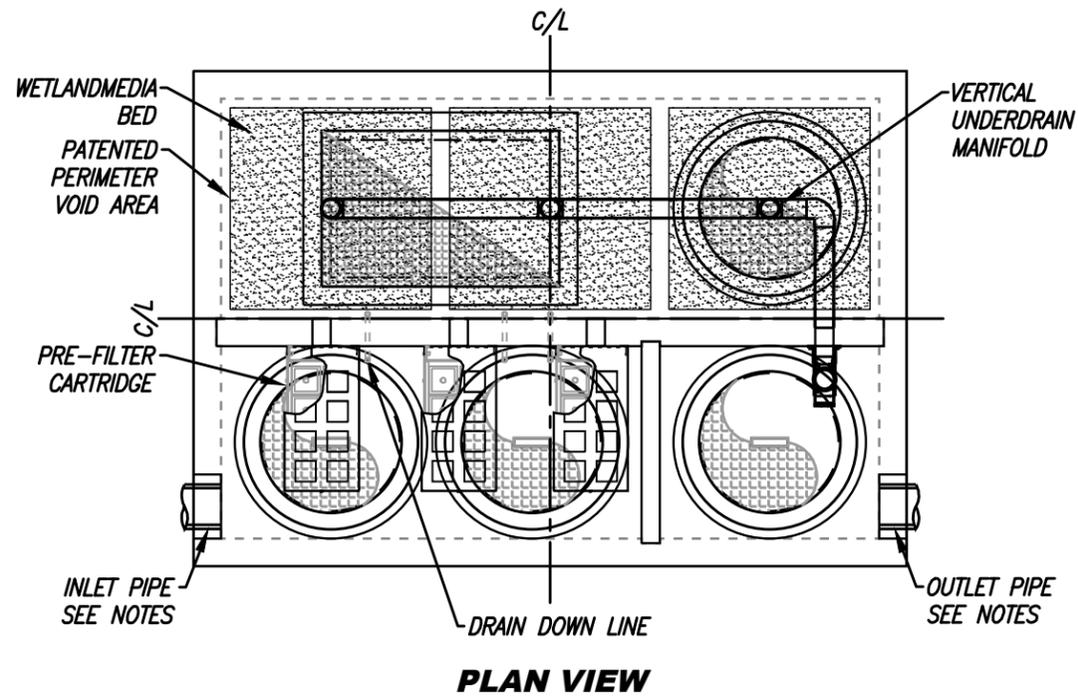
				HGL HEIGHT																							
		SHALLOW MODELS											STANDARD HEIGHT MODEL	HIGH CAPACITY MODELS													
MWS MODEL SIZE		WETLAND PERIMETER LENGTH	LOADING RATE GPM/SF	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.8	6.0
SIDE BY SIDE UNITS	MWS-L-4-4	6.70	1.0	0.022	0.025	0.028	0.031	0.034	0.037	0.040	0.043	0.046	0.049	0.052	0.055	0.058	0.062	0.065	0.068	0.071	0.074	0.077	0.080	0.083	0.086	0.089	0.092
	MWS-L-4-6	9.30	1.0	0.030	0.034	0.038	0.043	0.047	0.051	0.055	0.060	0.064	0.068	0.073	0.077	0.081	0.085	0.090	0.094	0.098	0.102	0.107	0.111	0.115	0.120	0.124	0.128
	MWS-L-4-6.33	9.30	1.0	0.030	0.034	0.038	0.043	0.047	0.051	0.055	0.060	0.064	0.068	0.073	0.077	0.081	0.085	0.090	0.094	0.098	0.102	0.107	0.111	0.115	0.120	0.124	0.128
	MWS-L-4-8	14.80	1.0	0.048	0.054	0.061	0.068	0.075	0.082	0.088	0.095	0.102	0.109	0.115	0.122	0.129	0.136	0.143	0.149	0.156	0.163	0.170	0.177	0.183	0.190	0.197	0.204
END TO END UNITS	MWS-L-4-13	18.40	1.0	0.059	0.068	0.076	0.084	0.093	0.101	0.110	0.118	0.127	0.135	0.144	0.152	0.160	0.169	0.177	0.186	0.194	0.203	0.211	0.220	0.228	0.236	0.245	0.253
	MWS-L-4-15	22.40	1.0	0.072	0.082	0.093	0.103	0.113	0.123	0.134	0.144	0.154	0.165	0.175	0.185	0.195	0.206	0.216	0.226	0.236	0.247	0.257	0.267	0.278	0.288	0.298	0.308
	MWS-L-4-17	26.40	1.0	0.085	0.097	0.109	0.121	0.133	0.145	0.158	0.170	0.182	0.194	0.206	0.218	0.230	0.242	0.254	0.267	0.279	0.291	0.303	0.315	0.327	0.339	0.351	0.364
	MWS-L-4-19	30.40	1.0	0.098	0.112	0.126	0.140	0.153	0.167	0.181	0.195	0.209	0.223	0.237	0.251	0.265	0.279	0.293	0.307	0.321	0.335	0.349	0.363	0.377	0.391	0.405	0.419
	MWS-L-4-21	34.40	1.0	0.111	0.126	0.142	0.158	0.174	0.189	0.205	0.221	0.237	0.253	0.268	0.284	0.300	0.316	0.332	0.347	0.363	0.379	0.395	0.411	0.426	0.442	0.458	0.474
SIDE BY SIDE UNITS	MWS-L-6-8	18.80	1.0	0.060	0.069	0.078	0.086	0.095	0.104	0.112	0.121	0.129	0.138	0.147	0.155	0.164	0.173	0.181	0.190	0.198	0.207	0.216	0.224	0.233	0.242	0.250	0.259
	MWS-L-8-8	29.60	1.0	0.095	0.109	0.122	0.136	0.149	0.163	0.177	0.190	0.204	0.217	0.231	0.245	0.258	0.272	0.285	0.299	0.312	0.326	0.340	0.353	0.367	0.380	0.394	0.408
	MWS-L-8-12	44.40	1.0	0.143	0.163	0.183	0.204	0.224	0.245	0.265	0.285	0.306	0.326	0.346	0.367	0.387	0.408	0.428	0.448	0.469	0.489	0.509	0.530	0.550	0.571	0.591	0.611
	MWS-L-8-16	59.20	1.0	0.190	0.217	0.245	0.272	0.299	0.326	0.353	0.380	0.408	0.435	0.462	0.489	0.516	0.543	0.571	0.598	0.625	0.652	0.679	0.706	0.734	0.761	0.788	0.815
	MWS-L-8-20	74.00	1.0	0.238	0.272	0.306	0.340	0.374	0.408	0.442	0.476	0.509	0.543	0.577	0.611	0.645	0.679	0.713	0.747	0.781	0.815	0.849	0.883	0.917	0.951	0.985	1.019
	MWS-L-8-24	88.80	1.0	0.285	0.326	0.367	0.408	0.448	0.489	0.530	0.571	0.611	0.652	0.693	0.734	0.774	0.815	0.856	0.897	0.937	0.978	1.019	1.060	1.101	1.141	1.182	1.223

## **BMP DETAIL**

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- Modular Wetland by Bio-Clean Environmental (Contech)
- List of Certified Trash Full Capture Systems by Water Resources Control Board

SITE SPECIFIC DATA			
PROJECT NUMBER			
PROJECT NAME			
PROJECT LOCATION			
STRUCTURE ID			
TREATMENT REQUIRED			
FLOW BASED (CFS)			
PEAK BYPASS REQUIRED (CFS) – IF APPLICABLE			
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2			
OUTLET PIPE			
	PRETREATMENT	BIOFILTRATION	DISCHARGE
RIM ELEVATION			
SURFACE LOAD			
NOTES:			

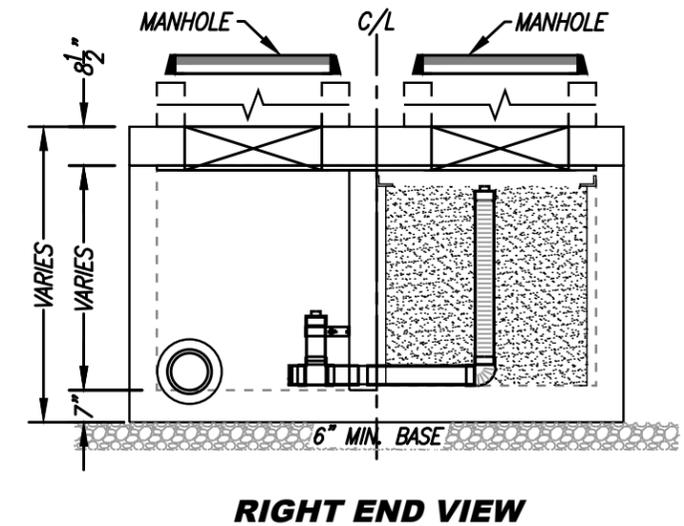
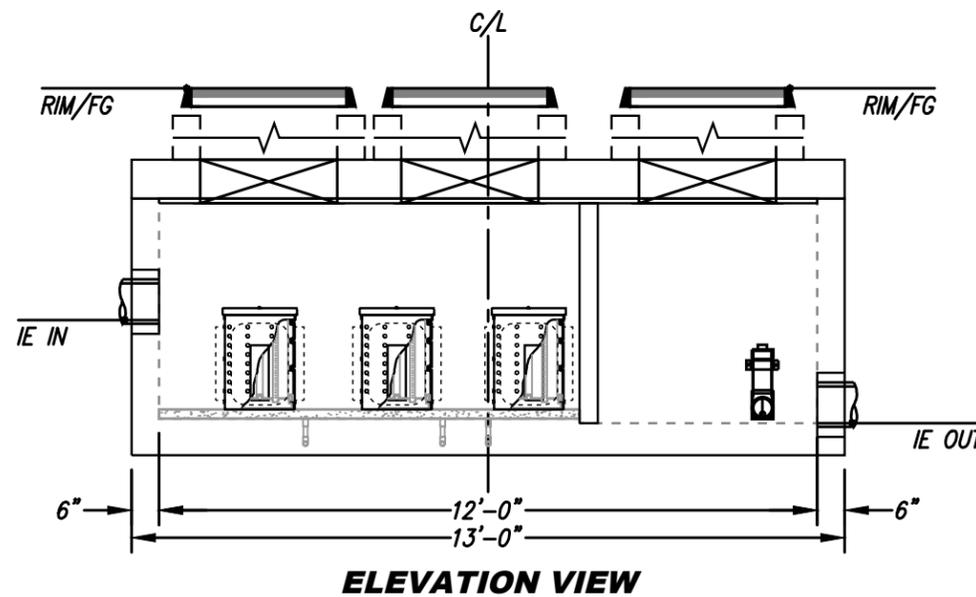


**INSTALLATION NOTES**

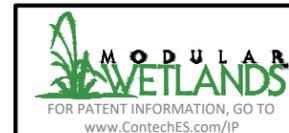
1. CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURERS' SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURER'S CONTRACT.
2. UNIT MUST BE INSTALLED ON LEVEL BASE. MANUFACTURER RECOMMENDS A MINIMUM 6" LEVEL ROCK BASE UNLESS SPECIFIED BY THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PROJECT ENGINEER'S RECOMMENDED BASE SPECIFICATIONS.
4. CONTRACTOR TO SUPPLY AND INSTALL ALL EXTERNAL CONNECTING PIPES. ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE (PIPES CANNOT INTRUDE BEYOND FLUSH). INVERT OF OUTFLOW PIPE MUST BE FLUSH WITH DISCHARGE CHAMBER FLOOR. ALL PIPES SHALL BE SEALED WATERTIGHT PER MANUFACTURER'S STANDARD CONNECTION DETAIL.
5. CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL PIPES, RISERS, MANHOLES, AND HATCHES. CONTRACTOR TO USE GROUT AND/OR BRICKS TO MATCH COVERS WITH FINISHED SURFACE UNLESS SPECIFIED OTHERWISE.
6. VEGETATION SUPPLIED AND INSTALLED BY OTHERS. ALL UNITS WITH VEGETATION MUST HAVE DRIP OR SPRAY IRRIGATION SUPPLIED AND INSTALLED BY OTHERS.
7. CONTRACTOR RESPONSIBLE FOR CONTACTING CONTECH FOR ACTIVATION OF UNIT. MANUFACTURER'S WARRANTY IS VOID WITHOUT PROPER ACTIVATION BY A CONTECH REPRESENTATIVE.

**GENERAL NOTES**

1. MANUFACTURER TO PROVIDE ALL MATERIALS UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS, ELEVATIONS, SPECIFICATIONS AND CAPACITIES ARE SUBJECT TO CHANGE. FOR PROJECT SPECIFIC DRAWINGS DETAILING EXACT DIMENSIONS, WEIGHTS AND ACCESSORIES PLEASE CONTACT CONTECH.



TREATMENT FLOW (CFS)	
OPERATING HEAD (FT)	
PRETREATMENT LOADING RATE (GPM/SF)	
WETLAND MEDIA LOADING RATE (GPM/SF)	



**MWS-L-8-12-V-UG**  
**STORMWATER BIOFILTRATION SYSTEM**  
**STANDARD DETAIL**

## State Water Resources Control Board

### **Certified Trash Full Capture Systems Available to the Public (Updated October 13, 2022)**

#### **Trash Provisions**

To qualify as a trash full capture system (System) as described below and satisfy the requirements of the Trash Provisions,<sup>1</sup> a System installed after December 2, 2015, must be certified, prior to installation, by the State Water Resources Control Board (State Water Board) Executive Director, or designee, that meets the full capture system definition. The Trash Provisions define a full capture system as a treatment control, or series of treatment controls, including but not limited to, a multi-benefit project or a low impact development control that traps all particles that are 5-millimeter or greater, and has a design treatment capacity that is either:

1. Of not less than the peak flow rate resulting from a one-year, one-hour storm event (design storm) in the subdrainage area, or
2. Appropriately sized and designed to carry at least the same flows as the corresponding storm drain.

Consistent with these requirements, the Systems shall not bypass trash below the design storm under maximum operational loading conditions and shall not have a diversion structure present upstream such that a portion of the peak flow is not treated to trap all particles 5-millimeter or greater.

#### **Vector Control Accessibility**

According to the California Health and Safety Code,<sup>2</sup> California landowners are legally responsible to abate (eliminate the source of) a public nuisance arising from their property, including mosquitoes. Mosquito vector control districts have substantial authority to access public and private property, inspect known or suspected sources of

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<sup>1</sup> Amendment to the Water Quality Control Plan for Ocean Waters of California to Control Trash and Part 1 Trash Provisions of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California adopted by the State Water Board.

<sup>2</sup> Health & Safety Code sections 2001-2002, 2060-2067, 100170, and 131075.

## Certified Trash Full Capture Systems Available to the Public

mosquitoes, abate mosquito sources, and charge the landowner for work performed and/or charge fees if a landowner is unwilling or unable to address a mosquito source arising from their property.

If not designed properly, a System may impede the mosquito vector control district's ability to (1) visually inspect the System and/or storm vault for mosquito breeding, and (2) apply the appropriate chemical treatment. Moreover, some Systems may create a habitat for mosquitoes.

All the Systems in the tables below have been reviewed and approved by the Mosquito Vector Control Association of California for vector control accessibility. However, prior to installation of any Systems, the local mosquito vector control district should be contacted to ensure the installation conforms to the local district's visual inspection, treatment, and vector breeding minimizing guidelines. The Mosquito Vector Control Association of California may also be contacted via email at [Trashtreatment@mvcac.org](mailto:Trashtreatment@mvcac.org).

### Certified Trash Full Capture System Tables

The Systems included in the tables below are: 1) new Systems certified by the State Water Board Executive Director after adoption of the Trash Provisions, and 2) legacy Systems that were certified pursuant to the Trash Provisions include those full capture systems that were listed in Appendix I of the Bay Area-wide Trash Capture Demonstration Project, Final Project Report (May 8, 2014). All Systems remain certified unless and until they are decertified by the State Water Board's Executive Director or designee. Legacy Systems' descriptions are included in "fact sheets" that have been updated to address the application requirements for new Systems.

The tables do not include the Department of Transportation's Systems as its Systems are not available to the public. Multi-benefit trash treatment systems are listed separately on the State Water Board's Trash Implementation webpage at: [https://www.waterboards.ca.gov/water\\_issues/programs/stormwater/trash\\_implementation.html](https://www.waterboards.ca.gov/water_issues/programs/stormwater/trash_implementation.html).

Systems are either identified by their application number or, for legacy Systems, by a fact sheet alpha numeric designation.

**Please note:** Only Systems originally manufactured or distributed by the listed applicants are certified full capture systems.

The alphabetical tables of System applicants are divided into two categories:

- *Catch Basin Inserts and Other Insert Systems.* These Systems typically are inserted into existing stormwater infrastructure; and

## **Certified Trash Full Capture Systems Available to the Public**

- *High Flow Capacity Trash Full Capture Systems.* These Systems are generally self-contained units that typically are not inserted into existing stormwater infrastructure and that are designed to treat trash from large drainage areas.

### **How to Access Certified System Applications and Legacy System Fact Sheets**

Other than those applications pertaining to the Department of Transportation's certified Systems, all certified System applications and legacy System fact sheets may be obtained from the California Stormwater Quality Association's trash webpage at: <https://www.casqa.org/resources/trash/certified-full-capture-system-trash-treatment-control-devices>. To obtain the Department of Transportation's certified applications, please contact Leo Cosentini (contact information below).

All questions concerning the Trash Provisions and the tables below should be directed to Leo Cosentini by email at [Leo.Cosentini@waterboards.ca.gov](mailto:Leo.Cosentini@waterboards.ca.gov) or by phone at (916) 341-5524.

**Certified Trash Full Capture Systems Available to the Public**

**TABLE 2. High Flow Capacity Trash Full Capture Systems**

<b>Applicant/Owner</b>	<b>Full Capture System Name</b>	<b>Date of Application Certification and Update (if applicable), or Fact Sheet Update</b>	<b>Date of Vector Control Accessibility Approval</b>
<b>Advanced Drainage Systems, Inc.</b>	<b>Barracuda Hydrodynamic Separator</b>	<b>Application 21 06/26/19 Updated 05/21/21</b>	<b>03/15/19</b>
<b>AquaShield, Inc.</b>	<b>Aqua-Swirl® Stormwater Treatment System</b>	<b>Application 1 08/04/17 Updated 11/06/20</b>	<b>12/03/20</b>
<b>Bio Clean® Environmental Services, Inc.</b>	<b>Debris Separating Baffle Box</b>	<b>Application 6 03/15/18</b>	<b>07/28/20</b>
<b>Bio Clean® Environmental Services, Inc.</b>	<b>Bio Clean® Deflective Screening Device</b>	<b>Application 20 06/26/19</b>	<b>07/28/20</b>
<b>Bio Clean® Environmental Services, Inc.</b>	<b>Modular Wetland System®</b>	<b>Application 15 07/10/18</b>	<b>03/15/19</b>
<b>Coanda Inc.</b>	<b>Coanda Trash Screen and Debris Fence</b>	<b>Fact Sheet COA-1 12/02/15 Updated 09/10/21</b>	<b>09/07/21</b>

# INFILTRATION TESTING RESULTS

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**GEOTECHNICAL EXPLORATION REPORT  
PROPOSED EUCLID AND WALNUT  
MIXED-USE DEVELOPMENT  
112 WALNUT STREET, 2502 AND 2530 EUCLID AVENUE  
ONTARIO, CALIFORNIA**

**Prepared For** LEGACY/COLLIER RESIDENTIAL, LLC  
5154 CALIFORNIA AVENUE  
IRVINE, CALIFORNIA 92617

**Prepared By** LEIGHTON AND ASSOCIATES, INC.  
17781 COWAN  
IRVINE, CALIFORNIA 92614

Project No. 13493.001

May 13, 2022

May 13, 2022

Project No. 13493.001

Legacy/Collier Residential, LLC  
5154 California Avenue  
Irvine, California 92617

Attention: Mr. David Pinto

**Subject: Geotechnical Exploration Report  
Proposed "Euclid and Walnut Mixed Use" Development  
112 Walnut Street, 2502 and 2530 Euclid Avenue  
Ontario, San Bernardino County, California**

In accordance with our March 30, 2022 proposal, Leighton and Associates, Inc. submits this geotechnical engineering report for the proposed Euclid and Walnut Mixed-Use Development located at 112 Walnut Street, 2502 and 2530 Euclid Avenue in the City of Ontario, California. The purpose of our study was to evaluate the subsurface soil and groundwater conditions at the site to provide geotechnical recommendations for the design and construction of the proposed concept as currently planned. The results of our exploration, findings, conclusions and recommendations are presented in this report.

The recommendations presented in this report are considered to be preliminary and subject to revision based upon the limited information regarding the proposed development. Upon review of project design concept plans, revision to the recommendations may be considered necessary. In addition, revision to design recommendations may be necessary upon review by the local building official or their designated, third party technical reviewer.

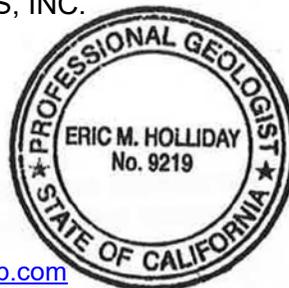
We sincerely appreciate the opportunity to be of service to you. If you have any questions or if we can be of further service, please contact us at **(866) LEIGHTON**; directly at the phone extensions or e-mail as listed below.

Respectfully submitted,

LEIGHTON AND ASSOCIATES, INC.



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## 1.0 INTRODUCTION

### 1.1 Site Description

The project site is a rectangular parcel of land, approximately 10.6-acres in size, located at the northwest corner of Walnut Street and Euclid Avenue in the city of Ontario, California. The site consists of the properties located at the street addresses of 112 W. Walnut Street, and 2502 and 2530 S. Euclid Avenue. The site is bordered by Euclid Avenue on the east, Walnut Street to the south, and residential development on the west and north. The southeastern region of the property is occupied by an existing Carl's Jr. restaurant. The site location (latitude 34.0275°, longitude -117.6524°) and immediate vicinity are shown on Figure 1, *Site Location Map*.

Based on visual site reconnaissance and review of the *Alta/NSPS Land Title Survey* prepared by Hillwig-Goodrow Inc., the site is currently occupied by a large rectangular-shaped structure formerly used as a K-Mart store located in the western portion of the site, and a strip mall retail development in the northeast region. The remainder of the site was generally paved with asphalt concrete and served as the parking lot for the development. The property is relatively flat, generally level with the adjacent roadways with site elevations (EL.) ranging from approximately EL. +823 feet above mean sea level (msl) in the northeastern region to approximately EL. +812 feet msl in the southwest region.

Based on review of historic aerial photographs (NETR, 2021), the project site appears to have a similar configuration dating back to at least 1985. The strip mall located in the northeast corner of the site was constructed between 1980 and 1985 and the K-Mart and Carl's Jr. structures were constructed at some point between 1966 and 1980. Prior to at least 1966, the site seems to have been used for agricultural purposes.

### 1.2 Proposed Development

Our understanding of the proposed development is based on review of the *Euclid and Walnut Mixed Use Site Plan Options A and B, Scale 1" = 100'*, dated March 10, 2022, prepared by AO Architects (AOA, 2022). The development conceptually consists of two options for a proposed mixed-use development with 3- to 4-story residential and commercial structures:

- 
- Option A includes a total of 346 residential units in 8 structures with 5,000 square feet of commercial development. In the Option A development scheme it appears the existing Carl's Jr. restaurant in the southeast corner of the site will remain.
  - Option B consists of full-site development with 376 residential units in 10 structures with 11,400 square feet of commercial development.

We understand the current preferred option for development is Option A and, therefore, is the development scheme that serves as the basis for the geotechnical recommendations presented in this report. Ancillary improvements will include pavement for vehicle access and parking, landscaping, utility infrastructure, and flatwork.

### **1.2.1 Structural Loads**

Information regarding total building height, finish floor elevations, and proposed loading conditions were not readily available at the time of this report. However, we understand that subterranean levels are not currently planned. Based upon the type of development planned for project site and our experience with similar developments, the buildings have been assumed to consist of wood frame structures supported by load bearing wall and isolated columns. Structural loads have been assumed to be a maximum of 3 kips per lineal foot for bearing walls and 40 kips for columns, Should additional design information become available, it should be provided to Leighton for review.

### **1.2.2 Finish Floor Elevations**

The finish first floor elevations of the proposed structures have been assumed to be within 1 to 2 feet of existing grade with floor elevations established or minimize cut and fill required on site. The actual quantity of cut and fill will be dependent upon the actual floor elevations determined by the project civil engineer and the quantity of overexcavation required to prepare building pad areas.

### **1.2.3 Pavement**

Pavements proposed for the development are expected to be primarily subjected to automobiles and occasional heavy truck traffic. Pavement

recommendations have been based upon a Traffic Index of 4.0 for automobile parking stalls; 5.0 for general purpose drive aisles; and 6.0 for areas subject to heavy trucks. Pavement recommendations have been based upon a twenty-year design life.

#### **1.2.4 Ancillary Improvements**

Based on email correspondence with Mr. Steve Ellis with Fuscoe Engineering, Inc., we understand preliminary infiltration system design is considering an invert depth of 15 feet below ground surface (bgs) along the southern property line.

### **1.3 Purpose and Scope**

The purpose of our geotechnical exploration was to evaluate the subsurface conditions at the site relative to the proposed development concept and provide geotechnical recommendations to aid in the design and construction for the project as currently planned. The scope of this geotechnical exploration included the following tasks:

- **Background Review** – We reviewed readily available in-house geotechnical reports, literature, aerial photographs, and maps relevant to the site. We evaluated geological hazards and potential geotechnical issues that may significantly impact the site. The documents reviewed are listed in Section 7.0.
- **Pre-Field Exploration Activities** – A site visit was performed by a member of our technical staff to mark the proposed exploration locations. Underground Service Alert (USA) was notified to identify and mark the locations of existing underground utilities prior to our subsurface exploration.
- **Field Exploration** – Our subsurface exploration was performed on April 6, 2022 and included drilling, logging, and sampling of five (5) hollow-stem auger borings (designated LB-1 through LB-5) to approximate depths ranging from 25 to 51½ feet below the existing ground surface (bgs). One (1) additional boring (designated LP-2) was drilled to an approximate depth of 20 feet bgs for subsequent percolation testing. To supplement the hollow-stem auger borings, four (4) Cone Penetrometer Test (CPT) soundings (designated CPT-1 through CPT-4) were advanced to depths of approximately 50 feet bgs. The approximate locations of the explorations are shown on Figure 2, *Geotechnical Map*. The boring and CPT logs are presented in Appendix A, *Exploration Logs*.

---

During drilling of the hollow-stem auger borings both bulk and drive samples were obtained from the borings for geotechnical laboratory testing. Driven ring samples were collected from the borings using a Modified California ring-lined sampler conducted in accordance with ASTM Test Method D 3550. Representative samples were also collected by conducting the Standard Penetration Test (SPT) within the borings in accordance with ASTM Test Method D 1586. Samples were collected at 5-foot intervals throughout the depth of exploration. In both test methods, the sampler is driven below the bottom of the borehole by a 140-pound weight (hammer) free-falling 30 inches. The drilling rig was equipped with an automatic hammer to provide greater consistency in the drop height and striking frequency. The number of blows to drive the sampler the final 12-inches of the 18-inch drive interval is termed the “blowcount” or SPT N-value. The N-values provide a measure of relative density in granular (non-cohesive) soils and comparative consistency in cohesive soils. The number of blows per 6 inches of penetration was recorded on the boring logs included in Appendix A, *Exploration Logs*.

The borings were logged in the field by a geologist from our firm. Each soil sample collected was reviewed and described in accordance with the Unified Soil Classification System (USCS). The samples were sealed and packaged for transportation to our laboratory. After completion of drilling, the borings were backfilled with soil cuttings and patched with cold-mix asphalt concrete at the surface.

- Percolation Testing – Boring LB-4 /LP-1 and LP-2 were converted to temporary percolation test wells upon completion of drilling and sampling. The test wells consisted of 2-inch diameter slotted (0.020”) PVC well casing surrounded by #3 Monterey Sand placed in the annulus of the borehole within the test zone. In-situ percolation testing was performed in general accordance with the County of San Bernardino guidelines. The results of the percolation testing are presented in Appendix B, *Percolation Test Data*. Additional details regarding the field percolation tests and results are presented in Section 2.4.1, *Infiltration*. Upon completion of the percolation testing, the well casing was removed from each boring and the borings were backfilled with soil cuttings and patched at the surface with cold-mix asphalt concrete to match existing site conditions.
- Laboratory Testing – Laboratory tests were performed on selected soil samples obtained from the borings during our field exploration. The laboratory testing

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program was designed to evaluate the physical and engineering characteristics of the onsite soil. Tests performed during this exploration included:

- In-situ Moisture Content and Dry Density (ASTM D2216 and ASTM D2937);
- Atterberg Limits (ASTM D 4318)
- Direct Shear (ASTM D 3080)
- Consolidation (ASTM D 2435);
- One Dimensional Swell or Settlement (ASTM D 4546)
- Maximum Dry Density (ASTM D 1557);
- Particle Size Distribution (ASTM D 6913);
- Expansion Index (ASTM D 4829);
- R-value (DOT CA Test 301)
- Sand Equivalent Test (DOT CA Test 217); and
- Corrosivity Suite – pH, Sulfate, Chloride, and Resistivity (California Test Methods 417, 422, and 532/643).

Results of the in-situ moisture content and dry density testing are presented on the boring logs in Appendix A. Other laboratory test results are presented in Appendix C, *Laboratory Test Results*

- *Engineering Analysis* – The data obtained from our background review and field exploration were evaluated and analyzed to develop recommendations for the proposed development.
- *Report Preparation* – This report presents our findings, conclusions, and recommendations for the proposed development.

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## 2.0 GEOTECHNICAL FINDINGS

### 2.1 Regional Geologic Setting

The project site is located in the Chino Basin in the northern portion of the Peninsular Ranges geomorphic province of California. Major structural features surround this region, including the Cucamonga fault and the San Gabriel Mountains to the north, the Chino fault and Puente/Chino Hills to the west, and the San Jacinto fault to the east. This is an area of large-scale crustal disturbance as the relatively northwestward moving Peninsular Ranges province collides with the Transverse Ranges province (San Gabriel Mountains) to the north. Several active and potentially active faults have been mapped in the region and are believed to accommodate compression associated with this collision. The Sierra Madre fault, a major structural feature along the southern flank of the San Gabriel Mountains, is located approximately 8.3 miles north of the site. This fault, as well as other faults in the region, has the potential for generating strong ground motions at the project site. Further discussion of faulting relative to the site is provided in Section 3.0, Seismic and Geologic Hazards.

The site is located in an area underlain by thick accumulations of alluvial sand, silt, gravel, cobbles, and boulders eroded from the mountains and deposited in the site vicinity by the Santa Ana River and smaller tributaries such as the San Antonio Creek and Cucamonga Creek (Morton and Miller, 2006; Dibblee, 2002).

### 2.2 Surficial Geology

The Quaternary age deposits that cover the floor and margins of the Chino Basin are composed primarily of unconsolidated recent (Holocene) young alluvial fan deposits consisting predominately of sands and gravels derived from the surrounding mountains and hills with finer clays and silts deposited into the basin over the broad floodplain. The surficial geologic units mapped in the vicinity of the project site are shown on Figure 3, *Regional Geology Map*.

### 2.3 Subsurface Soil Conditions

Based on our subsurface explorations, the site is underlain by a relatively thin mantle of undocumented artificial fill materials (Afu) overlying Quaternary-aged (Holocene) young alluvial fan deposits (Qyf).

---

A general description of the encountered soils is presented as follows:

### **2.3.1 Undocumented Artificial Fill (Afu)**

The artificial fill encountered in our borings extended to a depth of approximately 5 feet below grade and likely associated with the existing site improvements. In general, the encountered fill soils consist primarily of sandy silt and silty sand. Localized thicker accumulations of fill materials may be present between explored locations, particularly beneath the existing buildings.

### **2.3.2 Quaternary-Aged Young Alluvial Fan Deposits (Qyf)**

Below the mantle of artificial fill material, Quaternary-aged young alluvial fan deposits were encountered in the borings to the maximum depth explored (approximately 51½ feet). As encountered, this younger alluvial unit consists of stiff to very stiff sandy silt, silty clay, and clay; interbedded with medium dense to dense silty sand, sand with silt, and sand with gravel. Although relatively variable across the site, in general, fine-grained material is more prevalent in the upper 15 to 25 feet with coarser grained material becoming more frequent at depths of 25 feet or greater.

Detailed descriptions of the subsurface soils encountered in the borings are presented on the logs included in Appendix A. The locations of the borings are shown on Figure 2, *Geotechnical Location Map*.

## **2.4 Engineering Properties**

The results of laboratory testing are presented in Appendix C of this report. Discussion regarding select engineering properties of these soils are described in the following sections based upon the results of the laboratory testing program.

### **2.4.1 Expansive Soil Characteristics**

Expansive soils contain significant amounts of clay particles that swell considerably when wetted and which shrink when dried. Foundations constructed on these soils are subject to uplifting forces caused by the swelling. Without proper mitigation measures, heaving and cracking of both building foundations and slabs-on-grade could result.

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One (1) near-surface bulk soil sample collected from Boring LB-1 was tested for expansion potential. The test results indicate an Expansion Index (EI) value of 18, corresponding to a “Very Low” expansion potential. The Expansion Index laboratory test results are included in Appendix C of this report.

Variance in expansion potential of onsite soil is anticipated; therefore, additional testing is recommended upon completion of site grading and excavation to confirm the expansion potential presented in this report. For purposes of this report and based upon visual characterization of alluvial materials at approximate foundation depth, low expansion potential of site materials may be considered to support design and verified upon completion of earthwork grading.

#### **2.4.2 Soil Corrosivity**

One (1) near-surface bulk soil sample collected from Boring LB-3 was tested for corrosivity to assess corrosion potential to buried concrete. The chemical analysis test results for the onsite soil from our geotechnical exploration are included in Appendix C of this report.

The test results indicate a soluble sulfate concentration of 266 parts per million (ppm), chloride content of 40 ppm, pH 7.92, and a minimum resistivity value of 1,335 ohm-cm.

The results of the resistivity tests indicate the underlying soil is severely corrosive to buried ferrous metals per ASTM STP 1013. Based on the measured water-soluble sulfate contents from the soil samples, concrete in contact with the soil is expected to have negligible exposure to sulfate attack per ACI 318 (ACI, 2014). The samples tested for water-soluble chloride content indicate a low potential for corrosion of steel in concrete due to the chloride content of the soil.

#### **2.4.3 Soil Compressibility**

Three (3) samples of the onsite soils recovered from the borings were subjected to consolidation testing to evaluate the compressibility of these materials under assumed loads representative of anticipated structural bearing stresses. The results of testing indicate these soils exhibit a low

compressibility potential. The results of testing are presented in Appendix C.

#### **2.4.4 Shear Strength**

Evaluation of the shear strength characteristics of the soils included laboratory direct shear testing. The results of testing are included in Appendix C that provide values of angle of internal friction ( $\phi$ ) and cohesion (c) for use in geotechnical analysis.

#### **2.4.5 Excavation Characteristics**

Based on our subsurface explorations performed at the site and our experience from grading jobs in the vicinity of the site, we anticipate the onsite artificial fill and alluvial materials can generally be excavated using conventional excavation equipment in good operating condition.

The soils within the planned excavation depths are variable, and locally consist of layers that contain granular, unconsolidated soils with little or no cementation and few fines. These materials are prone to cave in or collapse in unshored excavations. See Section 5.4, *Temporary Excavations* for additional information on soil type and excavation characteristics.

### **2.5 Groundwater Conditions**

Groundwater was not encountered during our subsurface exploration to the maximum depth of 51.5 feet bgs. Based on review of the *Chino Basin Optimum Basin Management Plan 2008 State of the Basin Report* (Wildermuth, 2009), groundwater depth at the site is anticipated to be on the order of approximately 225 feet bgs. Review of available information from the California Department of Water Resources (DWR, 2022) for a nearby groundwater monitoring well located approximately 1.8 miles northwest of the project site (State Well # 01S07W29A001S) indicates the shallowest groundwater level measured for a monitoring period between October 1959 and September 2021 was approximately 214 feet bgs in 1959; with the most recent groundwater levels documented to be on the order of 250 feet bgs.

Based on these findings, groundwater is not expected to pose a constraint during or after construction. Fluctuations of the groundwater level, localized zones of perched water, and an increase in soil moisture, should be anticipated during and

following the rainy seasons or periods of locally intense rainfall or storm water runoff, or from stormwater infiltration.

## 2.6 Infiltration

Percolation testing was performed in temporary wells installed within borings LB-4/LP-1 and LP-2 located in the southern region of the site with test zone at depths of 17 to 22 feet bgs and 15 to 20 feet bgs, respectively. The percolation tests were conducted in general accordance with the *San Bernardino County Technical Guidance Document (TGD) for Water Quality Management Plans (2013)*. Results of the percolation testing are presented in Appendix B. The test locations and tested depth intervals are shown on Figure 2.

A boring percolation test is useful for field measurements of the infiltration rate of soils, and is suited for testing when the design depth of the infiltration device is deeper than current existing grades, especially in areas where it is difficult to dig test pits, or where the depths of these test pits would be considerably deep. At the subject site, testing consisted of advancing the borings to the anticipated depth for the invert of the proposed infiltration devices.

The *Percolation Test Procedure* (falling-head test method) as outlined in the County Guidelines was implemented at each percolation test well location. The infiltration rate was calculated by dividing the rate of discharge by the infiltration surface area, or flow area. The volume of discharge was calculated by adding the total volume of water that dropped within the PVC pipe and within the annulus, and incorporating a porosity reduction factor to account for the porosity of the annulus material. The flow area was based on the average water height within the test well.

Detailed results of the field testing data and measured infiltration rate for the test well are presented in Appendix B. The test results are summarized in the table below:

**Table 1 – Measured (Unfactored) Infiltration Rate**

Test Well Designation	Approximate Depth of Test Zone (feet bgs)	Measured Infiltration Rate (inches per hour)
LB-4/LP-1	17 to 22	0.32
LP-2	15 to 20	0.69

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Based on the results of our field percolation testing that was performed at the site, the measured (unfactored) infiltration rates for the two (2) tests performed were 0.32 inches per hour (LB-4/LP-1) and 0.69 inches per hour (LP-2), respectively. According to the *San Bernardino County Technical Guidance Document (TGD) for Water Quality Management Plans* (2013), the measured infiltration rate at both test well locations technically exceeds the minimum feasibility criteria of 0.3 inch per hour. However, implementation of a minimum factor of safety of 2.0 as required for the design infiltration rate indicates the depth and location tested for LB-4/LP-1 is considered infeasible for infiltration.

In consideration of the general greater prevalence of coarse-grained material at the site below depths of 25 feet or deeper, a more feasible infiltration rate may be achieved in percolation testing performed at depths greater than those tested during this exploration.

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### 3.0 SEISMIC AND GEOLOGIC HAZARDS

Depending upon the geographic location and geologic setting of a particular site in southern California, seismic-related hazards can include surface fault rupture; strong ground shaking; seismically-induced landslides; liquefaction and associated effects such as settlement and/or lateral spreading; and seiches, tsunamis and/or flooding depending upon the proximity of bodies of water. The following sections discuss each of these hazards and potential effect upon this site.

#### 3.1 Surface Fault Rupture

Known surface faults in the region are mapped on Figure 4, *Regional Surface Fault and Historical Seismicity Map*. Review of available literature indicates that no known active faults have been mapped across the site, and the site is **not** located within a currently established *Alquist-Priolo Earthquake Fault Zone* (Bryant and Hart, 2007). Therefore, a surface fault rupture hazard evaluation is not mandated for this site. Given an absence of known faults, potential risk for surface fault rupture at this site is low.

#### 3.2 Regional Faulting

The location of the closest active faults to the site was evaluated using the United States Geological Survey (USGS) Earthquake Hazards Program National Seismic Hazard Maps (USGS, 2008b). The closest active faults to the site with the potential for surface fault rupture are the Chino fault, San Jose fault, Cucamonga fault and Sierra Madre fault, located approximately 4.7 miles, 6.0 miles, 7.9 miles and 8.3 miles from the site, respectively. The San Andreas fault, which is the largest active fault in California, is approximately 20.3 miles northeast of the site on the north side of the San Gabriel Mountains. As discussed, major regional faults with surface expression in proximity to the site are shown on Figure 4, *Regional Fault and Historic Seismicity Map*.

#### 3.3 Strong Ground Shaking

The principal seismic hazard to the site is ground shaking resulting from an earthquake occurring along any of several major active and potentially active faults in southern California (Figure 4). The intensity of ground shaking at a given location depends primarily upon the earthquake magnitude, the distance from the source, and the site response characteristics. Accordingly, design of the project should be performed in accordance with all applicable current codes and standards

utilizing the appropriate seismic design parameters to reduce seismic risk as defined by California Geological Survey (CGS) Chapter 2 of Special Publication 117A (CGS, 2008). The 2019 edition of the California Building Code (CBC) is the current edition of the code. Through compliance with these regulatory requirements and the utilization of appropriate seismic design parameters selected by the design professionals, potential effects relating to seismic shaking can be reduced.

The following code-based seismic parameters should be considered for design under the 2019 CBC:

**Table 2 – 2019 CBC Based Ground Motion Parameters (Mapped Values)**

<b>Categorization/Coefficient</b>	<b>Code-Based</b>
Site Latitude	34.0275°
Site Longitude	-117.6523°
Site Class	D
Mapped Spectral Response Acceleration at Short Period (0.2 sec), $S_S$	1.5 g
Mapped Spectral Response Acceleration at Long Period (1 sec), $S_1$	0.579 g
Short Period (0.2 sec) Site Coefficient, $F_a$	1.0
Long Period (1 sec) Site Coefficient, $F_v$	1.72*
Adjusted Spectral Response Acceleration at Short Period (0.2 sec), $S_{MS}$	1.5 g
Adjusted Spectral Response Acceleration at Long Period (1 sec), $S_{M1}$	0.996*
Design Spectral Response Acceleration at Short Period (0.2 sec), $S_{DS}$	1.0 g
Design Spectral Response Acceleration at Long Period (1 sec), $S_{D1}$	0.664*
Site Coefficient for Peak Ground Acceleration, $F_{PGA}$	1.1
Peak Ground Acceleration adjusted for Site Class effects, $PGA_M$	0.644 g

1. All were derived from the ASCE 7 Hazard Tool web page: <https://asce7hazardtool.online/>
2. All coefficients in units of g (spectral acceleration)
3. \*Requires  $C_s$  calculation, see *Note* below.

Based on Table 1613.2.3(2) of the 2019 CBC, the long period site coefficient ( $F_v$ ) should be determined in accordance with Section 11.4.8 of ASCE 7-16 since the mapped spectral response acceleration at 1 second is greater than 0.2g for Site Class D. In accordance with Section 11.4.8 of ASCE 7-16, a site-specific seismic analysis is required; however, the values provided herein may be utilized if design

is performed in accordance with exception (2) in Section 11.4.8 of ASCE 7-16, with special requirements for the seismic response coefficient ( $C_s$ ) as noted below. The project structural engineer should review the seismic parameters.

*Note: Long period coefficient ( $F_v$ ) of 1.7 may be utilized for calculation of  $T_s$ , provided that the value of the Seismic Response Coefficient ( $C_s$ ) is determined by Equation 12.8-2 for values of the fundamental period of the building ( $T$ ) less than or equal to  $1.5T_s$ , and taken as 1.5 times the value computed in accordance with either equation 12.8-3 for  $T$  greater than  $1.5T_s$  and less than or equal to  $T_L$  or equation 12.8-4 for  $T$  greater than  $T_L$ .*

### 3.4 **Liquefaction Potential**

The term liquefaction is generally referenced to loss of strength and stiffness in soils due to build-up of pore water pressure when subject to cyclic or monotonic loading. Both sandy and clayey soils are susceptible to loss of strength and stiffness. Because of the difference in strength characteristic and methods for evaluating strength loss potential for granular and clayey soils, the term liquefaction is used for granular soils while cyclic softening is used for fine-grained soils (i.e. clays and plastic silts).

In general, adverse effects of liquefaction or cyclic softening include excessive ground settlement, loss of bearing support for structural foundations, and seismically-induced lateral ground deformations such as lateral spreading. Depending upon the relative thickness of the liquefied strata with respect to overlying non-liquefiable soils, other potentially adverse effects such as ground oscillation and ground fissuring may occur.

As regionally mapped on the California Geological Survey *Earthquake Zones of Required Investigation (EZRI) for the Ontario Quadrangle* (CGS, 200) and shown on Figure 4, *Seismic Hazard Zone Map*, the site is **not** within an area potentially susceptible to liquefaction. In addition, review of the San Bernardino County *Geologic Hazard Overlays* map FH27C (2010), the project site is not located within a County liquefaction susceptibility zone. The historically shallowest groundwater level recorded by DWR near the site is 214 feet bgs and the recent recorded depth to groundwater is greater than 200 feet bgs. Based on these findings, liquefaction is not considered a hazard at the site.

### 3.5 **Seismically-Induced Settlement**

Seismically-induced settlement consists of dynamic settlement of unsaturated soil (above groundwater) and liquefaction-induced settlement (below groundwater).

These settlements occur primarily within low density sandy soil due to reduction in volume during and shortly after an earthquake event.

As previously discussed, the site is not considered susceptible to the occurrence of liquefaction. Therefore, seismically-induced settlement will consist solely of densification of non-saturated soils upon exposure to strong ground shaking. Evaluation of the potential for such seismically-induced settlements to occur was performed for the Geomean Maximum Considered Event ( $MCE_G$ ) and the associated ground motion that corresponds to a 2,475 year average return period (ARP) for the CPT soundings that were advanced to a depth of 50 feet below grade. The results of the analysis are presented below:

**Table 3 – Seismically-Induced Settlement -  $MCE_G$  Seismic Event**

Design Scenario		CPT I.D.	Settlement (inches)		
PGA	$M_w$		Liquefaction <sup>(1)</sup>	Non-Liquefaction <sup>(2)</sup>	Total
0.64	6.78	CPT-1	No Liquefaction	0.23	0.23
		CPT-2	No Liquefaction	0.09	0.09
		CPT-3A	No Liquefaction	0.16	0.16
		CPT-4	No Liquefaction	0.45	0.45
Notes: (1) Liquefaction-induced settlement; Design Groundwater below depth of 50 feet					
(2) Non-liquefaction induced ("dry sand") settlement					

The results of the analysis indicated the magnitude of seismically-induced settlement under the  $MCE_G$  scenario will be less than ½ to 1 inch. Based on the general consistency in soil conditions as depicted by the test borings conducted at the site, the differential settlement is estimated to be approximately ½ inch over a distance of at least 40 feet, which results in an angular distortion less than 0.0021 in./in., which is anticipated to be within tolerable levels for structural design.

### 3.6 Lateral Spreading

Liquefaction may also cause lateral spreading. For lateral spreading to occur, the liquefiable zone must be continuous, unconstrained laterally, and free to move along gently sloping ground toward an unconfined area. Since the site is relatively flat and constrained laterally and liquefaction is not considered a hazard at the site, earthquake-induced lateral spreading is also not considered a hazard at the site.

### 3.7 **Earthquake-Induced Landsliding**

As regionally mapped on the California Geological Survey *Earthquake Zones of Required Investigation for the Torrance Quadrangle* (CGS, March 25, 1999) and shown on Figure 4, *Seismic Hazard Zone Map*, the site is **not** located within an area potentially susceptible to liquefaction (CGS, 2000a). Review of the San Bernardino County *Geologic Hazard Overlays* map FH27C (2010) indicates the project site is not located within a County landslide susceptibility zone. The project site is relatively flat with no significant slopes on or immediately adjacent. It is our opinion that seismically-induced landsliding is not considered a hazard at the site.

### 3.8 **Flooding**

According to a Federal Emergency Management Agency (FEMA) flood insurance rate map (FEMA, 2015), the project site is located within a flood hazard area identified as “Zone X”, which is defined as an area of minimal flood hazard. Regionally, storm runoff flow is generally directed to the southwest. As shown on Figure 5, *Flood Hazard Zone Map*, the site is **not** located within a 100-year or 500-year flood hazard zone.

Earthquake-induced flooding can be caused by failure of dams or other water-retaining structures as a result of earthquakes. As shown on Figure 6, *Dam Inundation Map*, the site **is** mapped within an inundation zone associated with San Antonio Dam. Catastrophic failure of this dam is expected to be a very unlikely event in that dam safety regulations exist and are enforced by the DOSD, Army Corps of Engineers and Department of Water Resources. Inspectors may require dam owners to perform work, maintenance or implement controls if issues are found with the safety of the dam. Due to the location and distance of the site from San Antonio Dam, along with the unlikely failure of the dam, the potential for earthquake-induced flooding to occur due to a failure of this dam is considered low.

### 3.9 **Seiches and Tsunamis**

Seiches are large waves generated in enclosed bodies of water in response to ground shaking. Tsunamis are waves generated in large bodies of water by fault displacement or major ground movement. Based on the absence of an enclosed water body near the site and the inland location of the site, seiche and tsunami risks at the site are considered negligible.

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### 3.10 **Methane**

Based on review of State of California Geologic Energy Management Division (CalGEM) records, the project site is not located within an oil field boundary (CalGEM, 2021). The nearest documented oil well to the site is located approximately 0.6 miles southwest of the site (API# 0407100083; Donald B. Lamont, Donald B. Lamont Lease, Well No. 1) and is reported as a plugged dry hole (CalGEM, 2021). Based on these findings, the potential for methane hazard at the site is low.

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## 4.0 FINDINGS AND CONCLUSIONS

No evidence of adverse geological or geotechnical hazards was noted at the site that will preclude the development of the project as currently planned. Presented below is a summary of findings based upon the results of our geotechnical exploration of the site. Geotechnical recommendations for design and construction are presented in Section 4.0 of this report.

- The potential for surface fault rupture is considered to be low since the site is not located in a designated Alquist-Priolo Earthquake Fault Zone.
- The site may be subjected to strong ground shaking during the design life of the proposed development due to the proximity of several active faults in the vicinity of the site. The Chino fault, located approximately 4.7 miles southwest of the site is the nearest active fault to the site with a potential for surface rupture and generation of strong ground shaking. However, strong ground shaking may occur at the site due to seismic activity on one of a number of faults in the area.
- The site is **not** located within an area shown as susceptible to liquefaction according to the CGS *Earthquake Zones of Required Investigation Map* for the Ontario Quadrangle or the San Bernardino County *Geologic Hazard Overlays* map FH27C. Given the lack of shallow groundwater underlying the site, the potential for liquefaction is considered low.
- Groundwater was not encountered to the maximum depth explored of 51½ feet bgs. Recent nearby groundwater levels as documented by the California Department of Water Resources indicate the depth to groundwater is likely on the order of greater than 200 feet bgs. Groundwater is not anticipated to be a constraint to site grading or construction.
- At a minimum, development of the site for support of the proposed mixed-use development should include overexcavation and recompaction of the existing artificial fill materials as well as a portion of the underlying native soils to develop a layer of structural compacted fill to provide foundation support.
- The results of the infiltration testing performed at the site indicate stormwater infiltration is marginally feasible based on the tested locations and depths.
- The proposed structures may be supported by a shallow foundation system supported on structural compacted fill underlain by suitable bearing native soils.

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## 5.0 GEOTECHNICAL DESIGN RECOMMENDATIONS

Based upon this study, we conclude that the proposed development for the subject site is feasible from a geotechnical standpoint, provided that the recommendations presented in this report are properly incorporated in design and construction. Geotechnical recommendations for the proposed development are presented in the following sections and are intended to provide sufficient geotechnical information to develop the project plans in accordance with 2019 CBC requirements. The following recommendations may be superseded by more restrictive requirements of the architect, structural engineer, and/or local building official.

The recommendations below are based upon the exhibited geotechnical engineering properties of the soils and their anticipated response both during and after construction. The recommendations are also based upon proper field observation and testing during construction. The project geotechnical engineer should be notified of suspected variances in field conditions to determine the effect upon the recommendations subsequently presented. These recommendations are considered minimal and may be superseded by more restrictive requirements of the civil and structural engineers, the City of Ontario, the County of San Bernardino and other governing agencies.

Leighton should review the grading plans, foundation plans and project specifications as they become available to verify that the recommendations presented in this report have been incorporated into the plans for this project.

### 5.1 Earthwork

All site grading should be performed in accordance with the project specifications that are prepared by the appropriate design professional. The guide specifications presented in Appendix D, General Earthwork and Grading Recommendations may be used as a guideline in developing the project specifications.

Earthwork and grading operations are recommended to be observed and appropriate testing be performed by representatives of the geotechnical engineer to verify that the site is properly prepared, the selected fill materials are satisfactory, and that placement and compaction of fills has been performed in accordance with our recommendations and the project specifications.

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### 5.1.1 Site Preparation

Initial preparation of the site should include demolition and removal of the existing facility from the project site including all foundations, slabs and underground structures. Existing utilities not planned for reuse with the proposed development should be either removed in their entirety, properly abandoned in-place, or rerouted around the development area to preserve their function. Disposal of all debris and remnants of the existing development should be performed in accordance with the type of material and local regulations.

The existing development includes a relatively large paved parking lot that consists of asphalt concrete. Based upon the conditions encountered at the test boring locations, the thickness of the existing asphalt concrete ranged from 2½ to 5 inches underlain by base course that ranged from 3 to 12 inches in thickness. Reuse of the pavement with the proposed development will require consideration of proposed finish grades and the need to construct an asphalt overlay to prolong the service life of the pavement. Recommendations for reuse of the pavement can be provided upon request. However, for purposes of this report, the existing pavement is assumed to not be salvaged for reuse and will be removed from the site. If properly processed during demolition and removal, the pavement may be reused as the base course for construction of new pavement.

Upon completion of demolition and site clearing activities, the soils should be carefully observed for the removal of all unsuitable deposits. All undocumented fill or man-made debris, unsuitable native soils and former foundation remnants should be excavated and removed from the proposed building/structure footprint prior to fill placement.

### 5.1.2 Removals and Overexcavations

The recommended depths of overexcavation presented below have been based upon the assumed structural loads and the recommended allowable bearing pressure. The actual depth recommended for preparation of foundation areas may be revised depending upon the actual footing sizes that result from structural design of the foundations. Consequently, the recommendations for building pad preparation/overexcavation should be reviewed by the geotechnical engineer as foundation design proceeds.

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To provide uniform foundation support and reduce the potential for excessive static settlement, all existing undocumented fill and any unsuitable soil, as deemed by the geotechnical engineer, should be removed to expose suitable native soils and replaced as engineered fill below the proposed building and other structural improvements. Based on our field explorations, we estimate removals of existing undocumented fill will be approximately 5 feet below existing grade across most of the site. Localized areas are anticipated to require deeper removals, in particular beneath the existing buildings and in areas of existing utilities.

Removals should be performed such that all undocumented fill is removed and replaced as engineered fill. In addition, overexcavations should be performed such that a minimum of 4 feet of engineered fill is established below the proposed building foundation elements and the at-grade slabs of the buildings. The lateral extent of overexcavation beyond foundations should be equal to the depth of overexcavation below the proposed foundations as measured at the excavation subgrade.

The depth of overexcavation in non-structural areas planned for new pavement construction is recommended to be 2 feet below the current grade or planned subgrade elevation to develop a suitable bearing subgrade for pavement support. Deeper overexcavations in localized areas may be recommended during grading by a representative of the geotechnical engineer depending on observed subsurface conditions.

### **5.1.3 Subgrade Preparation**

All excavation bottoms or removal bottoms should be observed by a representative of the geotechnical engineer prior to placement of fill or other improvements to determine that geotechnically suitable soil is exposed. Excavation bottoms observed to be suitable for fill placement or other improvements should be scarified to a depth of at least 8 inches, moisture-conditioned as necessary to achieve a moisture content of at least 2 percentage points above the optimum moisture content, and then compacted to a minimum of 90 percent of the maximum dry density as determined by ASTM Test Method D 1557 (Modified Proctor).

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#### **5.1.4 Fill Placement and Compaction**

The onsite soil, free of organic material, cobbles, boulders, rubble, and rock less than 3 inches in largest dimension, is suitable to be used as structural fill. All fill soil should be placed in loose lifts no greater than 8 inches in thickness, moisture-conditioned as necessary to a moisture content 1 to 2 percentage points above optimum moisture content and compacted using proper equipment to the minimum standard as noted below, unless stated otherwise in the specific sections.

- Fill soil should be moisture-conditioned and compacted to a minimum of 90 percent relative compaction as determined by ASTM Test Method D1557.
- Subgrade exposures should be moisture-conditioned and compacted to a minimum of 90 percent relative compaction as determined by ASTM Test Method D1557
- Base course material should be compacted to a minimum of 95 percent relative compaction.
- Utility trench backfill is discussed in Section 5.5.

Material imported to the site for use as fill should be reviewed and approved by the geotechnical engineer prior to import to the site and placement as fill. Imported soils should be very low in expansion potential (EI less than 20); non-corrosive to metals and concrete; and be free of hazardous substances.

When grading is interrupted by heavy rains, fill operations should not be resumed until the moisture content and the dry density of the placed fill are satisfactory.

#### **5.1.5 Shrinkage and Bulking**

The change in volume of excavated and recompacted soil varies according to soil type and location. This volume change is represented as a percentage increase (bulking) or decrease (shrinkage) in volume of fill after removal and recompaction. Field and laboratory data used in our calculations included laboratory-measured maximum dry density for the

general soil type encountered at the subject site, the measured in-place densities of near surface soils encountered and our experience.

Earthwork operations are generally anticipated to be limited to soils to a depth of 5 to 6 feet below current grade with some additional overexcavation in localized areas of the site where unsuitable bearing/very loose relative density soils may be encountered in the southern to southwestern region of the site. Data regarding the in-place density of the near surface soils could not be collected due to the manner in which field exploration was encountered whereby the soils to a depth of 5 feet at the boring locations were pre-drilled by use of a hand auger to protect against damaging buried utilities. Therefore, earthwork quantities (shrinkage/bulking) are primarily based upon experience with similar materials at other project sites and the limited available data from soils recovered from a depth of 6 feet.

On a preliminary basis, the existing fill materials requiring removal and recompaction are anticipated to exhibit volume shrinkage on the order of 10 to 15 percent. The estimated shrinkage does not include material losses due to removal of organic material or other unsuitable bearing materials (debris, rubble, oversize material greater than 6-inches) and the actual shrinkage that occurs during grading may vary throughout the site.

#### **5.1.6 Reuse of Concrete and Asphalt Rubble**

If encountered during site clearing and/or during preparation activities, construction rubble (i.e., Portland cement concrete and asphalt concrete) may be incorporated in the proposed development. For use as structural fill, the processed material should be crushed to develop a relatively well-graded mixture with a maximum particle size of 3-inch nominal diameter. Concrete rubble should be free of rebar and processed asphalt pavement rubble may be used if mixed with the existing base course (where present). Processed material may be used as structural fill if uniformly mixed with onsite soils in proportion of 1 part processed material to 3 parts soil. For use as pavement base course, rubble should be crushed to satisfy gradation requirements of Section 200-2.4 of the *Standard Specifications for Public Works Construction*, (SSPWC, "Greenbook"). Such materials must be free of and segregated from any hazardous materials and/or organic material of any kind.

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## 5.2 **Foundation Design**

Preparation of the building areas should be performed as described in Section 5.1 of this report. Upon completion of building pad preparation, the soils that will provide support of the foundations are expected to consist of properly moisture-conditioned structural compacted fill that exhibits very low to low expansion potential underlain by suitable bearing native soils.

### 5.2.1 **Vertical Load Bearing Capacity**

The proposed structures are recommended to be supported by a shallow foundation system in which continuous strip footings are used for wall support and isolated square pad footings for column support. Footings to support the proposed buildings are recommended to be designed for a maximum net allowable soil bearing pressure of 2,500 pounds per square foot (psf) for continuous strip footings for wall support and 3,000 psf for isolated square pad footings for column support.

The foundations for ancillary structures separate from the proposed buildings are recommend to be designed for a maximum 2,000 pounds per square foot (psf) for continuous strip footings for wall support and 2,500 psf for isolated square pad footings for column support. The recommended bearing pressures assume the foundations will be supported by a layer of structural compacted fill that is a minimum 2 feet in thickness below foundations and extends laterally distance of at least 2 feet beyond the edges of the foundations.

The allowable bearing values may be increased by one-third when considering short-term seismic or wind loads. The recommended bearing pressure is net so the unit weight of concrete may be assumed to be 50 pcf when calculating the component of load demand due to foundation weight; the weight of soil backfill can be neglected when determining the downward loads.

The recommended allowable bearing pressures stated above have been based upon specific minimum footing sizes and embedment depths:

- Minimum widths for foundations are recommended to be 18 inches for continuous strip footings and 24 inches for square pad footings.

- Minimum footing embedment depth for the isolated exterior footings and the footings for the exterior walls is recommended to be 18 inches.
- The minimum embedment depth for interior footings is recommended to be 18 inches.
- The minimum embedment depth for ancillary structures is 18 inches below adjacent subgrade elevation.

The depth of embedment should be determined from the finish subgrade elevation adjacent to the building for the perimeter footings and the finish pad grade within the structure for interior footings. Additional foundation embedment depth may be considered for foundations located close to property lines to protect foundations from being undermined due future excavation that may be performed on the adjacent properties.

Determination of the minimum steel reinforcement requirements of the continuous strip and isolated square pad footings should be performed by the structural engineer.

The foundation bearing soils are recommended to be evaluated by the geotechnical engineer prior to placing reinforcing steel. Evaluation is intended to verify suitable bearing conditions to support the footings and the footing excavations are generally in compliance with foundation plans.

### **5.2.2 Lateral Load Resistance**

Lateral loads may be resisted by friction acting along the bottoms of the footings and passive resistance of the soil adjacent to the vertical sides of the foundations provided the foundations are poured neat against properly compacted fill or undisturbed native soils. Resistance to lateral load may be calculated on the basis of an allowable frictional coefficient of 0.30 and allowable passive resistance equal to an equivalent fluid density of 250 pounds-per-cubic-foot (pcf) to a maximum of 2,500 psf. No reduction will be needed to any of the above two components for computing the total resistance to lateral loads. The use of passive resistance in lateral load analysis requires the foundations to be cast against vertical, undisturbed trench walls or any voids along the footing be backfilled with structural compacted fill.

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### 5.2.3 Settlement Estimate

Estimated post-construction total and differential settlement under the assumed loading conditions and preparation of the building areas as described in this report are estimated to be on the order of 1 inch and ½ inch, respectively. The differential settlement is expected to occur over a minimum span of 30 feet, thereby resulting in an angular distortion less than 0.002, which is expected to be within tolerable limits for the proposed structures.

Settlement is a function of footing size and contact bearing pressure. As a result, differential settlement can be expected between adjacent columns or walls where a large differential loading condition exists. Leighton should review the settlement estimates when final foundation plans and loads for the proposed structures become available.

### 5.3 Slab-on-Grade Floors

Upon completion of the recommended building pad preparation, the subgrades of the slabs supported on grade are anticipated to consist of newly placed structural compacted fill, which is generally expected to consist of the existing soils that have been overexcavated and recompacted under engineering controlled conditions.

Based upon the anticipated subgrade conditions, the floor slabs of the proposed buildings that will be supported on grade may be designed and constructed as a mat on elastic foundation using a modulus of subgrade reaction ( $k_{v1}$ ) of 100 pounds per cubic inch (pci). These slabs are recommended to be a minimum of 4 inches in thickness and include No. 3 rebar placed at center of the slab at 18 inches on-center in each direction based on geotechnical considerations. Increase in the slab thickness and/or reinforcing may be necessary due to structural engineering considerations as determined by the structural engineer.

The slabs may be recommended to be underlain by a minimum 4-inch thick coarse granular material to serve as a working mat during construction and serve as a capillary moisture break.

Interior slabs-on-grade are recommended to be underlain by a synthetic sheeting to serve as a retarder to moisture vapor transmission in areas where moisture-sensitive floor coverings are used (such as vinyl, tile, or carpet) or storage areas

for personal possessions. Prior to installing the synthetic sheeting, the exposed subgrade surface should be clear of all extruding rock and gravel that could damage the sheeting. The sheeting should be evaluated for the presence of punctures or tears by the installer prior to pouring concrete. Installation of the sheeting should include proper overlap and taping of seams.

Appropriate synthetic sheeting should be determined by others qualified in evaluating and mitigating moisture vapor transmission through concrete slabs. Our firm does not practice in the field of moisture vapor transmission evaluation, since this is not specifically a geotechnical issue. Therefore, we recommend that a qualified person, such as the flooring subcontractor and/or structural engineer, be consulted with to evaluate the general and specific moisture vapor transmission paths and any impact on the proposed construction with respect to the storage facility and retail areas. That person should provide recommendations for mitigation of the potential adverse effects of moisture vapor transmission on various components of the structures as deemed appropriate.

Care should be taken to avoid slab curling if slabs are poured in hot weather. Frequent construction joints should be provided to minimize the potential for cracking. Slabs should be designed and constructed as promulgated by the Portland Cement Association (PCA). Prior to the slab pour, all utility trenches should be properly backfilled and compacted. Differential settlement of this material could result in movement and distress to hardscape and other improvements. The need to repair cracks, etc. should be anticipated.

#### **5.4 Temporary Excavations**

All temporary excavations, including utility trenches, retaining wall excavations, and other excavations should be performed in accordance with project plans, specifications and all Occupational Safety and Health Administration (OSHA) requirements.

Temporary excavations should be treated in accordance with the State of California version of OSHA excavation regulations, Construction Safety Orders for Excavation General Requirements, Article 6, Section 1541, effective October 1, 1995. The sides of excavations should be shored or sloped in accordance with OSHA regulations. OSHA allows the sides of unbraced excavations, up to a maximum height of 20 feet, to be cut to a  $\frac{3}{4}H:1V$  (horizontal:vertical) slope for Type A soils,  $1H:1V$  for Type B soils, and  $1\frac{1}{2}H:1V$  for Type C soils. Onsite sandy soils

are to be considered Type C soils which are subject to collapse in shallow unbraced excavations (i.e., approximately 3 to 4 feet in vertical height).

OSHA regulations are applicable in areas with no restriction of surrounding ground deformations. Shoring should be designed for areas with deformation restrictions. The soil type should be verified or revised based on geotechnical observation and testing during construction, as soil classifications may vary over short horizontal distances.

Typical cantilever shoring should be designed based on an active fluid pressure of 38 pcf, assuming level ground above the shoring. If excavations are braced at the top and at specific design intervals, the active pressure may then be approximated by a rectangular soil pressure distribution with the pressure per foot of width equal to  $25H$  psf, where  $H$  is equal to the depth of the excavation being shored.

Heavy construction loads, such as those resulting from stockpiles and heavy machinery, should be kept a minimum distance equivalent to the excavation height or 5 feet, whichever is greater, from the excavation unless the excavation is shored and these surcharges are considered in the design of the shoring system. Excavations that extend below an imaginary plane inclined at 45 degrees below the edge of any adjacent existing site foundation should be properly shored to maintain support of the adjacent structures.

## 5.5 Trench Backfill

Utility trenches should be backfilled with compacted fill in accordance with Sections 306-1.2 and 306-1.3 of the *Standard Specifications for Public Works Construction*, (SSPWC, "Greenbook"), 2018 Edition. Utility trenches can be backfilled with onsite material free of rubble, debris, organic and oversized material up to 3 inches in largest dimension. Prior to backfilling trenches, pipes should be bedded in and covered with either:

- **Granular Bedding:** a) ½-inch open grade aggregate; or b) a uniform sand material with a Sand Equivalent (SE) greater than or equal to ( $\geq$ ) 30, passing the No. 4 U.S. Standard Sieve (or as specified by the pipe manufacturer). Testing to evaluate the Sand Equivalent (SE) of representative samples of the near surface soils indicated SE values below 30, thereby indicating the on-site soils may not be suitable for reuse in this manner.

- **CLSM:** Controlled Low Strength Material (CLSM) conforming to Section 201-6 of the SSPWC. CLSM bedding should be placed to 1 foot (0.3 m) over the top of the conduit, and vibrated.

Pipe bedding should extend at least 4 inches below the pipeline invert and at least 12 inches over the top of the pipeline. The bedding and shading sand is recommended to be densified in place by vibratory, lightweight compaction equipment. Jetting or hydro-consolidation may be suitable for this project site where utility trenches will be underlain by the silty sands, typically present in the upper 5 to 10 feet.

Trench backfill over the pipe bedding zone may consist of native and clean fill soils. All backfill should be placed in thin lifts (appropriate for the type of compaction equipment), moisture conditioned above optimum, and mechanically compacted to at least 90 percent relative compaction, relative to the ASTM D 1557 laboratory maximum density.

## 5.6 Soil Corrosivity

In general, soil resistivity, which is a measure of how easily electrical current flows through soils, is the most influential factor for corrosion to ferrous metals. The following table presents an approximate relationship between soil resistivity and soil corrosiveness.

**Table 4 – Soil Corrosivity as a Function of Resistivity**

Soil Resistivity (ohm-cm)	Classification of Soil Corrosiveness
0 to 900	Very severe corrosion
900 to 2,300	Severely corrosive
2,300 to 5,000	Moderately corrosive
5,000 to 10,000	Mildly corrosive
10,000 to >100,000	Very mildly corrosive
Note: <sup>1</sup> ASTM STP 1013 titled <i>Effects of Soil Characteristics on Corrosion</i> (February, 1989).	

In addition to resistivity, the concentration of chloride ions can also be used to evaluate corrosive potential to steel, either in the form of reinforcement protected by concrete cover or plain steel substructures, such as steel pipes. As a general guideline, the chloride threshold adopted by Caltrans is a concentration of 500 ppm

or greater as determined by California Test 532. Concentrations of chloride ions above the stated concentration or other characteristics such as soil resistivity or redox potential may warrant special corrosion protection measures. The results of corrosivity testing are summarized in the following table.

**Table 5 – Summary of Corrosivity Testing**

Test Parameter	Test Results LB-3 @ 0'-5'	General Classification of Hazard
Water-Soluble Sulfate in Soil (ppm)	260	Negligible sulfate exposure to buried concrete
Water-Soluble Chloride in Soil (ppm)	40	Non-corrosive to buried reinforced concrete
pH	7.92	Moderately alkaline
Minimum Resistivity (saturated, ohm-cm)	1,335	Severely corrosive to buried ferrous pipes

The results of the resistivity tests indicate the underlying soil is moderately corrosive to buried ferrous metals per ASTM STP 1013. The samples tested for water-soluble chloride content indicate a low potential for corrosion of steel in concrete due to the chloride content of the soil.

Based on the test results, ferrous pipes buried in moist to wet site earth materials should be avoided by using high-density polyethylene (HDPE), polyvinyl chloride (PVC) and/or other non-ferrous pipe when possible provided the pipe walls possess sufficient strength for the embedment and external loading to which the pipe will be subjected. Ferrous pipe can also be protected by polyethylene bags, tape or coatings, di-electric fittings or other means to separate pipe from on-site soils. If buried ferrous pipes are planned for this site, further corrosivity testing of soil samples should be performed upon completion of rough grading and specific corrosion protection measures should be recommended by a qualified corrosion engineer.

## 5.7 Cement Type

In general, soil environments that are detrimental to concrete have high concentrations of soluble sulfates and/or pH values of less than 5.5. Section 4.3 of ACI 318 (ACI, 2014) provides specific guidelines for the concrete mix-design when the soluble sulfate content of the soil exceeds 0.1 percent by weight or 1,000 parts per million (ppm).

The results of laboratory testing indicated concentrations of soluble sulfate less than 0.1 percent. The test results indicate a sulfate Exposure Class designation of “S0” appears to be appropriate for the project site based upon criteria presented in ACI 318. However, if the concrete is expected to be in contact with reclaimed water, Type V cement and a water/cement ratio of 0.45 should be used. Samples should be collected from the compacted fill subgrade upon completion of grading to confirm the initial findings of this exploration.

## **5.8 Elevator Pit Wall Design**

The proposed development is not expected to include new earth retaining structures due to the generally level topographic relief of the site and no below grade levels associated with the buildings. However, in consideration that the buildings will be multi-stories in height, the buildings are anticipated to include elevators. In the anticipation that elevator equipment will include below-grade pits to house the mechanical workings, design of the pit walls should include provisions to resist the lateral load of the adjacent soils. Based on the recommended building pad parathion and the anticipated soil conditions, design of the pit walls is recommended to be based upon an equivalent lateral earth pressure of 60 psf per foot of retained height.

## **5.9 Pavements**

### **5.9.1 Pavement Subgrades**

The pavement subgrades should be prepared as described in Section 5.1 of this report. In accordance with the recommendations, preparation of the subgrade within the areas of new pavement construction are recommended to be overexcavated to a depth of 2 feet below the current grade or planned subgrade elevation, or to the depth of undocumented fill whichever is greater, to allow placement of a minimum of 2 feet of structural fill to develop a suitable bearing subgrade for pavement support.

### **5.9.2 Hot Mix Asphalt (HMA) Pavement Sections**

Asphalt pavements are anticipated to be feasible for the proposed development. Based on the anticipated subgrade conditions and the results of laboratory testing conducted on one bulk sample of the near surface soils

(LB-1), the following recommendations for pavement design have been based upon a design R-value of 30 for the anticipated subgrade. R-value tests should be performed upon completion of grading to verify the design value is appropriate for the actual subgrade conditions. Based on the design procedures outlined in the current Caltrans Highway Design Manual and using an R-value of 78 for the pavement base course, the following flexible pavement sections may be used for Traffic Index values that correspond to various levels of vehicle traffic.

**Table 6 – Asphalt Pavement Sections**

Traffic Index	Asphalt Concrete (inches)	Base Course (inches)	
		CAB	CMB
4 or less	3	5	6
5.0	3	6	7
6.0	4	7	8
Notes: CAB – Crushed Aggregate Base Course; Caltrans Class 2, Section 26 or SSPWC Section 200-2.2			
CMB – Crushed Miscellaneous Base Course; SSPWC Section 200-2.4			

The asphalt concrete should conform to the specifications outlined in Section 203-6 of the Standard Specifications for Public Works Construction (SSPWC, a.k.a. “Greenbook”), and asphalt concrete construction methods should meet the requirements of Section 302-5 of the Green Book.

The base course should conform to requirements of Section 26 of State of California Department of Transportation Standard Specifications (Caltrans), latest edition, or meet the specifications for untreated base as defined in Section 200-2.2 of the SSPWC (Greenbook). As an alternate, the base course may comply with the specifications for Crushed Miscellaneous Base per SSPWC Section 200-2.4 with an appropriate increase in thickness.

Prior to placement of the base course, the subgrade soil should be processed to a minimum depth of 8 inches, moisture-conditioned to 1 to 2 percent above optimum moisture content, and recompacted to a minimum of 95 percent relative compaction. Base course should be placed in thin lifts, moisture conditioned, as necessary, and compacted to a minimum of 95 percent relative compaction (ASTM D1557).

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### **5.9.3 Portland Cement Concrete (PCC) Pavements**

Portland cement concrete is recommended for areas of the development subjected to large loads and truck loading/unloading areas. In such areas, a minimum 6-inch thick Portland Concrete Cement (PCC) pavement section reinforced is recommended. Reinforcement is recommended to consist of No. 4 rebar at a maximum on-center spaced at 16 inches in each direction. The recommended PCC pavement section was based on the procedures described in the *Guide for Design and Construction of Concrete Parking Lots by the American Concrete Institute (ACI 330R-08)*.

All PCC pavements should have a minimum 28-day concrete compressive strength of 3,000 pounds-per-square-inch (psi). The reinforcement should be evaluated by the civil/structural engineer to accommodate any additional structural loading requirements. Control joints are recommended to be installed at a maximum on-center spacing of 12 feet for 6-inch thick slabs, and should form square panels.

Concrete pavement may be underlain by a minimum 4-inch thick layer of compacted granular base to serve as a leveling mat for construction and to assist in load transfer at construction joints.

Integral curbs should be used at the perimeter of PCC pavement. Longitudinal joints should be avoided near curbs and gutters. Use of concrete cutoff or edge barriers should be considered at the perimeter of common parking or driveway areas when abutting either open (unfinished) or landscaped areas.

### **5.10 Concrete Flatwork and Exterior Slabs**

Exterior concrete slabs-on-grade should have a minimum thickness of 4 inches. Common Type II cement should be adequate for concrete flatwork not exposed to recycled water. Type V cement and a water:cement ratio of 0.45 should be used for concrete exposed to recycled water.

Concrete flatwork should be placed on compacted fill. If this material has been disturbed or dried out, the subgrade soil to a depth of 12 inches should be moisture conditioned to 1 to 2 percent above optimum moisture content and recompacted to minimum 90 percent relative compaction.

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Exterior concrete driveways, ramps, curbs, gutters, sidewalks often crack. Inclusion of joints at frequent intervals and reinforcement will help control the locations of the cracks, and thus reduce the unsightly appearance. Construction or weakened plane joints should be spaced at intervals of 6 feet or less for sidewalks, curbs and gutters. The spacing may be increased to 10 feet for ramps and driveways. If cracking occurs, repairs may be needed to mitigate the trip hazard and/or improve the appearance.

Minor cracking of concrete after curing due to expansion, drying and shrinkage is normal and should be expected. However, cracking is often aggravated by a high water-to-cement ratio, high concrete temperature at the time of placement, small nominal aggregate size, and rapid moisture loss due to hot, dry, and/or windy weather conditions during placement and curing. Cracking due to temperature and moisture fluctuations can also be expected.

The use of low-slump concrete or low water/cement ratios can reduce the potential for shrinkage cracking. Inclusion of joints at frequent intervals and reinforcement will help control the locations of the cracks, and thus improve aesthetics. Control joints should be spaced at intervals no more than 10 feet. If cracking occurs, repairs may be needed to mitigate the trip hazard and/or improve the appearance.

Slab cracking and/or uneven slab surfaces may result due to the presence of fill if the fill is left in place below the slabs. Slab distortion may result in tripping hazards. Standard methods to mitigate trip hazards include the following:

- Saw Cutting
- Grinding
- Patching and ramping
- Removing and replacement

A regular maintenance program should be implemented to mitigate trip hazards and comply with safety requirements.

### **5.11 Surface Drainage**

Positive drainage of surface water away from structures is very important. Water should not be allowed to pond adjacent to buildings or new site improvements. Positive drainage may be accomplished by providing drainage away at a minimum of 2 percent for earthen surfaces for a lateral distance of at least five feet and further maintained by a swale or drainage path at a gradient of at least 1 percent.

Where necessary, drainage paths may be shortened by the use of area drains and collector pipes. Eave gutters are recommended and should reduce water infiltration into the subgrade materials. Downspouts should be connected to appropriate outlet devices.

Irrigation of landscaping should be controlled to maintain, as much as possible, consistent moisture content sufficient to provide healthy plant growth without over watering.

## 5.12 **Additional Geotechnical Services**

Leighton should review the grading plans, foundation plans, and specifications when they are available to verify that the recommendations presented in this report have been properly interpreted and incorporated.

Geotechnical observation and testing should be provided during the following activities:

- Grading and excavation of the site;
- Subgrade Preparation;
- Compaction of all fill materials;
- Utility trench backfilling and compaction;
- Footing excavation and slab-on-grade preparation;
- Pavement subgrade and base preparation;
- Placement of asphalt concrete and/or concrete; and
- When conditions are encountered on site that are not consistent with the conditions described in this report.

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## 6.0 LIMITATIONS

This report was prepared using the degree of care and skill ordinarily exercised, under similar circumstances, by reputable geotechnical consultants practicing at this time in San Bernardino County. We do not make any warranty, either express or implied.

As in many projects, conditions revealed in excavations may be at variance with preliminary findings. If this occurs, the changed conditions must be evaluated by the geotechnical consultant and additional recommendations be developed as needed.

The identification and testing of hazardous, toxic or contaminated materials was outside the scope of Leighton's work. Should such materials be encountered at any time, or their existence be suspected, all measures stipulated in local, County, State and Federal regulations, as applicable, should be implemented.

This report is issued with the understanding that it is the responsibility of the owner, or of his representative, to ensure that the information and recommendations contained herein are brought to the attention of the necessary design consultants for the project and incorporated into the plans; and that the necessary steps are taken to see that the contractors carry out such recommendations in the field.

Changes in the conditions of a property can occur with the passage of time, whether due to natural processes or the work of man on the subject or adjacent properties. In addition, changes in standards of practice may occur from legislation or the broadening of knowledge. Accordingly, the findings of this report may at some future time be invalidated wholly or partially by changes outside Leighton's control.

The conclusions and recommendations in this report are based in part upon data that were obtained from a necessarily limited number of observations, site visits, excavations, samples and tests. Such information can be obtained only with respect to the specific locations explored, and therefore may not completely define all subsurface conditions throughout the site. The nature of many sites is that differing geotechnical or geological conditions can occur within small distances and under varying climatic conditions. Furthermore, changes in subsurface conditions can and do occur over time. Therefore, the findings, conclusions and recommendations presented in this report can be relied upon only if Leighton has the opportunity to perform additional investigation of the site, finalize and complete the conclusions and recommendations presented in this report, and finally to observe the subsurface conditions during grading and construction of the project, in order to verify that our preliminary findings are representative of the site.

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This report is intended only for the use of Legacy/Collier Residential, LLC and its design consultants, and only as related expressly to evaluation of the feasibility of developing the subject site with the proposed development and for preliminary planning and design.

If parties other than Leighton are engaged to provide construction geotechnical services, they must be notified that they will be required to assume complete responsibility for the geotechnical phase of the project by concurring with the findings and recommendations in this report or by providing alternative recommendations.

Any persons using this report for bidding or construction purposes should perform such independent explorations as they deem necessary to satisfy themselves as to the surface and subsurface conditions to be encountered and the procedures to be used in the performance of work on the subject site.

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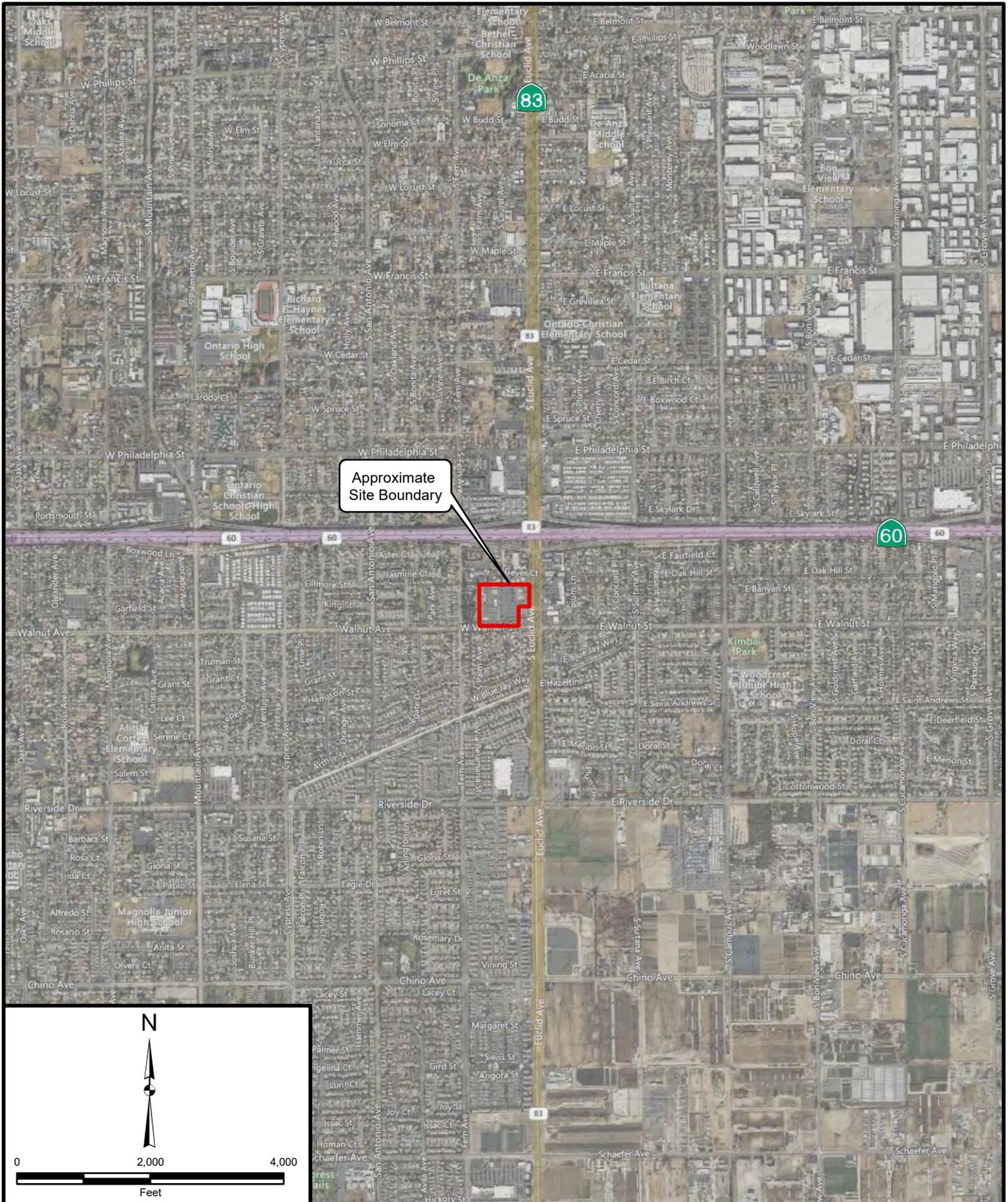
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# FIGURES



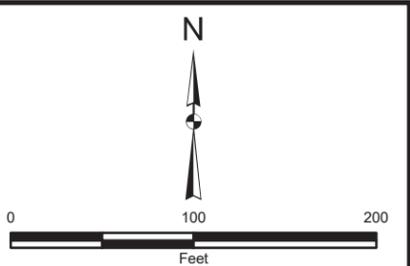
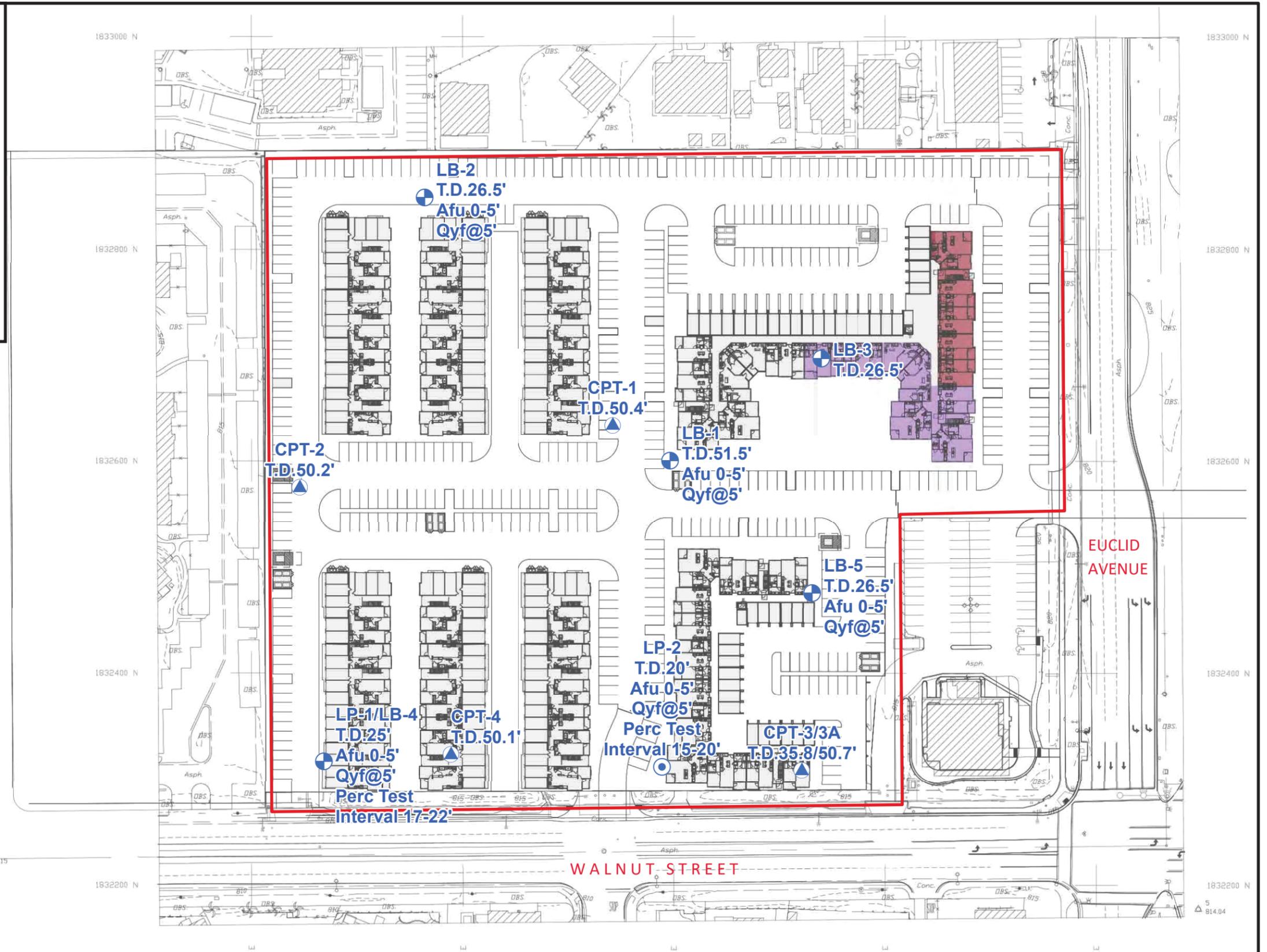
Project: 13493.001	Eng/Geol: JEH/EMH
Scale: 1" = 2,000'	Date: May 2022
Reference: © 2022 Microsoft Corporation © 2022 Maxar © CNES (2022) Distribution Airbus	

**SITE LOCATION MAP**  
 Proposed Euclid and Walnut Mixed-Use Development  
 2502 and 2530 S. Euclid Avenue  
 Ontario, California

**FIGURE 1**

**LEGEND**

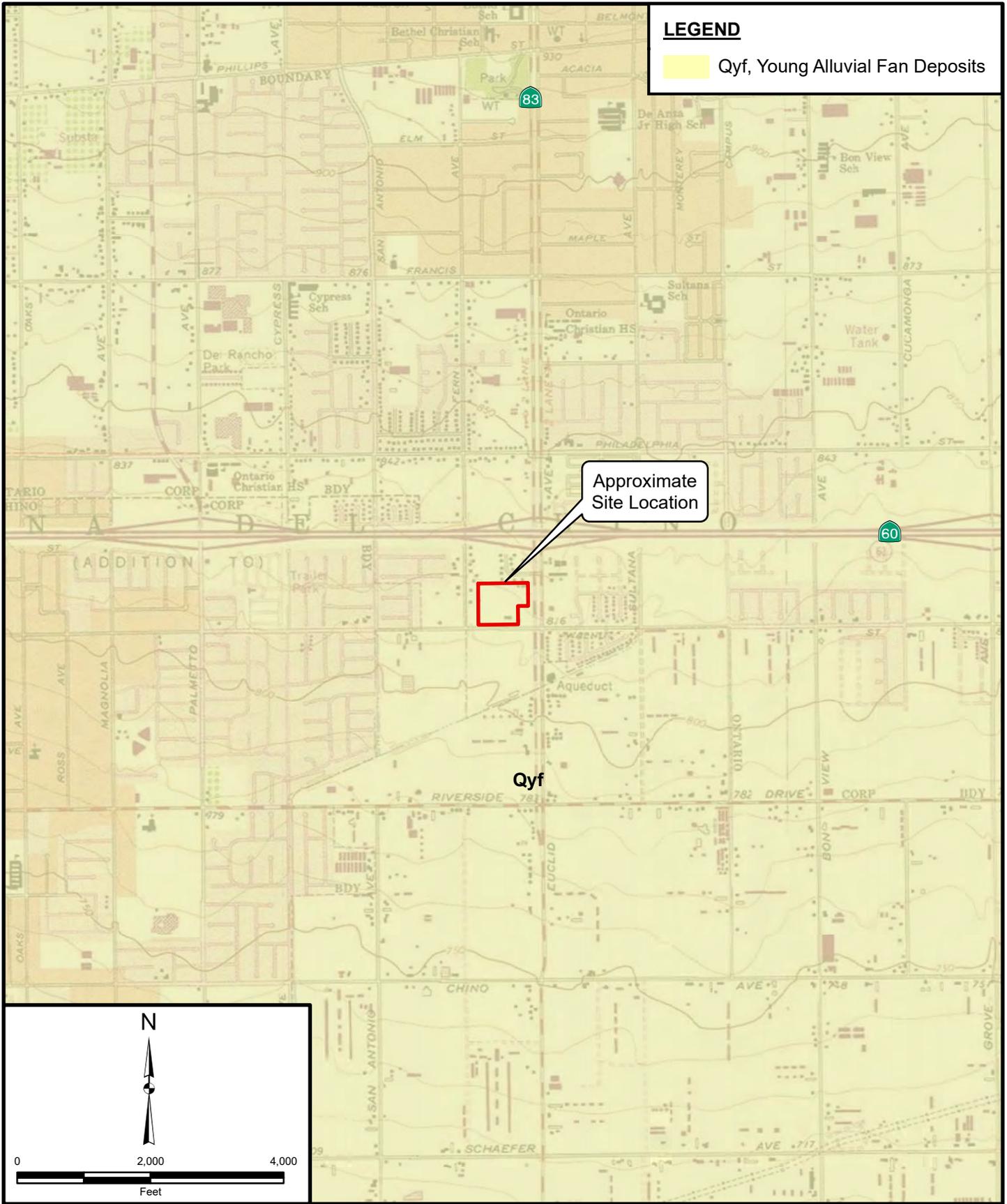
- Afu** Artificial Fill
- Qyf** Quaternary Young Alluvial Fan Deposits
- LB-5** Approximate location of hollow-stem auger boring showing total depth (T.D.) and depth to earth units in feet below ground surface.
- LP-2** Approximate location of percolation test well showing percolation test interval in feet below ground surface.
- CPT-4** Approximate location of cone penetrometer test sounding showing total depth (T.D.) in feet below ground surface
- Approximate Site Boundary



Project: 13493.001    Eng/Geol: JEH/EMH  
 Scale: 1" = 100'    Date: May 2022  
 Base Map: Option A Site Plan, Euclid and Walnut Mixed Use  
 Sheet 01, Dated: 03/10/2022  
 by AO Architecture Design Relationships

**GEOTECHNICAL MAP**  
 Proposed Euclid and Walnut Mixed-Use Development  
 2502 and 2530 S. Euclid Avenue  
 Ontario, California

**FIGURE 2**



**LEGEND**

Qyf, Young Alluvial Fan Deposits

Approximate Site Location

Qyf

Project: 13493.001    Eng/Geol: JEH/EMH  
 Scale: 1" = 2,000'    Date: May 2022

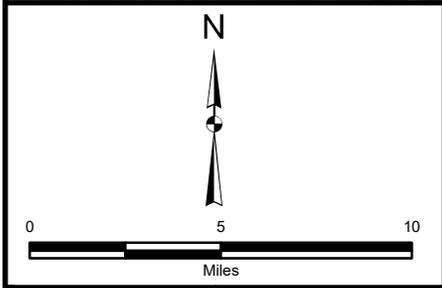
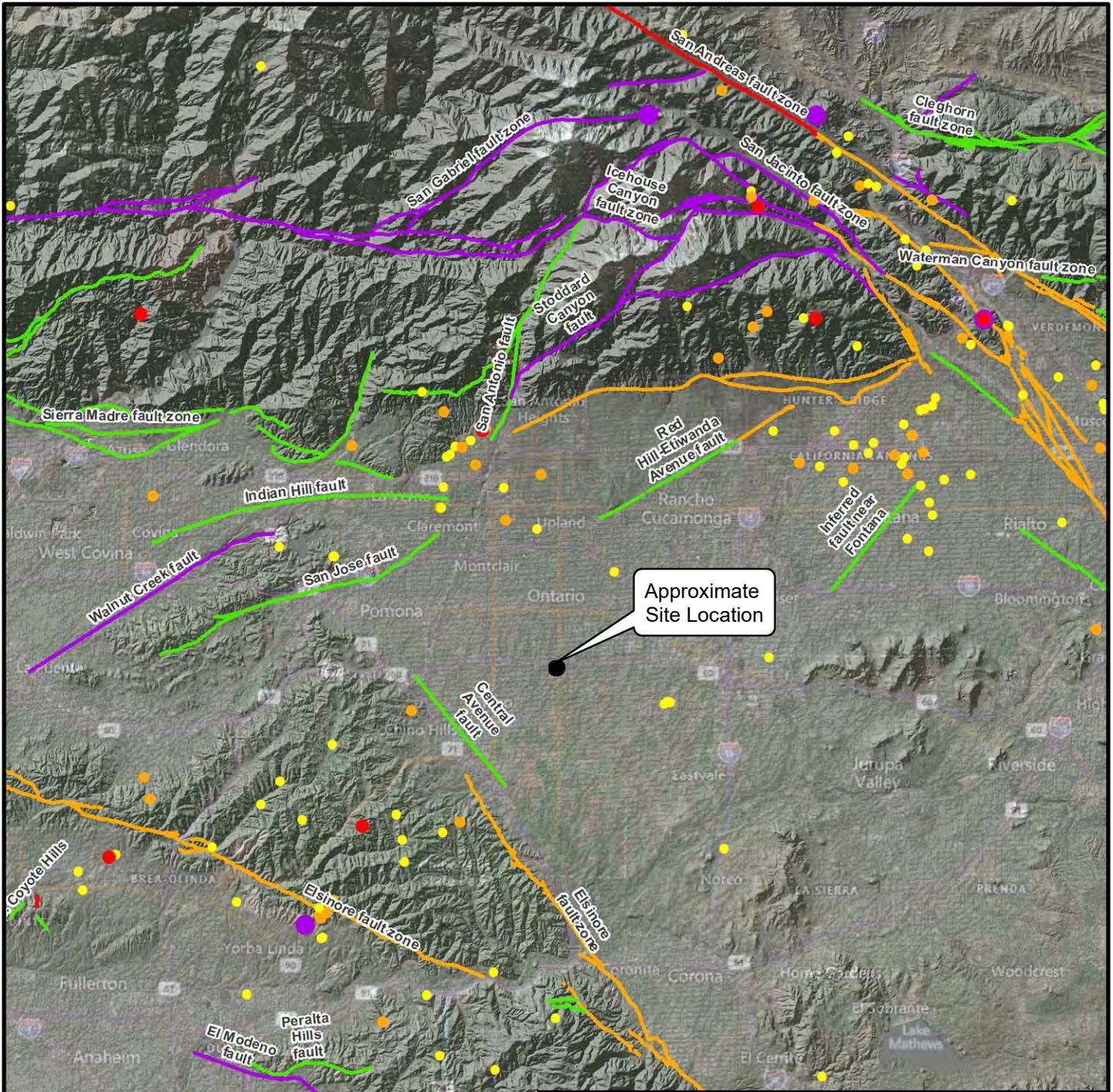
Basemap: USGS Topo Map Service from Esri, 2021  
 Reference: USGS Geologic Map of the Southern California GIS Compilation by CGS, Lancaster, et al., 2012

**REGIONAL GEOLOGY MAP**

Proposed Euclid and Walnut Mixed-Use Development  
 2502 and 2530 S. Euclid Avenue  
 Ontario, California

FIGURE 3





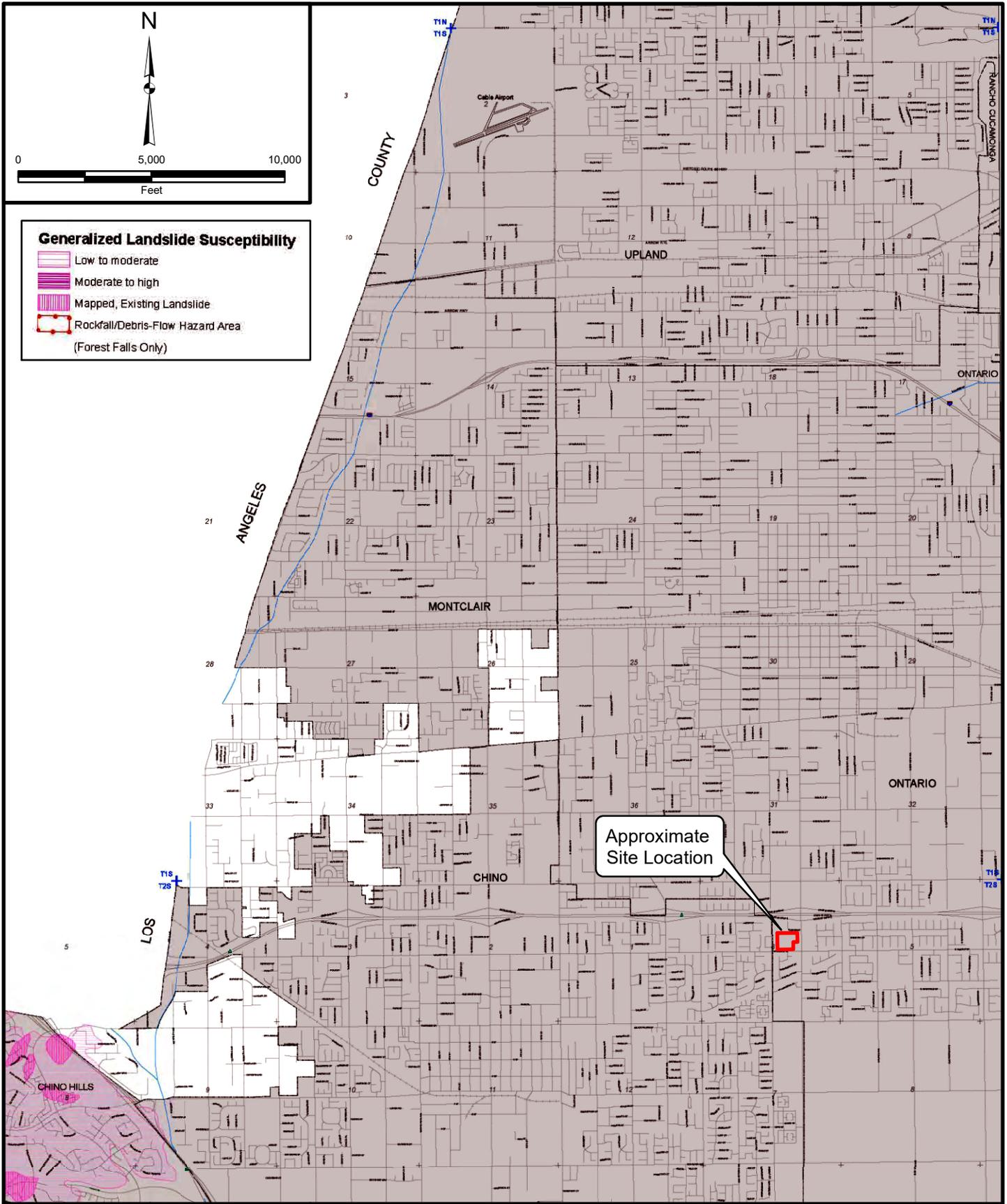
**LEGEND**

<b>Fault activity</b>		<b>Historical Earthquakes (<math>\geq M3.5</math>)</b>	
<b>Recency of Movement</b>		●	3.5 - 3.99
—	Historic (<200 years)	●	4.0 - 4.99
—	Holocene (<11,700 years)	●	5.0 - 5.99
—	Late Quaternary (last 700,000 years)	●	6.0 - 6.99
—	Quaternary (<1.6M years)		

Project: 13493.001    Eng/Geol: JEH/EMH  
 Scale: 1" = 5 miles    Date: May 2022  
 Base Map: ESRI ArcGIS Online 2022  
 Reference: maps.conservation.ca.gov

**REGIONAL FAULTS AND HISTORIC SEISMICITY MAP**  
 Proposed Euclid and Walnut Mixed-Use Development  
 2502 and 2530 S. Euclid Avenue  
 Ontario, California

**FIGURE 4**

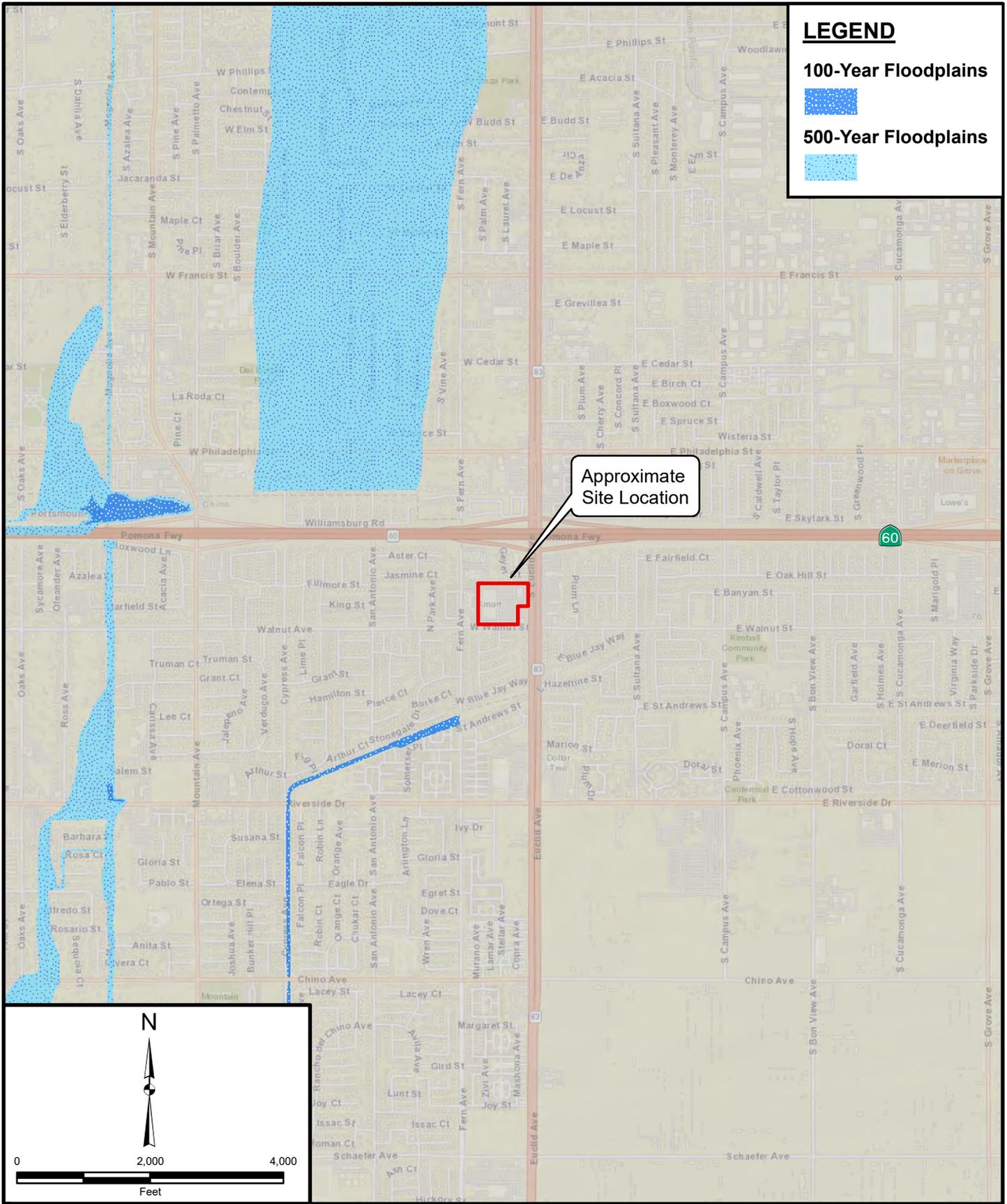


Project: 13493.001	Eng/Geol: JEH/EMH
Scale: 1" = 5,000'	Date: May 2022
Base Map: San Bernardino County Land Use Plan General Plan, Geologic Hazard Overlays, FH27 C Ontario	

**SEISMIC HAZARD MAP**  
 Proposed Euclid and  
 Walnut Mixed-Use Development  
 2502 and 2530 S. Euclid Avenue  
 Ontario, California

**FIGURE 5**

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**LEGEND**

**100-Year Floodplains**

**500-Year Floodplains**

Approximate Site Location

N

0 2,000 4,000

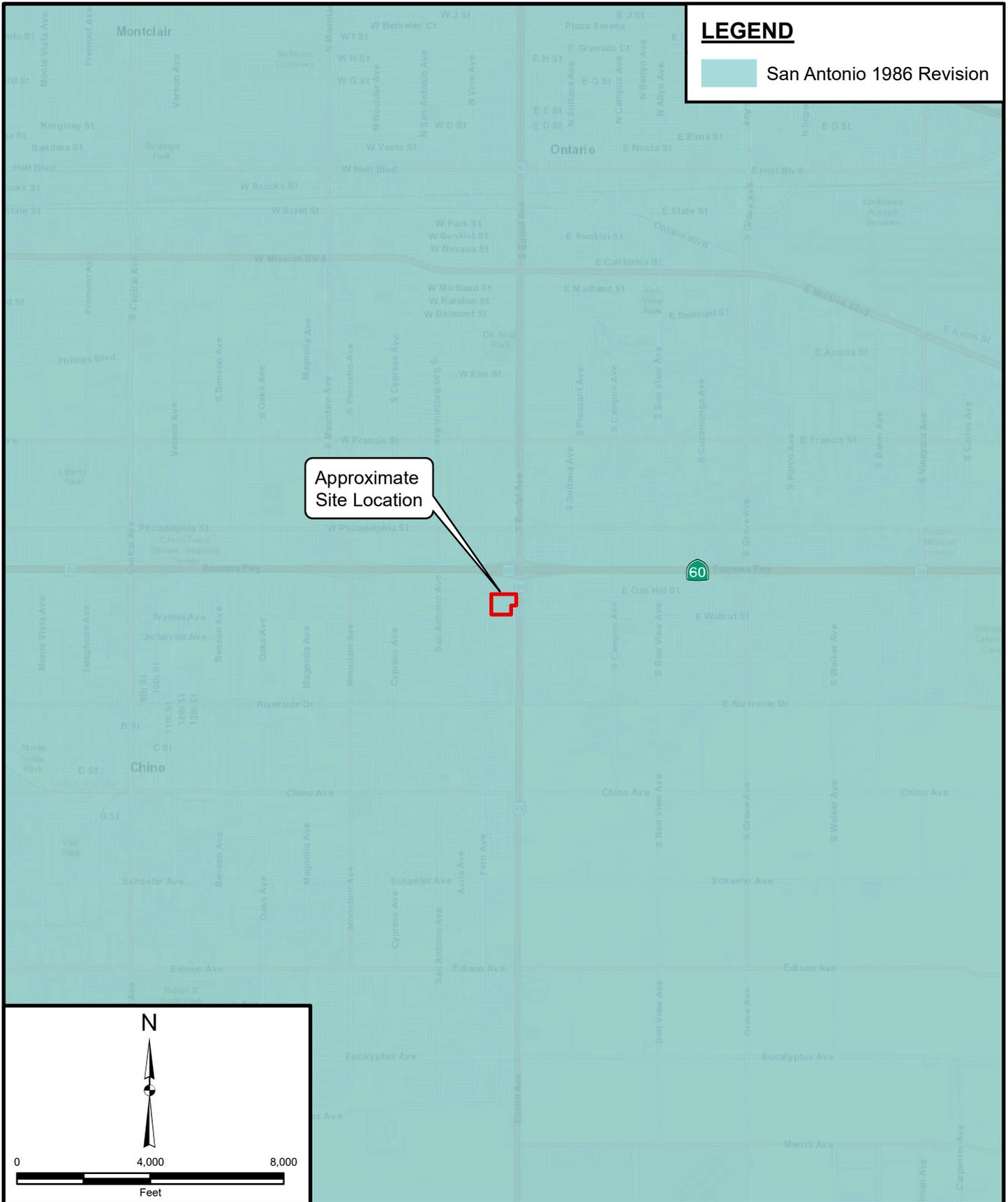
Feet

Project: 13493.001	Eng/Geol: JEH/EMH
Scale: 1" = 2,000'	Date: May 2022
Base Map: ESRI ArcGIS Online 2022 Reference: FEMA, DWR	

**FLOOD HAZARD ZONE MAP**

Proposed Euclid and Walnut Mixed-Use Development  
 2502 and 2530 S. Euclid Avenue  
 Ontario, California

**FIGURE 6**



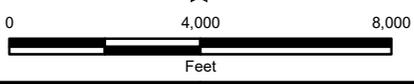
**LEGEND**

 San Antonio 1986 Revision

Approximate Site Location



N



Project: 13493.001	Eng/Geol: JEH/EMH
Scale: 1" = 4,000'	Date: May 2022
Base Map: ESRI ArcGIS Online 2022 Reference: FEMA, DWR	

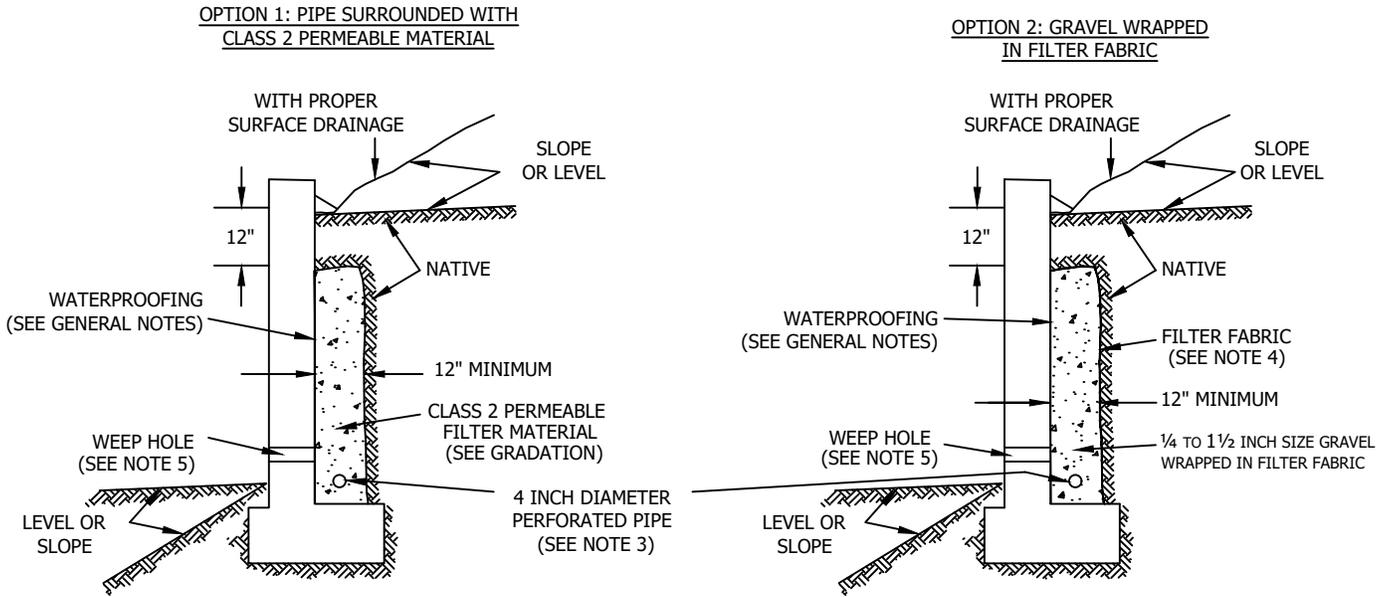
**DAM INUNDATION MAP**

Proposed Euclid and Walnut Mixed-Use Development  
2502 and 2530 S. Euclid Avenue  
Ontario, California

**FIGURE 7**



**SUBDRAIN OPTIONS AND BACKFILL WHEN NATIVE MATERIAL HAS EXPANSION INDEX OF  $\leq 50$**



Class 2 Filter Permeable Material Gradation  
Per Caltrans Specifications

Sieve Size	Percent Passing
1"	100
3/4"	90-100
3/8"	40-100
No. 4	25-40
No. 8	18-33
No. 30	5-15
No. 50	0-7
No. 200	0-3

**GENERAL NOTES:**

- \* Waterproofing should be provided where moisture nuisance problem through the wall is undesirable.
- \* Water proofing of the walls is not under purview of the geotechnical engineer
- \* All drains should have a gradient of 1 percent minimum
- \* Outlet portion of the subdrain should have a 4-inch diameter solid pipe discharged into a suitable disposal area designed by the project engineer. The subdrain pipe should be accessible for maintenance (rodding)
- \* Other subdrain backfill options are subject to the review by the geotechnical engineer and modification of design parameters.

**Notes:**

- 1) Sand should have a sand equivalent of 30 or greater and may be densified by water jetting.
- 2) 1 Cu. ft. per ft. of 1/4- to 1 1/2-inch size gravel wrapped in filter fabric
- 3) Pipe type should be ASTM D1527 Acrylonitrile Butadiene Styrene (ABS) SDR35 or ASTM D1785 Polyvinyl Chloride plastic (PVC), Schedule 40, Armco A2000 PVC, or approved equivalent. Pipe should be installed with perforations down. Perforations should be 3/8 inch in diameter placed at the ends of a 120-degree arc in two rows at 3-inch on center (staggered)
- 4) Filter fabric should be Mirafi 140NC or approved equivalent.
- 5) Weephole should be 3-inch minimum diameter and provided at 10-foot maximum intervals. If exposure is permitted, weepholes should be located 12 inches above finished grade. If exposure is not permitted such as for a wall adjacent to a sidewalk/curb, a pipe under the sidewalk to be discharged through the curb face or equivalent should be provided. For a basement-type wall, a proper subdrain outlet system should be provided.
- 6) Retaining wall plans should be reviewed and approved by the geotechnical engineer.
- 7) Walls over six feet in height are subject to a special review by the geotechnical engineer and modifications to the above requirements.

**RETAINING WALL BACKFILL AND SUBDRAIN DETAIL  
FOR WALLS 6 FEET OR LESS IN HEIGHT  
WHEN NATIVE MATERIAL HAS EXPANSION INDEX OF  $\leq 50$**



V:\DRAFTING\TEMP\ATES\STANDARD-FIGURES\DWG (04.02.21) 007-55AM.dwg, Prepared by: bham



**APPENDIX A**  
**EXPLORATION LOGS**

# GEOTECHNICAL BORING LOG LB-1

**Project No.** 13493.001  
**Project** Legacy-Collier, Proposed Residential Development  
**Drilling Co.** Martini Drilling, Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** See Figure 2 - Geotechnical Map

**Date Drilled** 4-6-22  
**Logged By** BTM  
**Hole Diameter** 8"  
**Ground Elevation** 805'  
**Sampled By** BTM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	<b>SOIL DESCRIPTION</b>	Type of Tests
805	0	N S		B-1	Bulk Driven			ML-SM	This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual. @Surface: 2.5 -inches Asphalt Concrete over 4.5 -inches Base <b>Artificial Fill, undocumented (Afu)</b> @0.58': Sandy SILT, olive brown, moist, low plasticity, very fine to fine sand, slightly micaceous; grades to Silty SAND, medium brown, moist, very fine to fine sand, slightly micaceous @ ~4'	EI, RV
800	5			R-1	4 7 9			ML/CL	<Quaternary-Aged Young Alluvial Deposits (Qyf) @5': Silty CLAY, stiff, olive brown, moist, low plasticity, iron oxidation staining, slightly micaceous, few fine sand PP=2.50 TSF >>>	CN
795	10			R-2	7 11 13	95	9	ML-SM	@7.5': Sandy SILT, very stiff, medium olive brown, moist, very fine sand, low plasticity, slightly micaceous, slightly laminated; grades to Clayey SILT with sand, grayish brown, moist, low plasticity, iron oxidation staining, slightly micaceous, few fine sand	
				R-3	4 9 15	89	31	CL-ML	@10': Silty CLAY, very stiff, gray, moist, low to medium plasticity, iron oxidation staining/veins, few fine sand, trace subrounded gravel, slightly laminated PP>4.5 TSF	
790	15			R-4	4 8 12	112	16		@15': Silty CLAY, stiff, medium brown, moist, medium plasticity, iron oxidation staining, slightly micaceous; grades to Sandy CLAY, medium brown, moist, medium plasticity, very fine to fine sand, slightly micaceous, iron oxidation staining PP=4.25 TSF	
785	20			R-5	8 18 22	120	12	SC	@20': Clayey SAND, medium dense, mottled medium brown to orange, low plasticity, predominately fine sand, little medium sand, slightly micaceous, slightly laminated, trace fine subrounded gravel PP>4.50 TSF	
780	25			R-6	12 16 27			SP	@25': SAND with Silt, medium dense, yellowish brown, slightly moist, predominately fine sand, poorly-graded, little medium sand, slightly micaceous	CO
775	30									

- SAMPLE TYPES:**  
 B BULK SAMPLE  
 C CORE SAMPLE  
 G GRAB SAMPLE  
 R RING SAMPLE  
 S SPLIT SPOON SAMPLE  
 T TUBE SAMPLE
- TYPE OF TESTS:**  
 -200 % FINES PASSING  
 AL ATTERBERG LIMITS  
 CN CONSOLIDATION  
 CO COLLAPSE  
 CR CORROSION  
 CU UNDRAINED TRIAXIAL
- DS DIRECT SHEAR  
 EI EXPANSION INDEX  
 H HYDROMETER  
 MD MAXIMUM DENSITY  
 PP POCKET PENETROMETER  
 RV R VALUE
- SA SIEVE ANALYSIS  
 SE SAND EQUIVALENT  
 SG SPECIFIC GRAVITY  
 UC UNCONFINED COMPRESSIVE STRENGTH



\*\*\* This log is a part of a report by Leighton and should not be used as a stand-alone document. \*\*\*

# GEOTECHNICAL BORING LOG LB-1

**Project No.** 13493.001  
**Project** Legacy-Collier, Proposed Residential Development  
**Drilling Co.** Martini Drilling, Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** See Figure 2 - Geotechnical Map

**Date Drilled** 4-6-22  
**Logged By** BTM  
**Hole Diameter** 8"  
**Ground Elevation** 805'  
**Sampled By** BTM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
775	30			S-7	9 12 14		4		<i>This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.</i> @30': SAND with gravel, medium dense, orange brown, slightly moist, fine to coarse sand, few fine subrounded gravel, slightly micaceous	
770	35		R-8	11 24 50/4"					@35': SAND with Silt, Very dense, yellowish brown, predominately fine sand, little medium to coarse sand, poorly graded, few fine subangular to subrounded gravel	CO
765	40		S-9	8 12 19			4		@40': SAND, dense, medium brown, slightly moist, predominately fine sand, little medium to coarse sand, trace to few fine subangular to subrounded gravel, slightly micaceous	
760	45		R-10	47 50/3"	115		2		@45': Very dense, medium brown to orange brown, few fine subrounded gravel	
755	50		S-11	35 39 50/4"			3		@50': Very dense, little subrounded granitic gravel	
750	55								Total Depth: 51.5' bgs No groundwater encountered during drilling Backfilled with soil cuttings Patched with cold-mix asphalt concrete	
745	60									

- |                                                                                                                                   |                                                                                                                                                  |                                                                                                                     |                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| <b>SAMPLE TYPES:</b><br>B BULK SAMPLE<br>C CORE SAMPLE<br>G GRAB SAMPLE<br>R RING SAMPLE<br>S SPLIT SPOON SAMPLE<br>T TUBE SAMPLE | <b>TYPE OF TESTS:</b><br>-200 % FINES PASSING<br>AL ATTERBERG LIMITS<br>CN CONSOLIDATION<br>CO COLLAPSE<br>CR CORROSION<br>CU UNDRAINED TRIAXIAL | DS DIRECT SHEAR<br>EI EXPANSION INDEX<br>H HYDROMETER<br>MD MAXIMUM DENSITY<br>PP POCKET PENETROMETER<br>RV R VALUE | SA SIEVE ANALYSIS<br>SE SAND EQUIVALENT<br>SG SPECIFIC GRAVITY<br>UC UNCONFINED COMPRESSIVE STRENGTH |
|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|



\*\*\* This log is a part of a report by Leighton and should not be used as a stand-alone document. \*\*\*

# GEOTECHNICAL BORING LOG LB-2

**Project No.** 13493.001  
**Project** Legacy-Collier, Proposed Residential Development  
**Drilling Co.** Martini Drilling, Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** See Figure 2 - Geotechnical Map

**Date Drilled** 4-6-22  
**Logged By** BTM  
**Hole Diameter** 8"  
**Ground Elevation** 807'  
**Sampled By** BTM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	<b>SOIL DESCRIPTION</b>	Type of Tests
	0	N S							This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
805				B-1				ML-SM	@Surface: 4 -inches Asphalt Concrete over 5 -inches Base <b>Artificial Fill, undocumented (Afu)</b> @0.75': Sandy SILT, olive brown, moist, low plasticity, very fine sand, slightly micaceous, some debris (asphalt)	DS, MD, SE
800	5			R-1	3 8 16			ML-SM	<Quaternary-Aged Young Alluvial Deposits (Qyf) @5': Clayey SAND, medium dense, olive gray, very moist, low plasticity, very fine to fine sand, slightly micaceous, pinhole pores; grades to Silty SAND with gravel, light to medium brown, predominately fine sand, few medium sand, fine subangular granitic gravel )>>	CN
				R-2	6 11 11	101	3	SP	@7.5': SAND, medium dense, grayish brown, moist, very fine to fine sand, slightly micaceous, little iron oxidation staining	
795	10			R-3	4 8 12			CL/SM	@10': CLAY, stiff, olive gray, moist, lean, low plasticity, extensive iron oxidation staining, few very fine sand, slightly micaceous; grades to Silty SAND, light orange brown, very fine sand, slightly micaceous	CN, AL
790	15			R-4	10 10 11	103	4	SP-ML	@15': SAND with silt, medium dense, light gray, slightly moist, very fine to fine sand, micaceous; interbedded with Clayey SILT, medium brown, moist, low plasticity, laminated, iron oxidation staining	
785	20			R-5	7 11 17	112	16	ML-SM CL-SC	@20': Sandy SILT, very stiff, medium brown, moist, low plasticity, very fine sand, micaceous; grades to Sandy CLAY, medium brown, moist, low plasticity, very fine to fine sand, trace subrounded gravel  PP = 3.50	
780	25			R-6	10 15 24	108	10	SP	@25': Sandy CLAY, very stiff, medium brown, moist, low plasticity, very fine to fine sand, micaceous, some silt  PP > 4.50 TSF @26': SAND with silt, orange brown, dry to slightly moist, very fine to fine sand, few medium sand, slightly micaceous <b>Total Depth: 26.5' bgs</b> <b>No groundwater encountered during drilling</b> <b>Backfilled with soil cuttings</b>	
	30									

**SAMPLE TYPES:**

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

**TYPE OF TESTS:**

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



# GEOTECHNICAL BORING LOG LB-2

**Project No.** 13493.001  
**Project** Legacy-Collier, Proposed Residential Development  
**Drilling Co.** Martini Drilling, Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** See Figure 2 - Geotechnical Map

**Date Drilled** 4-6-22  
**Logged By** BTM  
**Hole Diameter** 8"  
**Ground Elevation** 807'  
**Sampled By** BTM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests	
		N S							This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.		
30									Patched with cold-mix asphalt concrete		
775											
35											
770											
40											
765											
45											
760											
50											
755											
55											
750											
60											
SAMPLE TYPES:		TYPE OF TESTS:									
B	BULK SAMPLE	-200	% FINES PASSING	DS	DIRECT SHEAR	SA	SIEVE ANALYSIS				
C	CORE SAMPLE	AL	ATTERBERG LIMITS	EI	EXPANSION INDEX	SE	SAND EQUIVALENT				
G	GRAB SAMPLE	CN	CONSOLIDATION	H	HYDROMETER	SG	SPECIFIC GRAVITY				
R	RING SAMPLE	CO	COLLAPSE	MD	MAXIMUM DENSITY	UC	UNCONFINED COMPRESSIVE				
S	SPLIT SPOON SAMPLE	CR	CORROSION	PP	POCKET PENETROMETER		STRENGTH				
T	TUBE SAMPLE	CU	UNDRAINED TRIAXIAL	RV	R VALUE						



\*\*\* This log is a part of a report by Leighton and should not be used as a stand-alone document. \*\*\*

# GEOTECHNICAL BORING LOG LB-3

**Project No.** 13493.001  
**Project** Legacy-Collier, Proposed Residential Development  
**Drilling Co.** Martini Drilling, Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** See Figure 2 - Geotechnical Map

**Date Drilled** 4-6-22  
**Logged By** BTM  
**Hole Diameter** 8"  
**Ground Elevation** 808'  
**Sampled By** BTM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	<b>SOIL DESCRIPTION</b>	Type of Tests
	0	N S							This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
				B-1				SM	@Surface: 3.5 -inches Asphalt Concrete over 12 -inches Base	
805									<b>Artificial Fill, undocumented (Afu)</b> @1.3': Silty SAND, olive brown, slightly moist, very fine to fine sand, few medium sand, trace coarse sand, non-plastic, few debris (asphalt)	CR, MD
	5			R-1	7 9 11	111	8	SM	<Quaternary-Aged Young Alluvial Deposits (Qyf) @5': Silty SAND, medium dense, medium brown, moist, very fine to fine sand, slightly laminated, slightly micaceous >>	
800				R-2	7 12 15			CL-SC	@7.5': Silty SAND, medium dense, olive, slightly moist, fine sand, low plasticity, iron oxidation staining, carbonate veins; grades to SAND, yellowish brown, slightly moist, very fine to fine sand	DS
	10			R-3	10 16 26	90	26	CL	@10': Silty CLAY, very stiff, grayish brown, slightly moist, low to medium plasticity, trace very fine sand, iron oxidation staining  PP > 4.50 TSF	
795										
	15			R-4	5 9 17	87	35		@15': Very stiff, slightly laminated  PP = 4.25 TSF	
790										
	20			R-5	12 16 27	122	12	SC	@20': Clayey SAND, medium dense, orange brown, slightly moist, low plasticity, fine sand, trace medium to coarse sand, slightly laminated, iron oxidation staining  PP = 4.50 TSF	
785										
	25			R-6	7 10 17	114	14		@25': Medium dense, higher sand content, pinhole pores  PP > 4.50 TSF	
780									<b>Total Depth: 26.5' bgs</b> No groundwater encountered during drilling Backfilled with soil cuttings Patched with cold-mix asphalt concrete	
30										

**SAMPLE TYPES:**

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

**TYPE OF TESTS:**

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



# GEOTECHNICAL BORING LOG LB-5

**Project No.** 13493.001  
**Project** Legacy-Collier, Proposed Residential Development  
**Drilling Co.** Martini Drilling, Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** See Figure 2 - Geotechnical Map

**Date Drilled** 4-6-22  
**Logged By** BTM  
**Hole Diameter** 8"  
**Ground Elevation** 807'  
**Sampled By** BTM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
	0	N S							This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
805				B-1				SM	@Surface: 5 -inches Asphalt Concrete over 3 -inches Base <b>Artificial Fill, undocumented (Afu)</b> @0.67': Silty SAND, olive brown, slightly moist, very fine to fine sand, few medium sand, trace coarse sand, trace debris (asphalt)	SE
800	5			R-1	5 7 9			SM-ML	<Quaternary-Aged Young Alluvial Deposits (Qyf) @5': Silty SAND, medium dense, medium brown, slightly moist, very fine to fine sand, trace coarse sand, nonplastic, slightly micaceous; grades to Sandy SILT, yellowish brown, slightly moist, very fine sand, no to low plasticity, slightly micaceous >>	
				R-2	9 16 16			ML-SM	@7.5': Sandy SILT, very stiff, grayish brown, slightly moist, very fine sand, low plasticity, iron oxidation staining; grades to Sandy SILT, yellowish brown	
795	10			R-3	6 11 16			CL-ML	@10': Silty CLAY, very stiff, grayish brown to tan, moist, low plasticity, slightly laminated, trace very fine sand; grades to SAND, tan to yellowish brown, slightly moist, very fine to fine sand, slightly micaceous	
790	15			R-4	5 10 21				@15': Silty CLAY, very stiff, grayish brown, moist, low to medium plasticity, iron oxidation staining, some very fine to fine sand, slightly laminated	
785	20			R-5	6 9 19				@20': Very stiff, few to little very fine to fine sand, slightly laminated	
780	25			R-6	10 18 28			SC	@25': Clayey SAND, dense, olive brown, moist, predominately fine sand, trace to few medium to coarse sand, low plasticity, slightly micaceous; grades to orange, iron oxidation stained Clayey SAND, slightly laminated	
									Total Depth: 26.5' bgs No groundwater encountered during drilling Backfilled with soil cuttings Patched with cold-mix asphalt concrete	
	30									

**SAMPLE TYPES:**

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

**TYPE OF TESTS:**

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



# GEOTECHNICAL BORING LOG LP-1

**Project No.** 13493.001  
**Project** Legacy-Collier, Proposed Residential Development  
**Drilling Co.** Martini Drilling, Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** See Figure 2 - Geotechnical Map

**Date Drilled** 4-6-22  
**Logged By** BTM  
**Hole Diameter** 8"  
**Ground Elevation** 805'  
**Sampled By** BTM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	<b>SOIL DESCRIPTION</b>	Type of Tests
805	0	N S							This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
				B-1	Bulk Driven			ML-SM	@Surface: 3 -inches Asphalt Concrete over 7 -inches Base  <b>Artificial Fill, undocumented (Afu)</b> @0.83': Sandy SILT, olive brown, moist, low plasticity, very fine sand, slightly micaceous; grades to Silty SAND, medium brown, moist, very fine to fine sand, trace medium sand, slightly micaceous @ ~4'	
800	5			S-1	2 2			SM-ML	<b>Quaternary-Aged Young Alluvial Deposits (Qyf)</b> @5': Silty SAND, very loose, medium brown, moist, very fine to fine sand, slightly micaceous, nonplastic	
795	10			S-2	2 3 4			ML-CL	@10': Clayey Sandy SILT, medium stiff, moist, low plasticity, very fine sand, slightly micaceous; grades to Silty CLAY with sand, gray, moist, low to medium plasticity, very fine sand, micaceous, extensive iron oxidation staining	
790	15			R-3	6 9 11	104	5	SP	@15': Silty SAND, medium dense, grayish brown, slightly moist, predominately fine sand, some clay, trace medium to coarse sand, trace fine subrounded gravel, slightly micaceous	, SA
785	20			R-4	8 13 21	119	12	SM	@18.5': Sandy SILT, very stiff, olive brown, slightly moist, low plasticity, very fine to fine sand, iron oxidation staining, slightly micaceous  PP > 4.50 TSF	, SA
780	25			S-5	5 6 7			ML-SM	@23.5': Sandy CLAY, stiff to medium dense, orange mottled with brown, low plasticity, very fine to fine sand, slightly micaceous	SA
									Total Depth: 25' bgs No groundwater encountered during drilling Temporary percolation well installed; screened from 17 - 22' bgs Upon completion of percolation testing, boring was backfilled with soil cuttings and patched with cold-mix asphalt	
775	30									

- SAMPLE TYPES:**
- B BULK SAMPLE
  - C CORE SAMPLE
  - G GRAB SAMPLE
  - R RING SAMPLE
  - S SPLIT SPOON SAMPLE
  - T TUBE SAMPLE

- TYPE OF TESTS:**
- 200 % FINES PASSING
  - AL ATTERBERG LIMITS
  - CN CONSOLIDATION
  - CO COLLAPSE
  - CR CORROSION
  - CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



# GEOTECHNICAL BORING LOG LP-2

**Project No.** 13493.001  
**Project** Legacy-Collier, Proposed Residential Development  
**Drilling Co.** Martini Drilling, Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** See Figure 2 - Geotechnical Map

**Date Drilled** 4-6-22  
**Logged By** BTM  
**Hole Diameter** 8"  
**Ground Elevation** 804'  
**Sampled By** BTM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	<b>SOIL DESCRIPTION</b>	Type of Tests
	0	N S							This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
	0	█		B-1				SM-ML	@Surface: 3.5 -inches Asphalt Concrete over 4 -inches Base <b>Artificial Fill, undocumented (Afu)</b> @0.62': Silty SAND to Sandy SILT, olive brown, slightly moist, very fine to fine sand, low to no plasticity, slightly micaceous	
800	5	█		S-1	4 2 2			SM	<Quaternary-Aged Young Alluvial Deposits (Qyf) @5': Silty SAND, very loose, medium to dark brown, moist, very fine to fine sand, trace coarse sand to fine subrounded gravel >>	
795	10	█		S-2	2 2 3			ML/CL	@10': Sandy SILT, medium stiff, mottled with gray and light brown, slightly moist, low plasticity, very fine sand, slightly micaceous; grades to Silty CLAY, grayish brown, moist, low to medium plasticity, iron oxidation staining, laminated	
790	15	█		R-3	4 6 9	91	25		@15': Silty CLAY, stiff, olive brown, moist, low plasticity, very fine sand, slightly micaceous, laminated, iron oxidation staining	, SA
785	20	█		R-4	12 16 26	115	7	SM	@18.5': Silty SAND, medium dense, olive brown, moist, very fine to fine sand, low to no plasticity, little iron oxidation staining, trace pinhole pores	, SA
780	25								Total Depth: 20' bgs No groundwater encountered during drilling Temporary percolation well installed; screened from 15 - 20' bgs Upon completion of percolation testing, boring was backfilled with soil cuttings and patched with cold-mix asphalt	
775	30									

**SAMPLE TYPES:**

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

**TYPE OF TESTS:**

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH





**APPENDIX B**  
**PERCOLATION TEST DATA**

**Boring Percolation Test Data Sheet**

<b>Project Number:</b>	13493.001	<b>Test Hole Number:</b>	LP-1
<b>Project Name:</b>	Legacy - Collier	<b>Date Excavated:</b>	4/6/2022
<b>Earth Description:</b>	Alluvium	<b>Date Tested:</b>	4/7/2022
<b>Liquid Description:</b>	Tap water	<b>Depth of boring (ft):</b>	23.5
<b>Tested By:</b>	LFO/KD	<b>Radius of boring (in):</b>	4
<b><u>Time Interval Standard</u></b>		<b>Radius of casing (in):</b>	1
<b>Start Time for Pre-Soak:</b>	8:34	<b>Length of slotted of casing (ft):</b>	5
<b>Start Time for Standard:</b>	9:31	<b>Depth to Initial Water Depth (ft):</b>	16.9
<b>Standard Time Interval</b>	25	<b>Porosity of Annulus Material, <i>n</i>:</b>	0.35
<b>Between Readings, mins:</b>	10	<b>Bentonite Plug at Bottom:</b>	No

**Percolation Data**

Reading	Time	Time Interval, Δt (min.)	Initial/Final Depth to Water (ft.)	Initial/Final Water Height, H <sub>0</sub> /H <sub>f</sub> (in.)	Total Water Drop, Δd (in.)	Percolation Rate (min./in.)	Infiltration Rate (in./hr.)
1	8:34	25	16.93	78.8	8.2	3.06	0.20
	8:59		17.61	70.7			
2	9:04	25	16.99	78.1	7.4	3.36	0.18
	9:29		17.61	70.7			
3	9:31	10	16.94	78.7	5.9	1.70	0.35
	9:41		17.43	72.8			
4	9:43	10	17.00	78.0	5.0	1.98	0.30
	9:53		17.42	73.0			
5	9:55	10	17.00	78.0	5.3	1.89	0.32
	10:05		17.44	72.7			
6	10:06	10	17.00	78.0	5.3	1.89	0.32
	10:16		17.44	72.7			
7	10:18	10	17.00	78.0	5.4	1.85	0.33
	10:28		17.45	72.6			
8	10:30	10	17.00	78.0	5.3	1.89	0.32
	10:40		17.44	72.7			

Infiltration Rate (I) = Discharge Volume/Surface Area of Test Section/Time Interval

**Infiltration Rate, I (Last Reading) = 0.32 in./hr.**

**Boring Percolation Test Data Sheet**

<b>Project Number:</b>	13493.001	<b>Test Hole Number:</b>	LP-2
<b>Project Name:</b>	Legacy - Collier	<b>Date Excavated:</b>	4/6/2022
<b>Earth Description:</b>	Alluvium	<b>Date Tested:</b>	4/7/2022
<b>Liquid Description:</b>	Tap water	<b>Depth of boring (ft):</b>	20
<b>Tested By:</b>	LFO/KD	<b>Radius of boring (in):</b>	4
<b><u>Time Interval Standard</u></b>		<b>Radius of casing (in):</b>	1
<b>Start Time for Pre-Soak:</b>	7:25	<b>Length of slotted of casing (ft):</b>	5
<b>Start Time for Standard:</b>	8:27	<b>Depth to Initial Water Depth (ft):</b>	15.05
<b>Standard Time Interval</b>	25	<b>Porosity of Annulus Material, <i>n</i>:</b>	0.35
<b>Between Readings, mins:</b>	10	<b>Bentonite Plug at Bottom:</b>	No

**Percolation Data**

Reading	Time	Time Interval, Δt (min.)	Initial/Final Depth to Water (ft.)	Initial/Final Water Height, H <sub>0</sub> /H <sub>f</sub> (in.)	Total Water Drop, Δd (in.)	Percolation Rate (min./in.)	Infiltration Rate (in./hr.)
1	7:25	25	15.05	59.4	0.1	208.33	0.00
	7:50		15.06	59.3			
2	7:55	25	15.20	57.6	16.2	1.54	0.59
	8:20		16.55	41.4			
3	8:27	10	15.08	59.0	8.0	1.24	0.66
	8:37		15.75	51.0			
4	8:39	10	15.05	59.4	8.8	1.14	0.72
	8:49		15.78	50.6			
5	8:56	10	15.08	59.0	8.0	1.24	0.66
	9:06		15.75	51.0			
6	9:08	10	15.08	59.0	5.0	1.98	0.40
	9:18		15.50	54.0			
7	9:21	10	15.08	59.0	8.4	1.19	0.69
	9:31		15.78	50.6			
8	9:34	10	15.08	59.0	8.4	1.19	0.69
	9:44		15.78	50.6			

Infiltration Rate (I) = Discharge Volume/Surface Area of Test Section/Time Interval

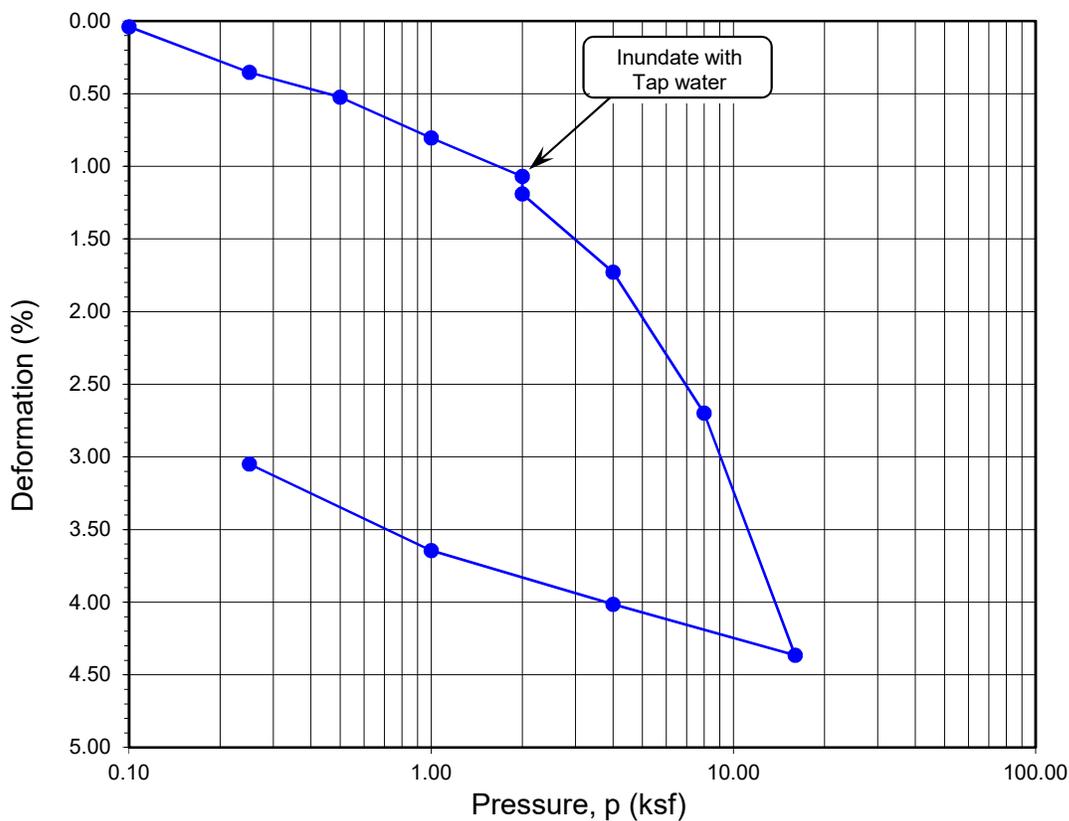
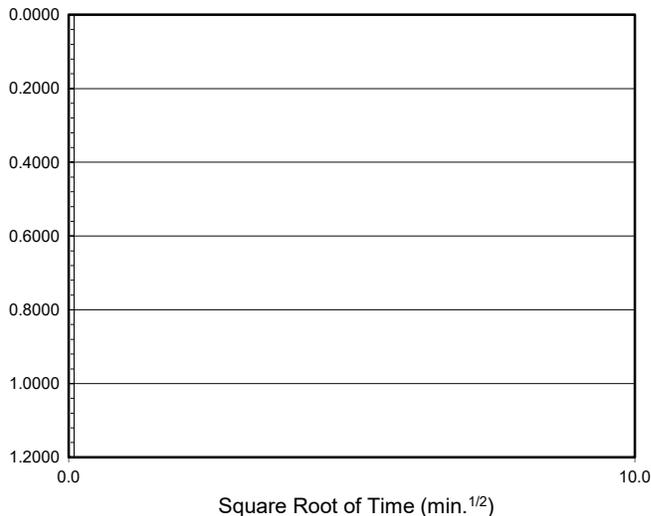
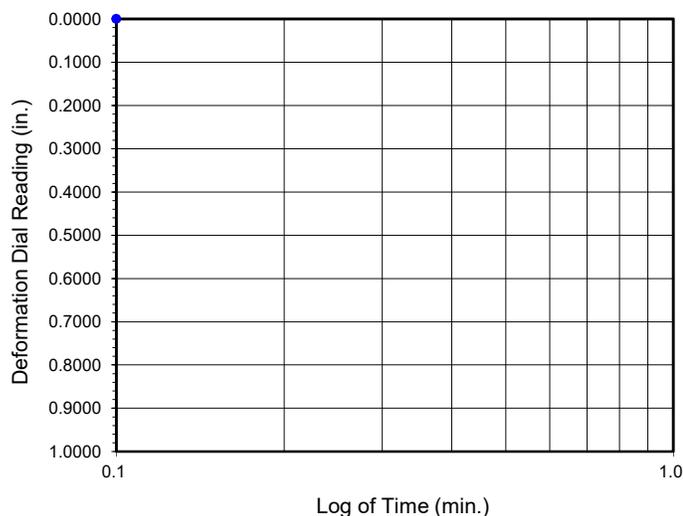
**Infiltration Rate, I (Last Reading) = 0.69 in./hr.**



**APPENDIX C**  
**LABORATORY TEST RESULTS**



Time Readings



Boring No.	Sample No.	Depth (ft.)	Moisture Content (%)		Dry Density (pcf)		Void Ratio		Degree of Saturation (%)	
			Initial	Final	Initial	Final	Initial	Final	Initial	Final
<b>LB-1</b>	<b>R-1</b>	<b>5</b>	<b>18.2</b>	<b>20.3</b>	<b>98.3</b>	<b>106.5</b>	<b>0.720</b>	<b>0.668</b>	<b>68</b>	<b>94</b>

Soil Identification: Olive silty clay (CL-ML)



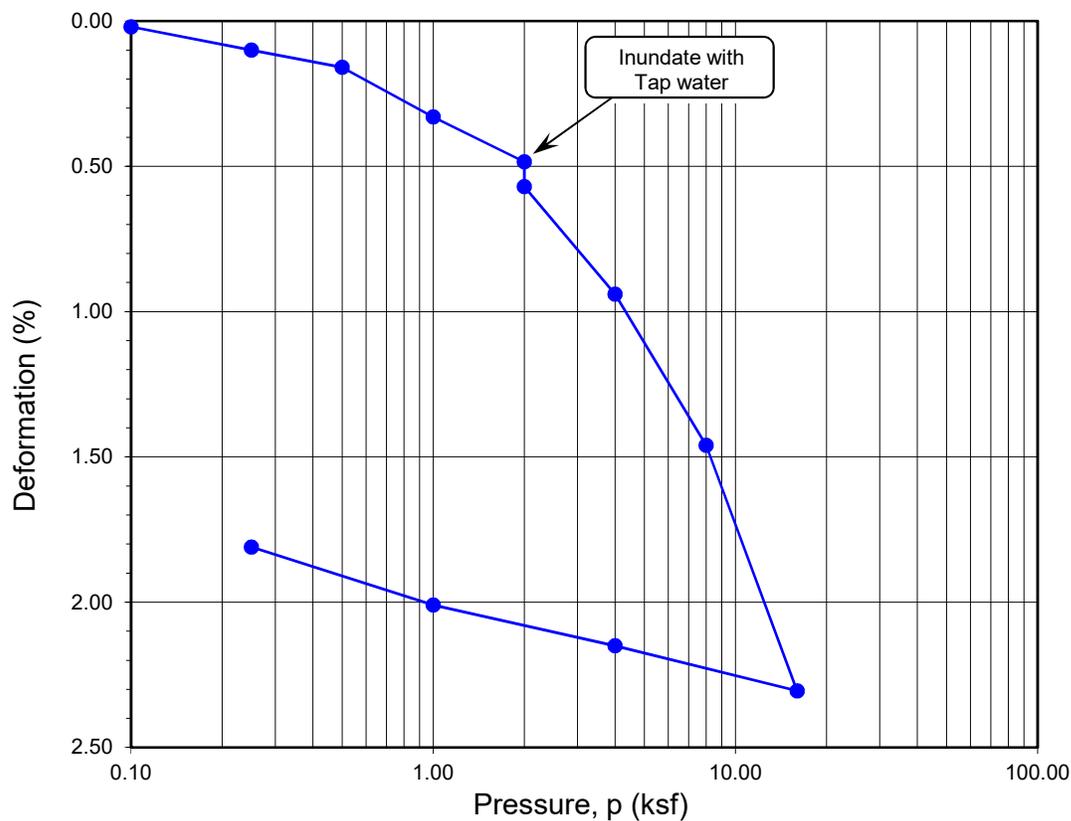
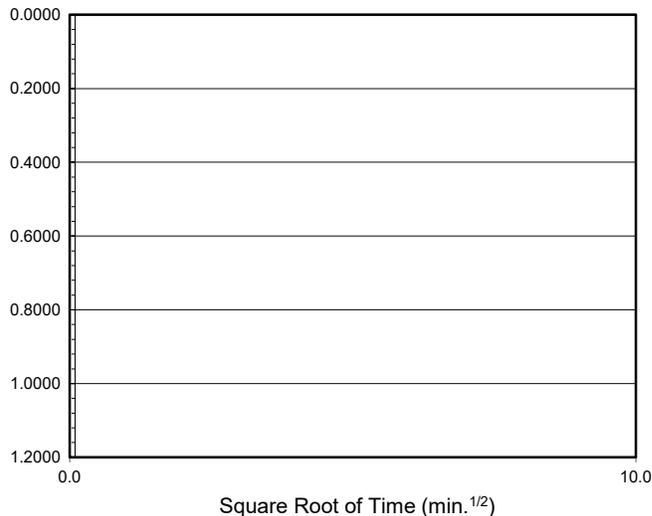
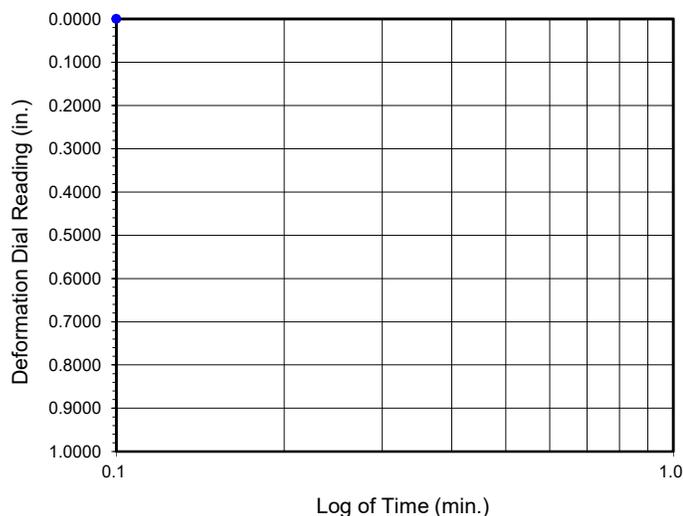
**ONE-DIMENSIONAL CONSOLIDATION  
PROPERTIES of SOILS**  
ASTM D 2435

Project No.: 13493.001  
Legacy-Collier, Proposed Euclid &  
Walnut Mixed-Use, Ontario CA

04-22



### Time Readings



Boring No.	Sample No.	Depth (ft.)	Moisture Content (%)		Dry Density (pcf)		Void Ratio		Degree of Saturation (%)	
			Initial	Final	Initial	Final	Initial	Final	Initial	Final
<b>LB-2</b>	<b>R-1</b>	<b>5</b>	<b>9.0</b>	<b>11.4</b>	<b>117.9</b>	<b>120.3</b>	<b>0.435</b>	<b>0.409</b>	<b>56</b>	<b>76</b>

Soil Identification: Olive gray silty, clayey sand (SC-SM)



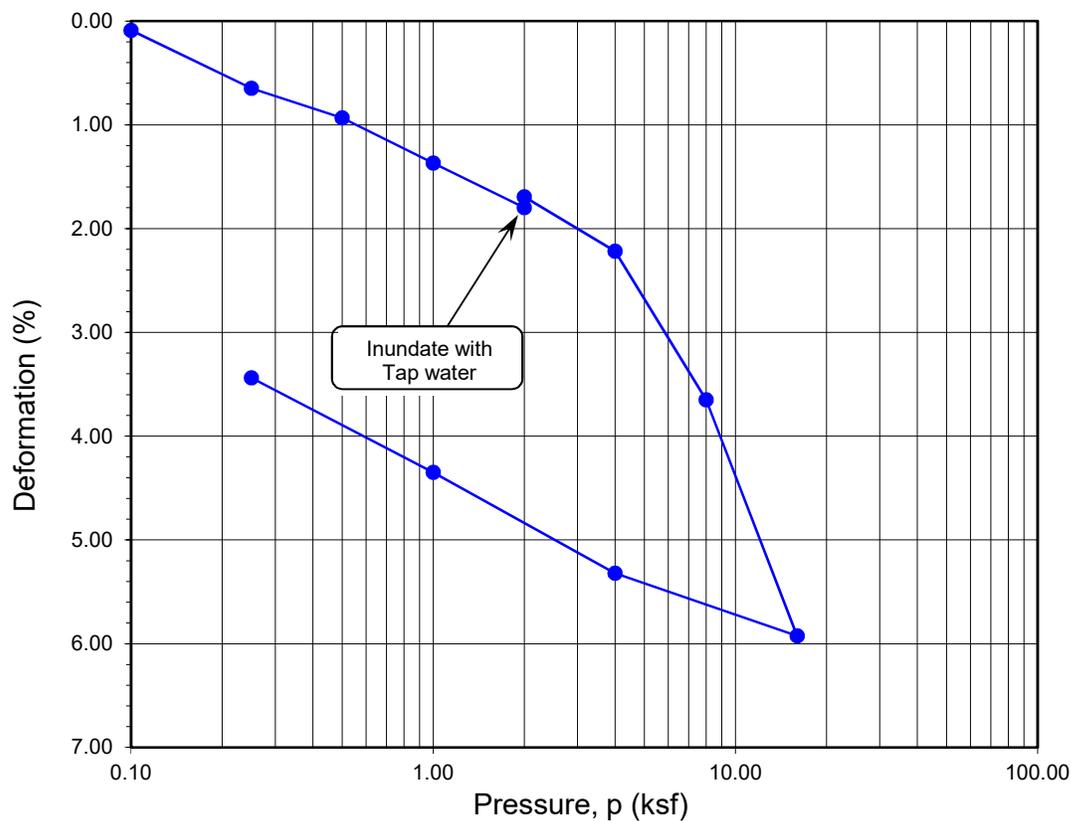
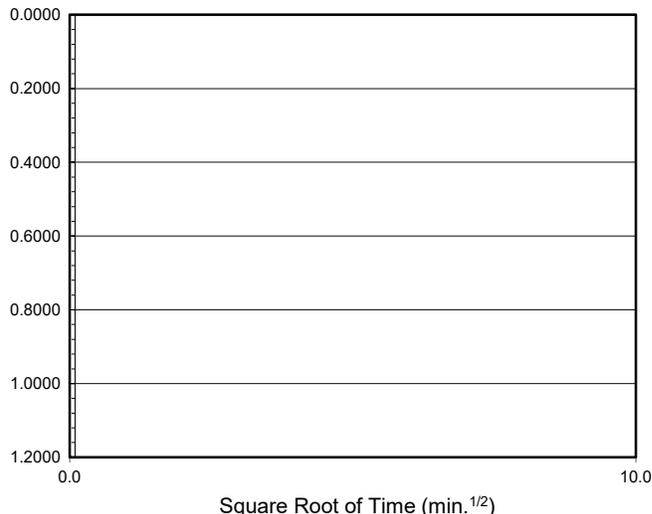
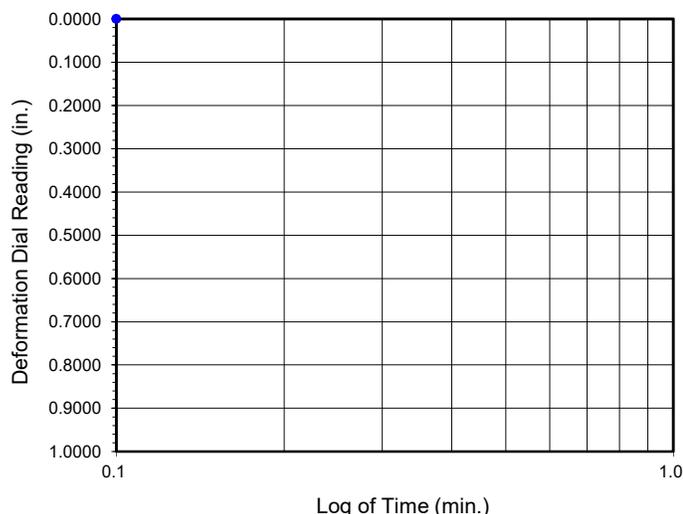
### ONE-DIMENSIONAL CONSOLIDATION PROPERTIES of SOILS ASTM D 2435

Project No.: 13493.001  
Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario CA

04-22



Time Readings



Boring No.	Sample No.	Depth (ft.)	Moisture Content (%)		Dry Density (pcf)		Void Ratio		Degree of Saturation (%)	
			Initial	Final	Initial	Final	Initial	Final	Initial	Final
<b>LB-2</b>	<b>R-3</b>	<b>10</b>	<b>30.7</b>	<b>26.5</b>	<b>93.9</b>	<b>99.6</b>	<b>0.855</b>	<b>0.791</b>	<b>100</b>	<b>99</b>

Soil Identification: Olive gray lean clay (CL)



**ONE-DIMENSIONAL CONSOLIDATION  
PROPERTIES of SOILS**  
ASTM D 2435

Project No.: 13493.001  
Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario CA

04-22



**TESTS for SULFATE CONTENT  
CHLORIDE CONTENT and pH of SOILS**

Legacy-Collier, Proposed Euclid & Walnut

Project Name: Mixed-Use, Ontario CA Tested By : G. Berdy Date: 04/13/22  
 Project No. : 13493.001 Checked By: A. Santos Date: 04/25/22

Boring No.	LB-3			
Sample No.	B-1			
Sample Depth (ft)	0-5			
Soil Identification:	Olive brown (SM)			
Wet Weight of Soil + Container (g)	168.20			
Dry Weight of Soil + Container (g)	168.07			
Weight of Container (g)	52.00			
Moisture Content (%)	0.11			
Weight of Soaked Soil (g)	100.19			

**SULFATE CONTENT, DOT California Test 417, Part II**

Beaker No.	8			
Crucible No.	3			
Furnace Temperature (°C)	860			
Time In / Time Out	7:15/8:00			
Duration of Combustion (min)	45			
Wt. of Crucible + Residue (g)	24.5192			
Wt. of Crucible (g)	24.5129			
Wt. of Residue (g) (A)	0.0063			
PPM of Sulfate (A) x 41150	259.25			
<b>PPM of Sulfate, Dry Weight Basis</b>	<b>260</b>			

**CHLORIDE CONTENT, DOT California Test 422**

ml of Extract For Titration (B)	15			
ml of AgNO3 Soln. Used in Titration (C)	0.4			
PPM of Chloride (C -0.2) * 100 * 30 / B	40			
<b>PPM of Chloride, Dry Wt. Basis</b>	<b>40</b>			

**pH TEST, DOT California Test 643**

<b>pH Value</b>	<b>7.92</b>			
<b>Temperature °C</b>	<b>20.3</b>			



## SOIL RESISTIVITY TEST

### DOT CA TEST 643

Project Name: Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario C Tested By : G. Berdy Date: 04/19/22  
 Project No. : 13493.001 Checked By: A. Santos Date: 04/25/22  
 Boring No.: LB-3 Depth (ft.) : 0-5  
 Sample No. : B-1

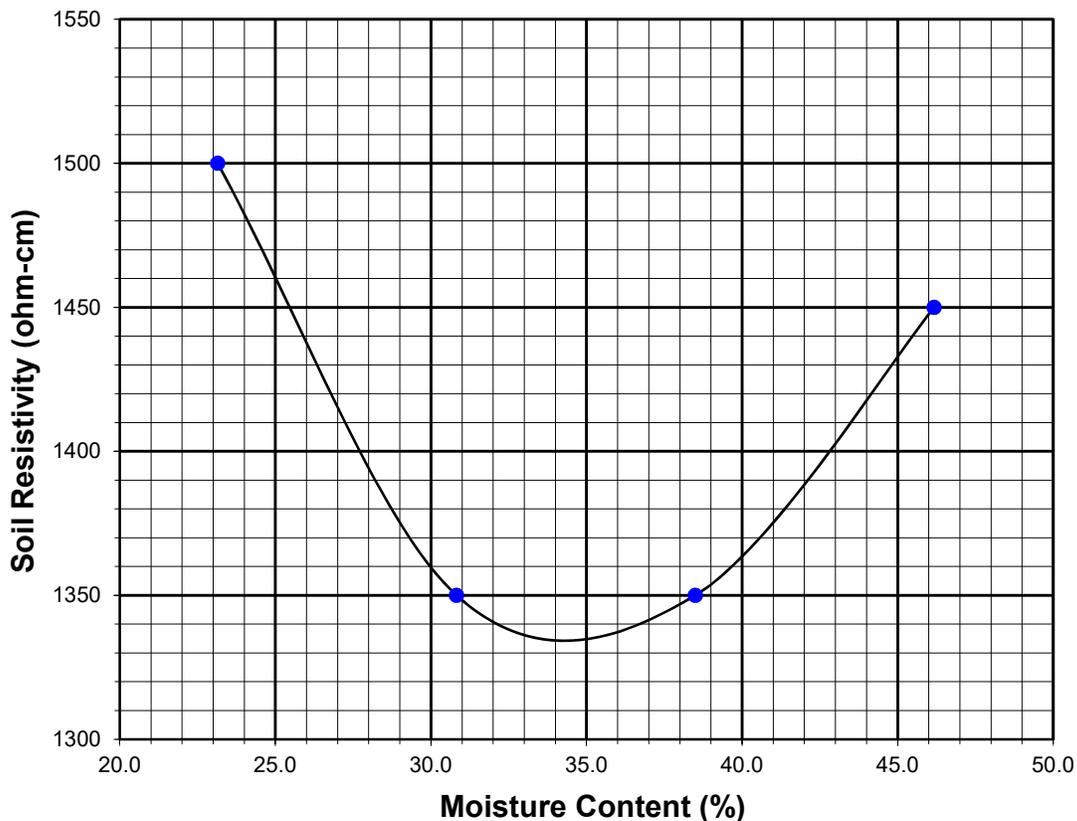
Soil Identification:\* Olive brown (SM)

\*California Test 643 requires soil specimens to consist only of portions of samples passing through the No. 8 US Standard Sieve before resistivity testing. Therefore, this test method may not be representative for coarser materials.

Specimen No.	Water Added (ml) (Wa)	Adjusted Moisture Content (MC)	Resistance Reading (ohm)	Soil Resistivity (ohm-cm)
1	30	23.14	1500	1500
2	40	30.82	1350	1350
3	50	38.50	1350	1350
4	60	46.18	1450	1450
5				

Moisture Content (%) (Mci)	0.11
Wet Wt. of Soil + Cont. (g)	168.20
Dry Wt. of Soil + Cont. (g)	168.07
Wt. of Container (g)	52.00
Container No.	
Initial Soil Wt. (g) (Wt)	130.40
Box Constant	1.000
$MC = (((1 + Mci / 100) \times (Wa / Wt + 1)) - 1) \times 100$	

Min. Resistivity (ohm-cm)	Moisture Content (%)	Sulfate Content (ppm)	Chloride Content (ppm)	Soil pH	
				pH	Temp. (°C)
DOT CA Test 643		DOT CA Test 417 Part II		DOT CA Test 643	
<b>1335</b>	<b>34.4</b>	<b>260</b>	<b>40</b>	<b>7.92</b>	<b>20.3</b>





**DIRECT SHEAR TEST**  
Consolidated Drained - ASTM D 3080

Project Name: Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario CA      Tested By: G. Bathala      Date: 04/18/22  
 Project No.: 13493.001      Checked By: A. Santos      Date: 04/25/22  
 Boring No.: LB-2      Sample Type: 90% Remold  
 Sample No.: B-1      Depth (ft.): 0-5  
 Soil Identification: Olive brown sandy silt s(ML)

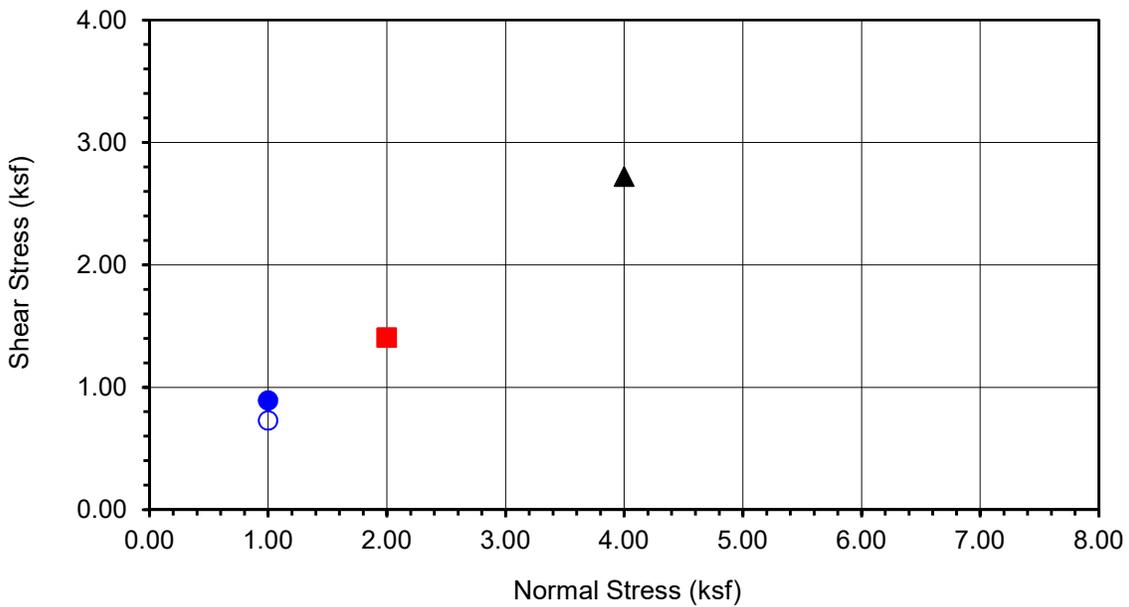
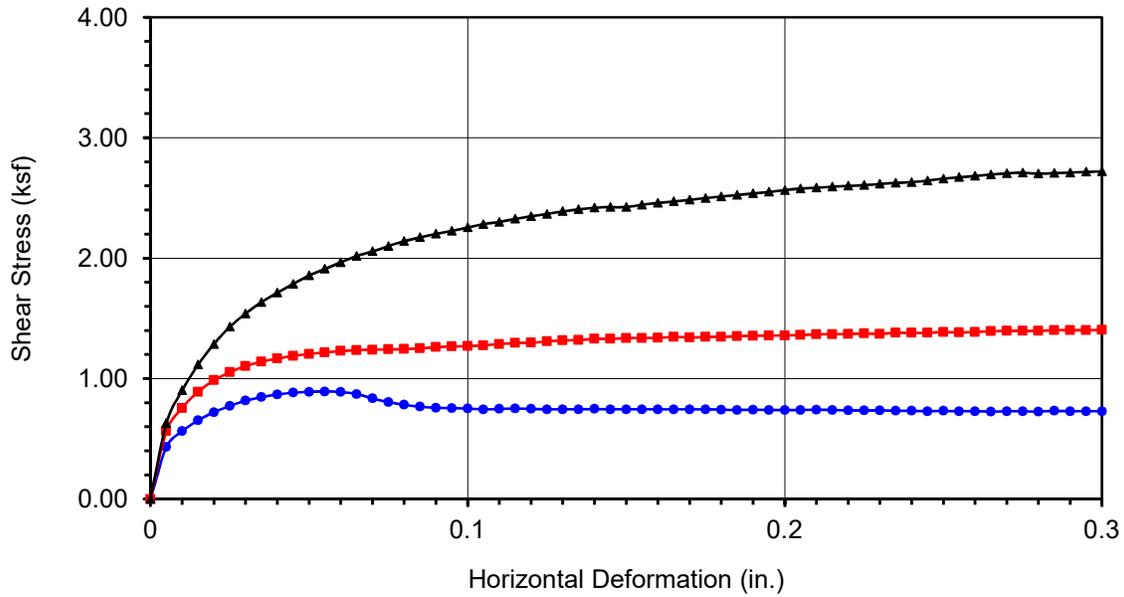
Sample Diameter(in):	2.415	2.415	2.415
Sample Thickness(in.):	1.000	1.000	1.000
Weight of Sample + ring(gm):	197.98	198.21	198.62
Weight of Ring(gm):	45.38	45.43	45.60

**Before Shearing**

Weight of Wet Sample+Cont.(gm):	169.35	169.35	169.35
Weight of Dry Sample+Cont.(gm):	155.92	155.92	155.92
Weight of Container(gm):	56.15	56.15	56.15
Vertical Rdg.(in): Initial	0.2545	0.2729	0.0000
Vertical Rdg.(in): Final	0.2651	0.2858	-0.0224

**After Shearing**

Weight of Wet Sample+Cont.(gm):	211.09	212.06	191.55
Weight of Dry Sample+Cont.(gm):	190.82	191.76	171.67
Weight of Container(gm):	58.12	58.19	38.35
Specific Gravity (Assumed):	2.70	2.70	2.70
Water Density(pcf):	62.43	62.43	62.43



<b>Boring No.</b>	<b>LB-2</b>
<b>Sample No.</b>	<b>B-1</b>
<b>Depth (ft)</b>	<b>0-5</b>
<u>Sample Type:</u>	
90% Remold	
<u>Soil Identification:</u>	
Olive brown sandy silt s(ML)	

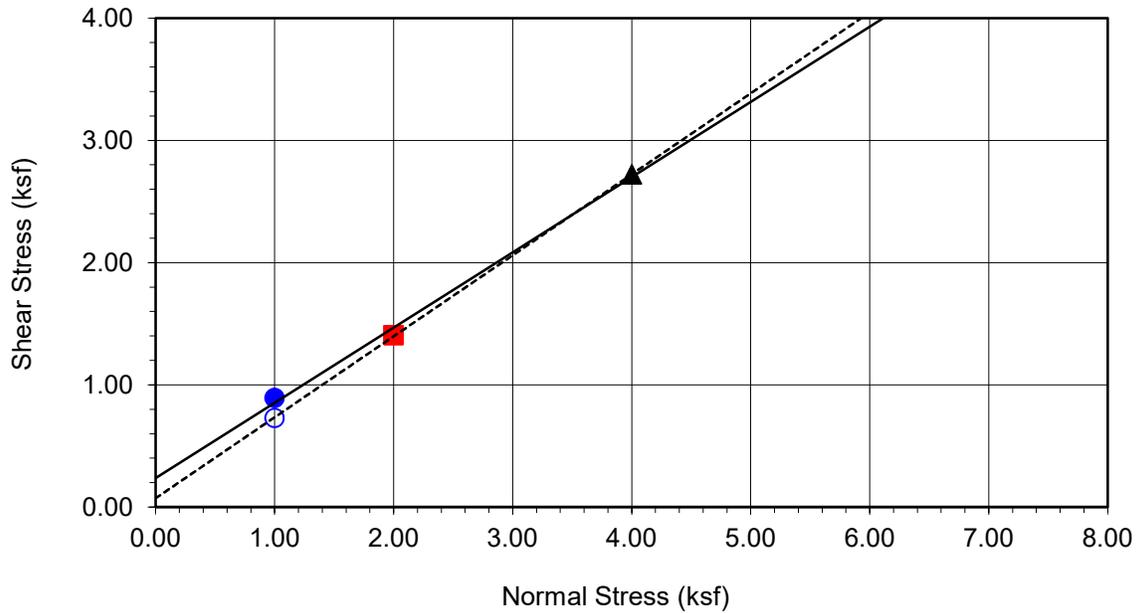
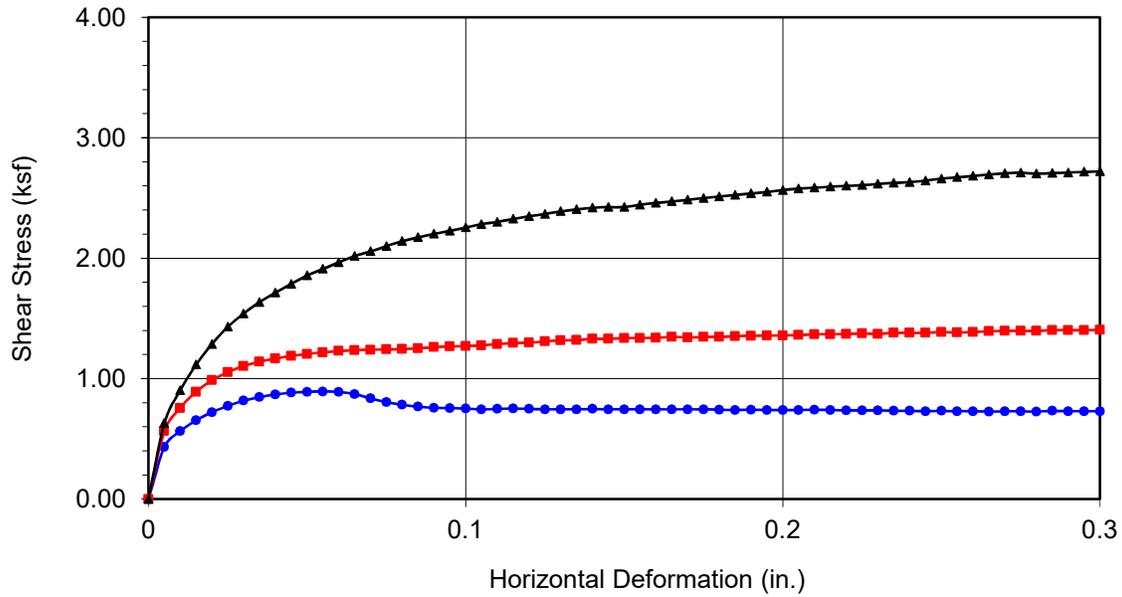
Normal Stress (kip/ft <sup>2</sup> )	1.000	2.000	4.000
Peak Shear Stress (kip/ft <sup>2</sup> )	● 0.893	■ 1.405	▲ 2.719
Shear Stress @ End of Test (ksf)	○ 0.729	□ 1.405	△ 2.719
Deformation Rate (in./min.)	0.0017	0.0017	0.0017
Initial Sample Height (in.)	1.000	1.000	1.000
Diameter (in.)	2.415	2.415	2.415
Initial Moisture Content (%)	13.46	13.46	13.46
Dry Density (pcf)	111.9	112.0	112.2
Saturation (%)	71.7	71.9	72.3
Soil Height Before Shearing (in.)	0.9894	0.9871	0.9776
Final Moisture Content (%)	15.3	15.2	14.9



**DIRECT SHEAR TEST RESULTS**  
Consolidated Drained - ASTM D 3080

Project No.: 13493.001  
Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario CA

04-22



<b>Boring No.</b>	<b>LB-2</b>	
<b>Sample No.</b>	<b>B-1</b>	
<b>Depth (ft)</b>	<b>0-5</b>	
Sample Type: 90% Remold		
Soil Identification: Olive brown sandy silt s(ML)		
<b>Strength Parameters</b>		
	C (psf)	$\phi$ (°)
Peak	236	32
Ultimate	72	34

Normal Stress (kip/ft <sup>2</sup> )	1.000	2.000	4.000
Peak Shear Stress (kip/ft <sup>2</sup> )	● 0.893	■ 1.405	▲ 2.719
Shear Stress @ End of Test (ksf)	○ 0.729	□ 1.405	△ 2.719
Deformation Rate (in./min.)	0.0017	0.0017	0.0017
Initial Sample Height (in.)	1.000	1.000	1.000
Diameter (in.)	2.415	2.415	2.415
Initial Moisture Content (%)	13.46	13.46	13.46
Dry Density (pcf)	111.9	112.0	112.2
Saturation (%)	71.7	71.9	72.3
Soil Height Before Shearing (in.)	0.9894	0.9871	0.9776
Final Moisture Content (%)	15.3	15.2	14.9



**DIRECT SHEAR TEST RESULTS**  
Consolidated Drained - ASTM D 3080

Project No.: 13493.001  
Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario CA

04-22



**DIRECT SHEAR TEST**  
Consolidated Drained - ASTM D 3080

Project Name: Legacy-Collier, Proposed Euclid &

Project No.: Walnut Mixed-Use, Ontario CA

Boring No.: 13493.001

Sample No.: LB-3

Soil Identification: R-2

Olive silty sand (SM)

Tested By: G. Bathala

Checked By: A. Santos

Sample Type: Ring

Depth (ft.): 7.5

Date: 04/19/22

Date: 04/25/22

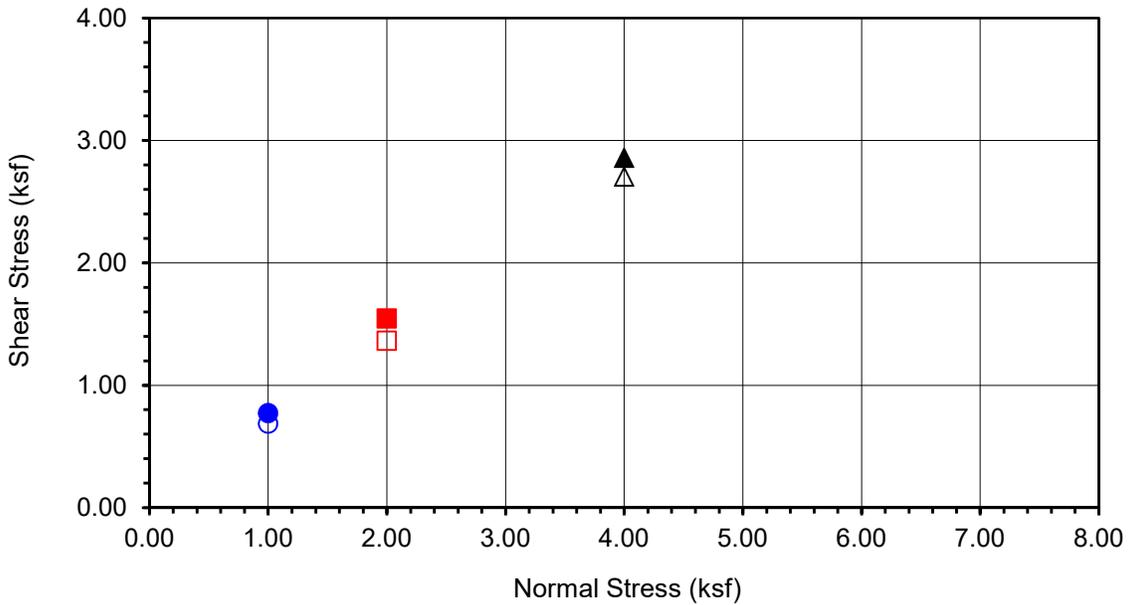
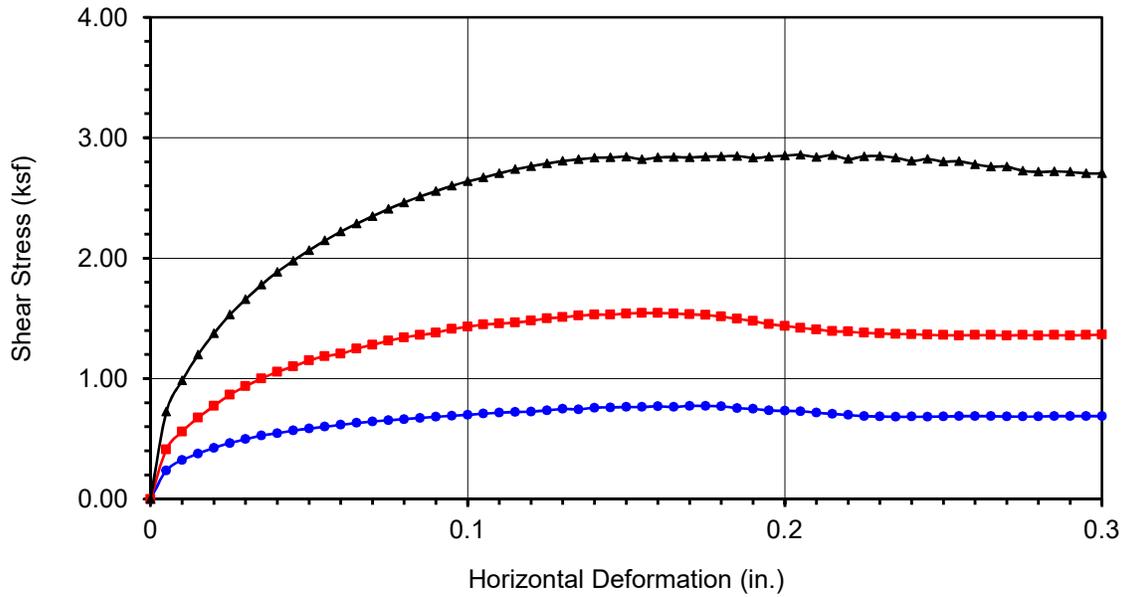
Sample Diameter(in):	2.415	2.415	2.415
Sample Thickness(in.):	1.000	1.000	1.000
Weight of Sample + ring(gm):	177.41	181.99	182.19
Weight of Ring(gm):	43.72	45.58	45.95

**Before Shearing**

Weight of Wet Sample+Cont.(gm):	182.62	182.62	182.62
Weight of Dry Sample+Cont.(gm):	178.05	178.05	178.05
Weight of Container(gm):	58.18	58.18	58.18
Vertical Rdg.(in): Initial	0.0000	0.2562	0.2637
Vertical Rdg.(in): Final	-0.0126	0.2707	0.2918

**After Shearing**

Weight of Wet Sample+Cont.(gm):	208.16	204.29	212.34
Weight of Dry Sample+Cont.(gm):	188.26	184.44	192.59
Weight of Container(gm):	66.34	58.11	67.16
Specific Gravity (Assumed):	2.70	2.70	2.70
Water Density(pcf):	62.43	62.43	62.43



<b>Boring No.</b>	<b>LB-3</b>
<b>Sample No.</b>	<b>R-2</b>
<b>Depth (ft)</b>	<b>7.5</b>
<u>Sample Type:</u>	
Ring	
<u>Soil Identification:</u>	
Olive silty sand (SM)	

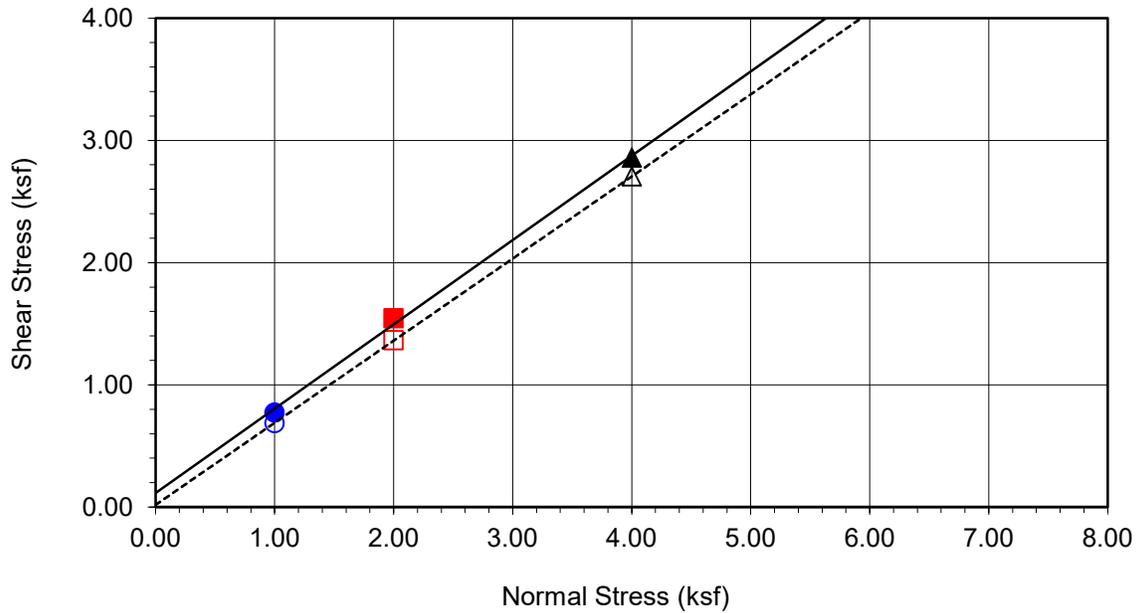
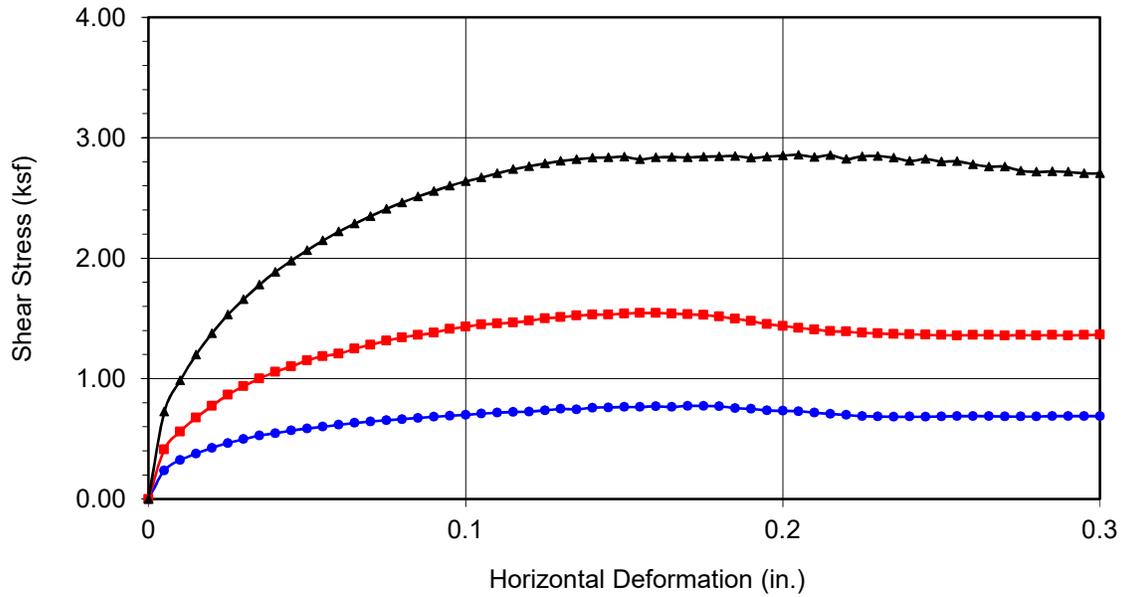
Normal Stress (kip/ft <sup>2</sup> )	1.000	2.000	4.000
Peak Shear Stress (kip/ft <sup>2</sup> )	● 0.773	■ 1.544	▲ 2.858
Shear Stress @ End of Test (ksf)	○ 0.688	□ 1.364	△ 2.704
Deformation Rate (in./min.)	0.0033	0.0033	0.0033
Initial Sample Height (in.)	1.000	1.000	1.000
Diameter (in.)	2.415	2.415	2.415
Initial Moisture Content (%)	3.81	3.81	3.81
Dry Density (pcf)	107.1	109.3	109.1
Saturation (%)	17.9	19.0	18.9
Soil Height Before Shearing (in.)	0.9874	0.9855	0.9719
Final Moisture Content (%)	16.3	15.7	15.7



**DIRECT SHEAR TEST RESULTS**  
Consolidated Drained - ASTM D 3080

Project No.: 13493.001  
Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario CA

04-22



<b>Boring No.</b>	<b>LB-3</b>	
<b>Sample No.</b>	<b>R-2</b>	
<b>Depth (ft)</b>	<b>7.5</b>	
<b>Sample Type:</b>	Ring	
<b>Soil Identification:</b> Olive silty sand (SM)		
<b>Strength Parameters</b>		
	C (psf)	$\phi$ (°)
Peak	116	35
Ultimate	18	34

Normal Stress (kip/ft <sup>2</sup> )	1.000	2.000	4.000
Peak Shear Stress (kip/ft <sup>2</sup> )	● 0.773	■ 1.544	▲ 2.858
Shear Stress @ End of Test (ksf)	○ 0.688	□ 1.364	△ 2.704
Deformation Rate (in./min.)	0.0033	0.0033	0.0033
Initial Sample Height (in.)	1.000	1.000	1.000
Diameter (in.)	2.415	2.415	2.415
Initial Moisture Content (%)	3.81	3.81	3.81
Dry Density (pcf)	107.1	109.3	109.1
Saturation (%)	17.9	19.0	18.9
Soil Height Before Shearing (in.)	0.9874	0.9855	0.9719
Final Moisture Content (%)	16.3	15.7	15.7



**DIRECT SHEAR TEST RESULTS**  
Consolidated Drained - ASTM D 3080

Project No.: 13493.001  
Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario CA

04-22



**EXPANSION INDEX of SOILS**  
ASTM D 4829

Project Name: Legacy-Collier, Proposed Euclid & Walnut  
Mixed-Use, Ontario CA Tested By: G. Berdy Date: 04/13/22  
 Project No.: 13493.001 Checked By: A. Santos Date: 04/25/22  
 Boring No.: LB-1 Depth (ft.): 0-5  
 Sample No.: B-1  
 Soil Identification: Olive brown sandy silt s(ML)

Dry Wt. of Soil + Cont.	(g)	1000.00
Wt. of Container No.	(g)	0.00
Dry Wt. of Soil	(g)	1000.00
Weight Soil Retained on #4 Sieve		0.00
Percent Passing # 4		100.00

MOLDED SPECIMEN	Before Test	After Test
Specimen Diameter (in.)	4.01	4.01
Specimen Height (in.)	1.0000	1.0175
Wt. Comp. Soil + Mold (g)	609.40	443.20
Wt. of Mold (g)	202.10	0.00
Specific Gravity (Assumed)	2.70	2.70
Container No.	0	0
Wet Wt. of Soil + Cont. (g)	819.60	645.30
Dry Wt. of Soil + Cont. (g)	751.90	575.77
Wt. of Container (g)	0.00	202.10
Moisture Content (%)	9.00	18.61
Wet Density (pcf)	122.9	131.4
Dry Density (pcf)	112.7	110.8
Void Ratio	0.496	0.522
Total Porosity	0.331	0.343
Pore Volume (cc)	68.6	72.2
Degree of Saturation (%) [ S <sub>meas</sub> ]	<b>49.0</b>	96.3

**SPECIMEN INUNDATION** in distilled water for the period of 24 h or expansion rate < 0.0002 in./h

Date	Time	Pressure (psi)	Elapsed Time (min.)	Dial Readings (in.)
04/13/22	11:12	1.0	0	0.5855
04/13/22	11:22	1.0	10	0.5855
Add Distilled Water to the Specimen				
04/13/22	11:59	1.0	37	0.6000
04/14/22	5:42	1.0	1100	0.6030
04/14/22	9:53	1.0	1351	0.6030

Expansion Index (EI <sub>meas</sub> ) = ((Final Rdg - Initial Rdg) / Initial Thick.) x 1000	<b>18</b>
---------------------------------------------------------------------------------------------	-----------

Borehole	Depth	Liquid Limit	Plastic Limit	Plasticity Index	Maximum Size (mm)	%<#200 Sieve	Classification	Water Content (%)	Dry Density (pcf)	Saturation (%)	Void Ratio
LB-1	7.5							9.3	94.6		
LB-1	10.0							31.0	88.6		
LB-1	15.0							15.7	111.5		
LB-1	20.0							12.2	120.1		
LB-1	30.0							3.6			
LB-1	40.0							4.4			
LB-1	45.0							2.0	114.9		
LB-1	50.0							3.2			
LB-2	7.5							3.0	101.4		
LB-2	15.0							4.0	102.8		
LB-2	20.0							15.7	111.9		
LB-2	25.0							10.4	108.4		
LB-3	5.0							7.7	110.6		
LB-3	10.0							26.3	90.1		
LB-3	15.0							35.1	87.0		
LB-3	20.0							12.5	121.7		
LB-3	25.0							13.9	113.8		
LP-1	15.0							5.0	104.3		
LP-1	18.5							12.4	119.3		
LP-2	15.0							25.4	91.0		
LP-2	18.5							7.3	115.0		

US LAB SUMMARY 13493.001 BORING LOGS.GPJ ROCKLOG2012.GDT 5/4/22



**Summary of Laboratory Results**

Project Name: Legacy-Collier, Proposed Residential Development

Project Number: 13493.001

Date: 5/4/2022 11:49:57 AM

Figure No. 1



# MODIFIED PROCTOR COMPACTION TEST

ASTM D 1557

Project Name: Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario CA Tested By: J. Gonzalez Date: 04/12/22  
 Project No.: 13493.001 Checked By: A. Santos Date: 04/13/22  
 Boring No.: LB-2 Depth (ft.): 0-5  
 Sample No.: B-1  
 Soil Identification: Olive brown sandy silt s(ML)

Preparation Method:  Moist  Mechanical Ram  
 Dry  Manual Ram  
**Mold Volume (ft<sup>3</sup>)** 0.03330 *Ram Weight = 10 lb.; Drop = 18 in.*

TEST NO.	1	2	3	4	5	6
Wt. Compacted Soil + Mold (g)	3861	3920	3880			
Weight of Mold (g)	1826	1826	1826			
Net Weight of Soil (g)	2035	2094	2054			
Wet Weight of Soil + Cont. (g)	462.6	478.9	498.0			
Dry Weight of Soil + Cont. (g)	423.8	429.5	437.3			
Weight of Container (g)	37.9	36.3	39.6			
Moisture Content (%)	10.05	12.56	15.26			
Wet Density (pcf)	134.7	138.6	136.0			
Dry Density (pcf)	122.4	123.2	118.0			

**Maximum Dry Density (pcf)** 123.5 **Optimum Moisture Content (%)** 11.5

### PROCEDURE USED

**Procedure A**  
 Soil Passing No. 4 (4.75 mm) Sieve  
 Mold : 4 in. (101.6 mm) diameter  
 Layers : 5 (Five)  
 Blows per layer : 25 (twenty-five)  
 May be used if + #4 is 20% or less

**Procedure B**  
 Soil Passing 3/8 in. (9.5 mm) Sieve  
 Mold : 4 in. (101.6 mm) diameter  
 Layers : 5 (Five)  
 Blows per layer : 25 (twenty-five)  
 Use if + #4 is >20% and +3/8 in. is 20% or less

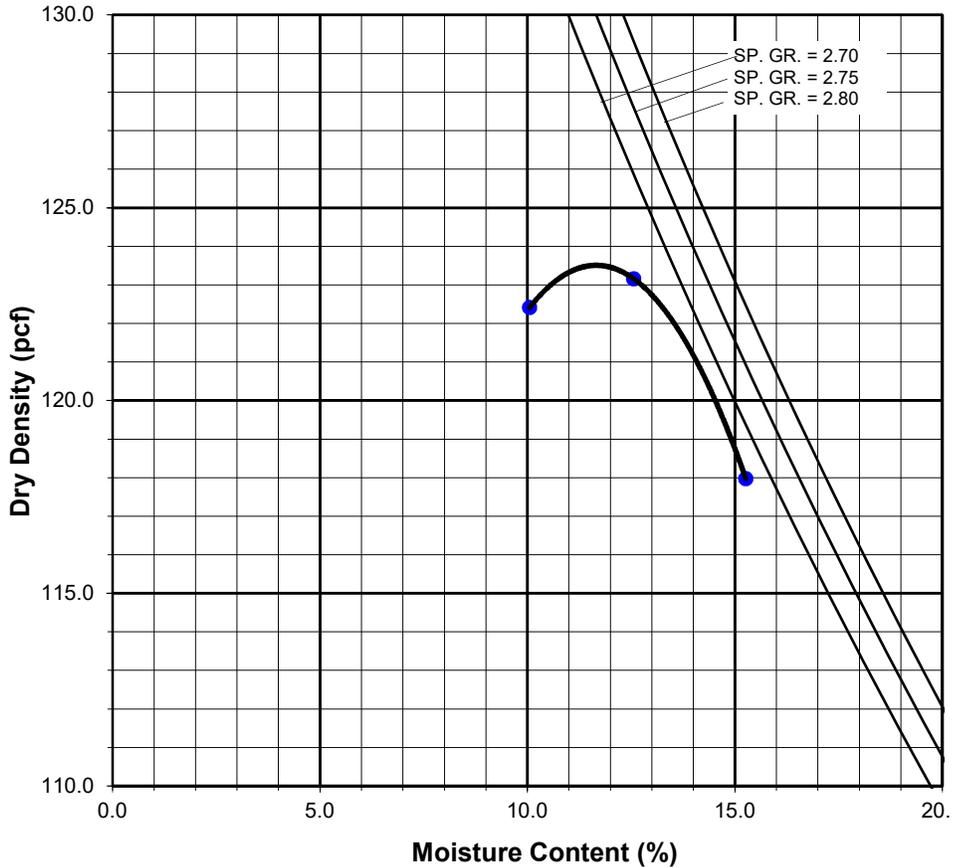
**Procedure C**  
 Soil Passing 3/4 in. (19.0 mm) Sieve  
 Mold : 6 in. (152.4 mm) diameter  
 Layers : 5 (Five)  
 Blows per layer : 56 (fifty-six)  
 Use if +3/8 in. is >20% and +3/4 in. is <30%

### Particle-Size Distribution:

GR:SA:FI

### Atterberg Limits:

LL,PL,PI





# MODIFIED PROCTOR COMPACTION TEST

ASTM D 1557

Project Name: Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario CA Tested By: J. Gonzalez Date: 04/13/22  
 Project No.: 13493.001 Checked By: A. Santos Date: 04/25/22  
 Boring No.: LB-3 Depth (ft.): 0-5  
 Sample No.: B-1  
 Soil Identification: Olive brown silty sand (SM)

Preparation Method:  Moist  Mechanical Ram  
 Dry  Manual Ram  
**Mold Volume (ft<sup>3</sup>)** 0.03330 *Ram Weight = 10 lb.; Drop = 18 in.*

TEST NO.	1	2	3	4	5	6
Wt. Compacted Soil + Mold (g)	3839	3913	3850			
Weight of Mold (g)	1826	1826	1826			
Net Weight of Soil (g)	2013	2087	2024			
Wet Weight of Soil + Cont. (g)	499.8	520.0	518.3			
Dry Weight of Soil + Cont. (g)	469.3	477.3	466.0			
Weight of Container (g)	41.0	39.1	37.8			
Moisture Content (%)	7.12	9.74	12.21			
Wet Density (pcf)	133.3	138.2	134.0			
Dry Density (pcf)	124.4	125.9	119.4			

**Maximum Dry Density (pcf)** 126.4 **Optimum Moisture Content (%)** 9.0

### PROCEDURE USED

**Procedure A**  
 Soil Passing No. 4 (4.75 mm) Sieve  
 Mold : 4 in. (101.6 mm) diameter  
 Layers : 5 (Five)  
 Blows per layer : 25 (twenty-five)  
 May be used if + #4 is 20% or less

**Procedure B**  
 Soil Passing 3/8 in. (9.5 mm) Sieve  
 Mold : 4 in. (101.6 mm) diameter  
 Layers : 5 (Five)  
 Blows per layer : 25 (twenty-five)  
 Use if + #4 is >20% and +3/8 in. is 20% or less

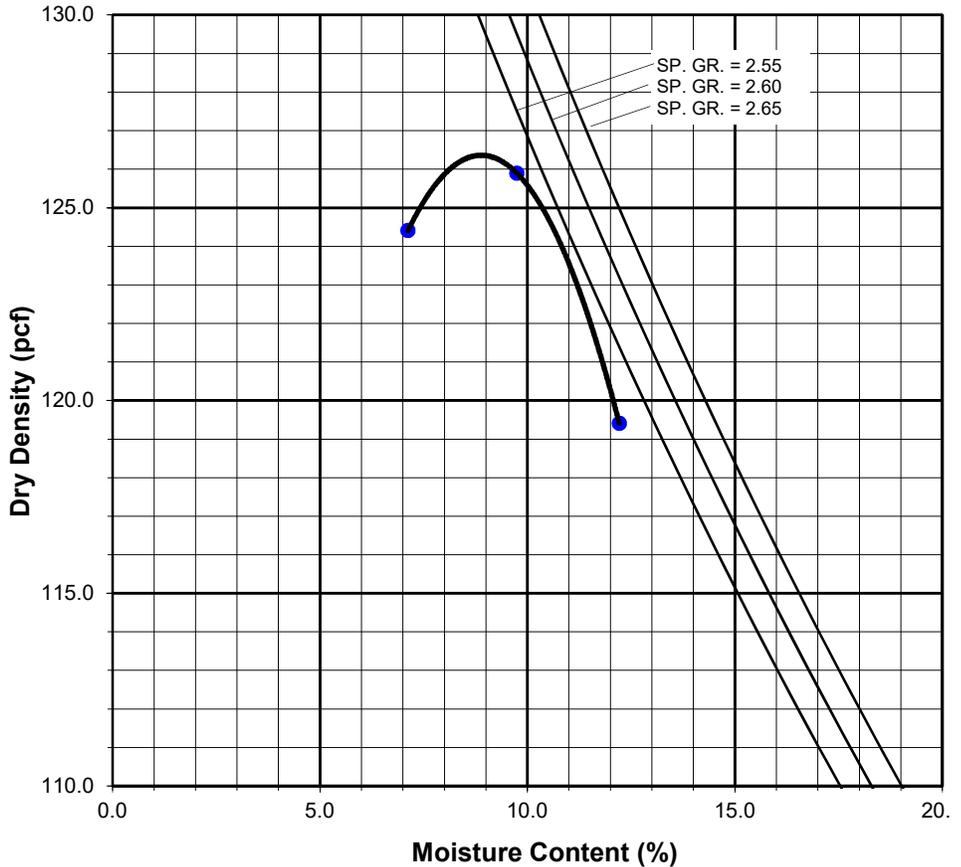
**Procedure C**  
 Soil Passing 3/4 in. (19.0 mm) Sieve  
 Mold : 6 in. (152.4 mm) diameter  
 Layers : 5 (Five)  
 Blows per layer : 56 (fifty-six)  
 Use if +3/8 in. is >20% and +3/4 in. is <30%

### Particle-Size Distribution:

GR:SA:FI

### Atterberg Limits:

LL, PL, PI





## ATTERBERG LIMITS ASTM D 4318

Project Name: Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Onratio CA      Tested By: J. Domingo      Date: 04/22/22  
 Project No. : 13493.001      Input By: G. Bathala      Date: 04/25/22  
 Boring No.: LB-2      Checked By: A. Santos  
 Sample No.: R-3      Depth (ft.) 10.0  
 Soil Identification: Olive gray lean clay (CL)

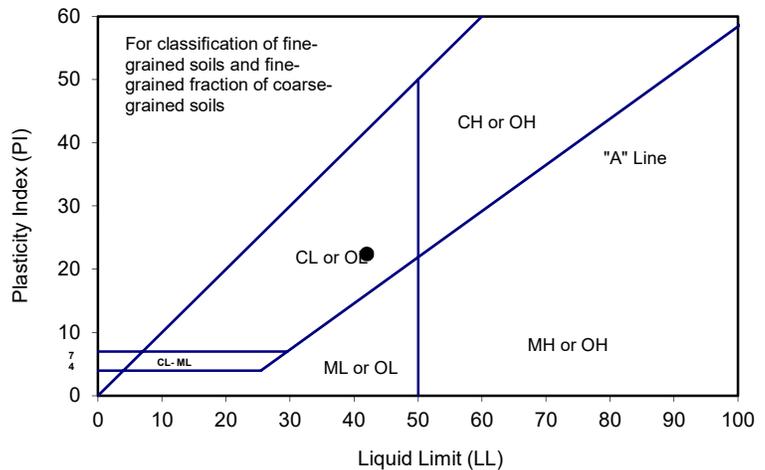
TEST NO.	PLASTIC LIMIT		LIQUID LIMIT			
	1	2	1	2	3	4
Number of Blows [N]			26	21	16	
Wet Wt. of Soil + Cont. (g)	8.64	8.87	20.09	21.49	20.68	
Dry Wt. of Soil + Cont. (g)	7.38	7.61	14.48	15.38	14.70	
Wt. of Container (g)	1.06	1.07	1.11	1.03	1.00	
Moisture Content (%) [W <sub>n</sub> ]	19.94	19.27	41.96	42.58	43.65	

<b>Liquid Limit</b>	<b>42</b>
<b>Plastic Limit</b>	<b>20</b>
<b>Plasticity Index</b>	<b>22</b>
<b>Classification</b>	<b>CL</b>

PI at "A" - Line =  $0.73(LL-20)$  16.06

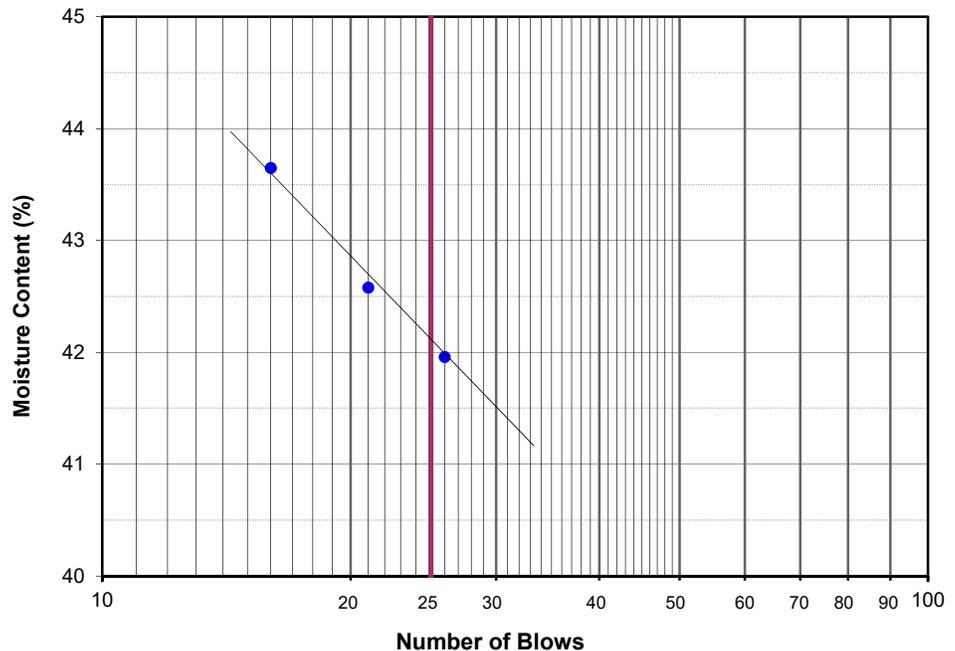
One - Point Liquid Limit Calculation

$$LL = W_n(N/25)^{0.121}$$



### PROCEDURES USED

- Wet Preparation  
Multipoint - Wet
- Dry Preparation  
Multipoint - Dry
- Procedure A  
Multipoint Test
- Procedure B  
One-point Test



Project Name: Legacy-Collier, Proposed Euclid &  
Walnut Mixed-Use, Ontario CA  
Project No.: 13493.001

Summary of Pocket Penetrometer Test Results

Tested by: S. Felter Date: 04/19/22  
Prepared by: G. Bathala Date: 04/22/22

Boring No.	Sample No.	Depth (ft.)	Readings	Remarks
LB-1	R-2	7.5	2.50	
	R-3	10	>4.50	
	R-4	15	4.25	
	R-5	20	>4.50	
	R-10	45	3.50	
LB-2	R-2	7.5	1.75	
	R-4	15	3.75	
	R-5	20	3.50	
	R-6	25	>4.50	
LB-3	R-1	5	>4.50	
	R-3	10	>4.50	
	R-4	15	4.25	
	R-5	20	4.50	
	R-6	25	>4.50	
LP-1	R-3	15	2.75	
	R-4	18.5	>4.50	
LP-2	R-3	15	>4.50	
	R-4	18.5	>4.50	

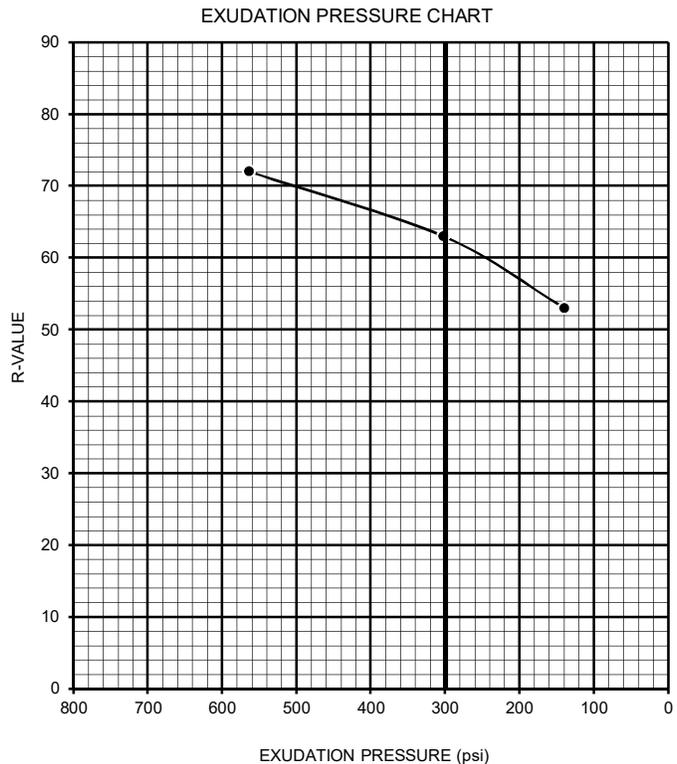
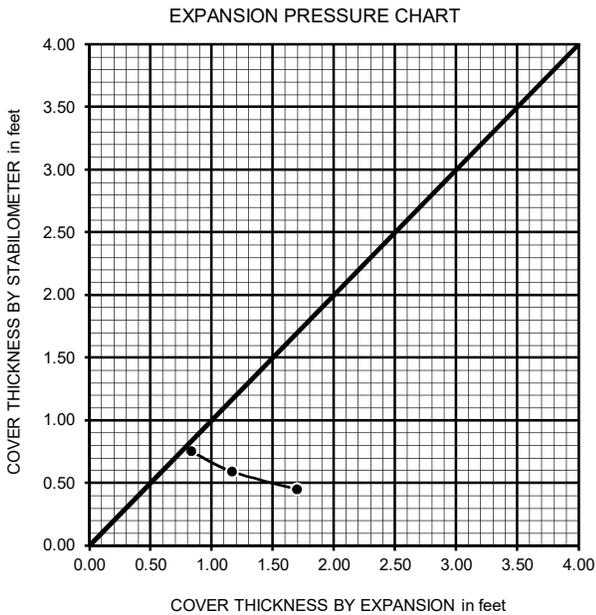


## R-VALUE TEST RESULTS DOT CA Test 301

PROJECT NAME:	Legacy-Collier, Proposed Euclid & Walnut Mixed-Use Ontario CA	PROJECT NUMBER:	13493.001
BORING NUMBER:	LB-1	DEPTH (FT.):	0-5
SAMPLE NUMBER:	B-1	TECHNICIAN:	O. Figueroa
SAMPLE DESCRIPTION:	Olive brown sandy silt s(ML)	DATE COMPLETED:	4/13/2022

TEST SPECIMEN	a	b	c
MOISTURE AT COMPACTION %	12.7	13.7	14.6
HEIGHT OF SAMPLE, Inches	2.45	2.50	2.53
DRY DENSITY, pcf	120.2	118.7	116.2
COMPACTOR PRESSURE, psi	325	250	150
EXUDATION PRESSURE, psi	564	302	139
EXPANSION, Inches x 10exp-4	51	35	25
STABILITY Ph 2,000 lbs (160 psi)	28	36	46
TURNS DISPLACEMENT	4.60	5.13	5.45
R-VALUE UNCORRECTED	72	63	53
R-VALUE CORRECTED	72	63	53

DESIGN CALCULATION DATA	a	b	c
GRAVEL EQUIVALENT FACTOR	1.0	1.0	1.0
TRAFFIC INDEX	5.0	5.0	5.0
STABILOMETER THICKNESS, ft.	0.45	0.59	0.75
EXPANSION PRESSURE THICKNESS, ft.	1.70	1.17	0.83



R-VALUE BY EXPANSION:	50
R-VALUE BY EXUDATION:	63
EQUILIBRIUM R-VALUE:	50



**SAND EQUIVALENT TEST**  
DOT CA Test 217

Project Name: Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario CA

Tested By: A Santos

Date: 04/25/22

Project No. : 13493.001

Input By: J. Ward

Date: 04/25/22

Boring No.	Sample No.	Depth (ft.)	Soil Type	T1	T2	T3	T4	R1	R2	SE	Average SE
LB-2	B-1	0-5	Olive brown sandy silt s(ML)	11:20	11:30	11:33	11:53	13.5	1.2	9	<b>9</b>
				11:24	11:34	11:37	11:57	13.4	1.1	9	
				11:28	11:38	11:41	12:01	13.5	1.1	9	
LB-5	B-1	0-5	Olive brown silty sand (SM)	13:40	13:50	13:53	14:13	12.6	1.4	12	<b>12</b>
				13:44	13:54	13:57	14:17	12.6	1.4	12	
				13:48	13:58	14:01	14:21	12.7	1.3	11	

T1 = Starting Time

T3 = Settlement Starting Time

Sand Equivalent =  $R2 / R1 * 100$

T2 = ( T1 + 10 min) Begin Agitation  
(131 cycles in 45 sec)

T4 = ( T3 + 20 min) Take Clay Reading (R1)  
and Sand Reading (R2)

Record SE as Next Higher Integer



## PARTICLE-SIZE DISTRIBUTION (GRADATION) of SOILS USING SIEVE ANALYSIS

ASTM D 6913

Project Name: Legacy-Collier, Proposed Euclid & Walnut  
Mixed-Use, Ontario CA      Tested By: S. Felter    Date: 04/20/22  
 Project No.: 13493.001      Checked By: A. Santos    Date: 04/25/22  
 Boring No.: LP-1      Depth (feet): 15.0  
 Sample No.: R-3  
 Soil Identification: Grayish brown silty sand (SM)

		Moisture Content of Total Air - Dry Soil	
Container No.:	2	Wt. of Air-Dry Soil + Cont. (g)	0.0
Wt. of Air-Dried Soil + Cont.(g)	712.3	Wt. of Dry Soil + Cont. (g)	0.0
Wt. of Container (g)	110.0	Wt. of Container No. _____ (g)	1.0
Dry Wt. of Soil (g)	602.3	Moisture Content (%)	0.0

After Wet Sieve	Container No.	2
	Wt. of Dry Soil + Container (g)	582.3
	Wt. of Container (g)	110.0
	Dry Wt. of Soil Retained on # 200 Sieve (g)	472.3

U. S. Sieve Size		Cumulative Weight Dry Soil Retained (g)	Percent Passing (%)
(in.)	(mm.)		
1 1/2"	37.5		
1"	25.0		
3/4"	19.0		
1/2"	12.5		
3/8"	9.5	0.0	100.0
#4	4.75	1.2	99.8
#8	2.36	3.6	99.4
#16	1.18	17.0	97.2
#30	0.600	54.5	91.0
#50	0.300	166.8	72.3
#100	0.150	343.0	43.1
#200	0.075	464.2	22.9
PAN			

GRAVEL:                    **0 %**  
 SAND:                     **77 %**  
 FINES:                    **23 %**  
 GROUP SYMBOL:        **SM**

Cu = D60/D10 = \_\_\_\_\_

Cc = (D30)<sup>2</sup>/(D60\*D10) = \_\_\_\_\_

Remarks: \_\_\_\_\_

GRAVEL				SAND				FINES	
COARSE		FINE		COARSE	MEDIUM	FINE		SILT	CLAY

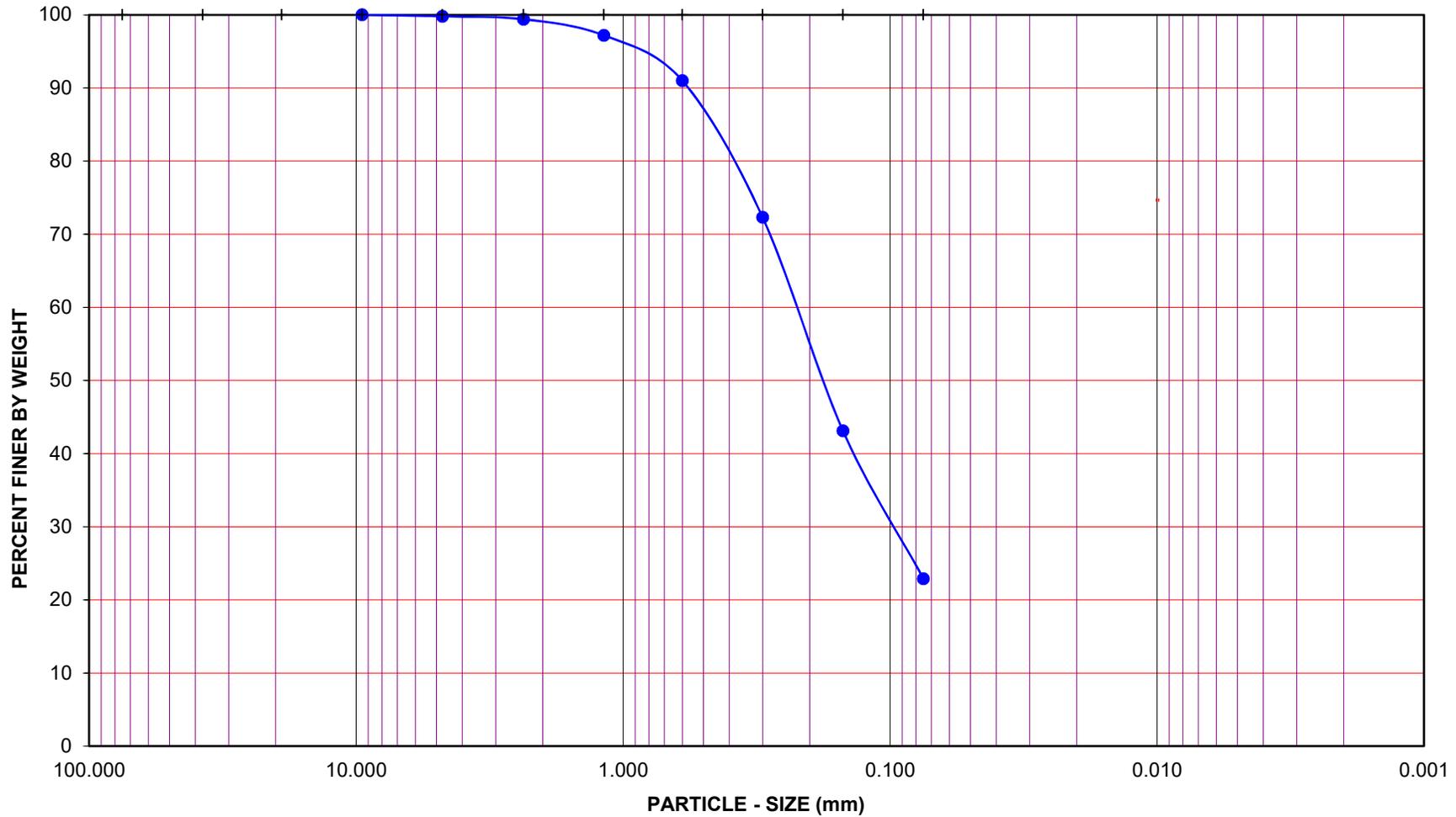
U.S. STANDARD SIEVE OPENING

3.0" 1 1/2" 3/4" 3/8"

U.S. STANDARD SIEVE NUMBER

#4 #8 #16 #30 #50 #100 #200

HYDROMETER



Project Name: Legacy-Collier, Proposed Euclid & Walnut  
Mixed-Use, Ontario CA

Project No.: 13493.001

Boring No.: LP-1

Sample No.: R-3

Depth (feet): 15.0

Soil Type : SM

Soil Identification: Grayish brown silty sand (SM)

**GR:SA:FI : (%)      0 : 77 : 23**



**PARTICLE - SIZE  
DISTRIBUTION  
ASTM D 6913**



**PARTICLE-SIZE DISTRIBUTION (GRADATION)  
of SOILS USING SIEVE ANALYSIS**

**ASTM D 6913**

Project Name: Legacy-Collier, Proposed Euclid & Walnut  
Mixed Use, Ontario CA Tested By: S. Felter Date: 04/20/22  
 Project No.: 13493.001 Checked By: A. Santos Date: 04/25/22  
 Boring No.: LP-1 Depth (feet): 18.5  
 Sample No.: R-4  
 Soil Identification: Olive brown sandy silt s(ML)

		Moisture Content of Total Air - Dry Soil	
Container No.:	9545	Wt. of Air-Dry Soil + Cont. (g)	0.0
Wt. of Air-Dried Soil + Cont.(g)	774.5	Wt. of Dry Soil + Cont. (g)	0.0
Wt. of Container (g)	106.2	Wt. of Container No. _____ (g)	1.0
Dry Wt. of Soil (g)	668.3	Moisture Content (%)	0.0

After Wet Sieve	Container No.	9545
	Wt. of Dry Soil + Container (g)	426.4
	Wt. of Container (g)	106.2
	Dry Wt. of Soil Retained on # 200 Sieve (g)	320.2

U. S. Sieve Size		Cumulative Weight Dry Soil Retained (g)	Percent Passing (%)
(in.)	(mm.)		
1 1/2"	37.5		
1"	25.0		
3/4"	19.0		
1/2"	12.5		
3/8"	9.5	0.0	100.0
#4	4.75	2.9	99.6
#8	2.36	8.0	98.8
#16	1.18	15.3	97.7
#30	0.600	41.7	93.8
#50	0.300	106.5	84.1
#100	0.150	206.4	69.1
#200	0.075	315.8	52.7
PAN			

GRAVEL: **0 %**  
 SAND: **47 %**  
 FINES: **53 %**  
 GROUP SYMBOL: **s(ML)**

Cu = D60/D10 = \_\_\_\_\_

Cc = (D30)<sup>2</sup>/(D60\*D10) = \_\_\_\_\_

Remarks: \_\_\_\_\_

GRAVEL				SAND				FINES	
COARSE		FINE		COARSE	MEDIUM	FINE		SILT	CLAY

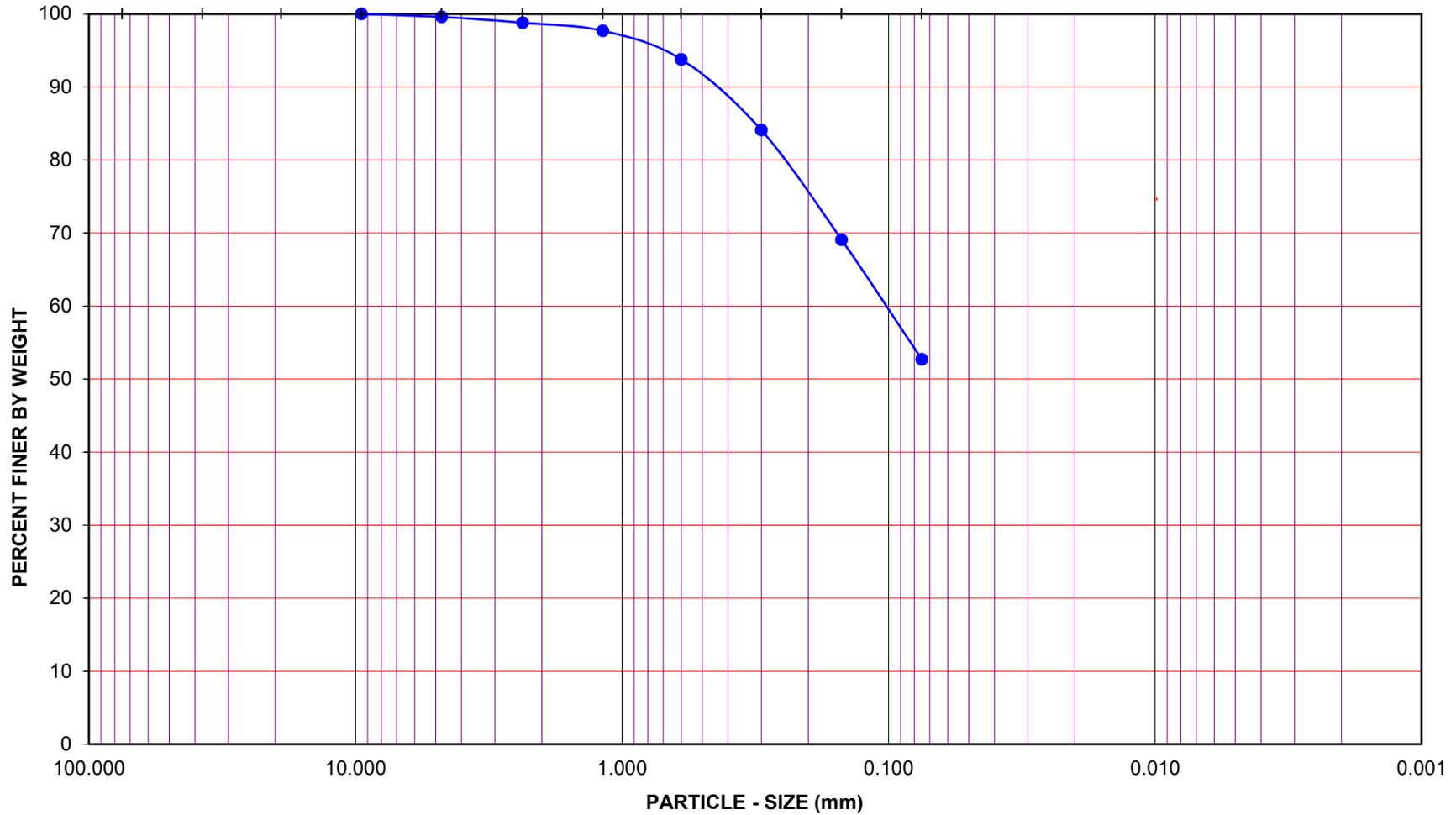
U.S. STANDARD SIEVE OPENING

3.0" 1 1/2" 3/4" 3/8"

U.S. STANDARD SIEVE NUMBER

#4 #8 #16 #30 #50 #100 #200

HYDROMETER



Project Name: Legacy-Collier, Proposed Euclid & Walnut  
Mixed Use, Ontario CA

Project No.: 13493.001

Boring No.: LP-1

Sample No.: R-4

Depth (feet): 18.5

Soil Type : s(ML)

Soil Identification: Olive brown sandy silt s(ML)

**GR:SA:FI : (%)      0 : 47 : 53**



**PARTICLE - SIZE  
DISTRIBUTION  
ASTM D 6913**



## PARTICLE-SIZE DISTRIBUTION (GRADATION) of SOILS USING SIEVE ANALYSIS

ASTM D 6913

Project Name: [Legacy-Collier, Proposed Euclid & Walnut](#)  
[Mixed-Use, Ontario CA](#) Tested By: [S. Felter](#) Date: [04/19/22](#)  
 Project No.: [13493.001](#) Checked By: [A. Santos](#) Date: [04/25/22](#)  
 Boring No.: [LP-1](#) Depth (feet): [23.5](#)  
 Sample No.: [S-5](#)  
 Soil Identification: [Brown sandy lean clay s\(CL\)](#)

		Moisture Content of Total Air - Dry Soil	
Container No.:	969	Wt. of Air-Dry Soil + Cont. (g)	0.0
Wt. of Air-Dried Soil + Cont.(g)	538.7	Wt. of Dry Soil + Cont. (g)	0.0
Wt. of Container (g)	109.4	Wt. of Container No. _____ (g)	1.0
Dry Wt. of Soil (g)	429.3	Moisture Content (%)	0.0

After Wet Sieve	Container No.	969
	Wt. of Dry Soil + Container (g)	344.3
	Wt. of Container (g)	109.4
	Dry Wt. of Soil Retained on # 200 Sieve (g)	234.9

U. S. Sieve Size		Cumulative Weight Dry Soil Retained (g)	Percent Passing (%)
(in.)	(mm.)		
1 1/2"	37.5		
1"	25.0		
3/4"	19.0		
1/2"	12.5		
3/8"	9.5	0.0	100.0
#4	4.75	1.1	99.7
#8	2.36	4.2	99.0
#16	1.18	12.8	97.0
#30	0.600	36.0	91.6
#50	0.300	83.7	80.5
#100	0.150	148.7	65.4
#200	0.075	220.7	48.6
PAN			

GRAVEL: **0 %**  
 SAND: **51 %**  
 FINES: **49 %**  
 GROUP SYMBOL: **s(CL)**

Cu = D60/D10 = \_\_\_\_\_

Cc = (D30)<sup>2</sup>/(D60\*D10) = \_\_\_\_\_

Remarks: \_\_\_\_\_

GRAVEL				SAND				FINES			
COARSE		FINE		COARSE	MEDIUM	FINE		SILT		CLAY	

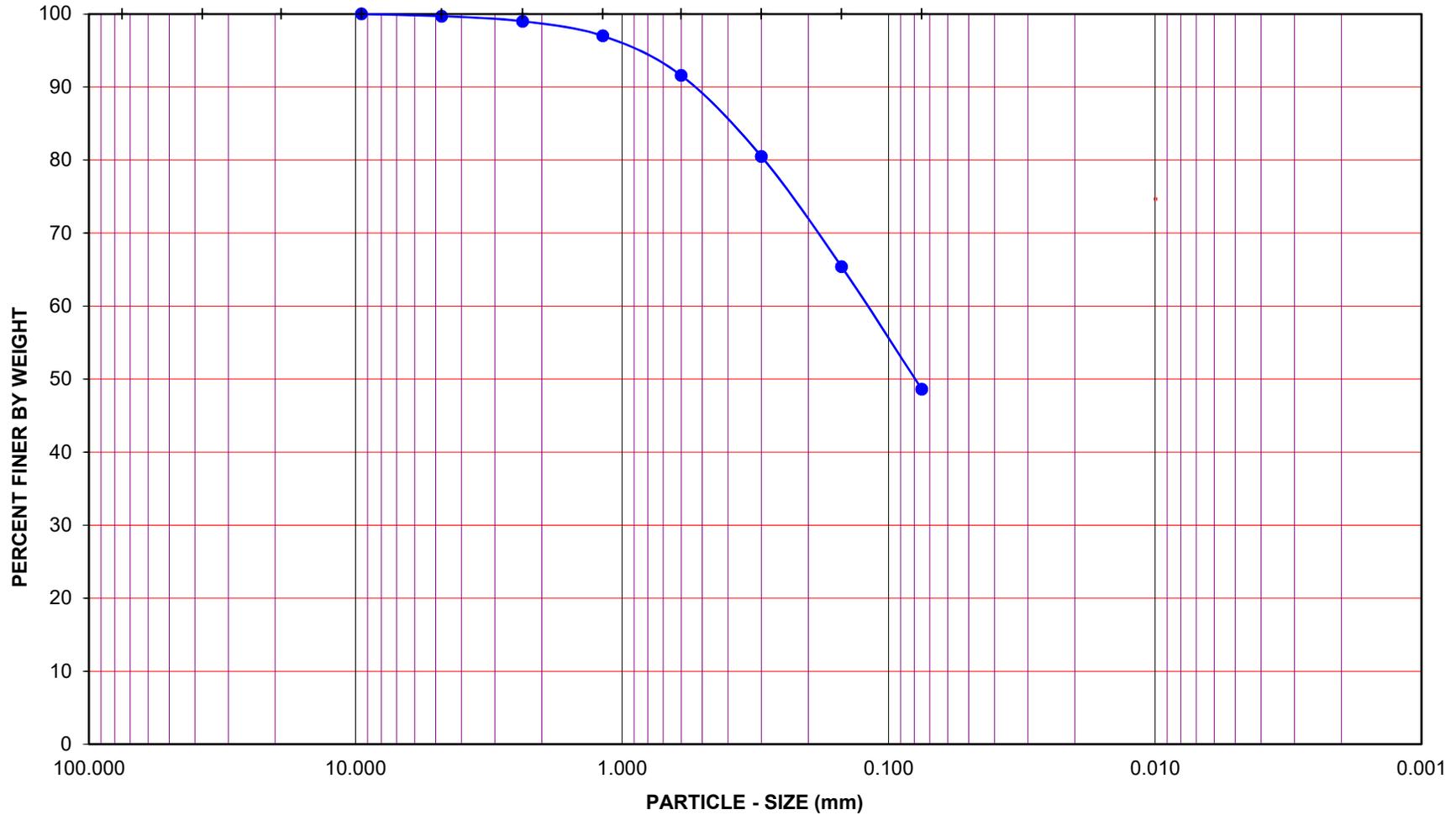
U.S. STANDARD SIEVE OPENING

3.0" 1 1/2" 3/4" 3/8"

U.S. STANDARD SIEVE NUMBER

#4 #8 #16 #30 #50 #100 #200

HYDROMETER



Project Name: Legacy-Collier, Proposed Euclid & Walnut  
Mixed-Use, Ontario CA

Project No.: 13493.001

Boring No.: LP-1

Sample No.: S-5

Depth (feet): 23.5

Soil Type : s(CL)

Soil Identification: Brown sandy lean clay s(CL)

**GR:SA:FI : (%)      0 : 51 : 49**



**PARTICLE - SIZE  
DISTRIBUTION  
ASTM D 6913**



## PARTICLE-SIZE DISTRIBUTION (GRADATION) of SOILS USING SIEVE ANALYSIS

ASTM D 6913

Project Name: [Legacy-Collier, Proposed Euclid & Walnut](#)  
[Mixed-Use, Ontario CA](#) Tested By: [S. Felter](#) Date: [04/19/22](#)  
 Project No.: [13493.001](#) Checked By: [A. Santos](#) Date: [04/25/22](#)  
 Boring No.: [LP-2](#) Depth (feet): [15.0](#)  
 Sample No.: [R-3](#)  
 Soil Identification: [Olive brown silty clay \(CL-ML\)](#)

		Moisture Content of Total Air - Dry Soil	
Container No.:	V-1	Wt. of Air-Dry Soil + Cont. (g)	0.0
Wt. of Air-Dried Soil + Cont.(g)	635.6	Wt. of Dry Soil + Cont. (g)	0.0
Wt. of Container (g)	108.7	Wt. of Container No. _____ (g)	1.0
Dry Wt. of Soil (g)	526.9	Moisture Content (%)	0.0

After Wet Sieve	Container No.	V-1
	Wt. of Dry Soil + Container (g)	139.2
	Wt. of Container (g)	108.7
	Dry Wt. of Soil Retained on # 200 Sieve (g)	30.5

U. S. Sieve Size		Cumulative Weight Dry Soil Retained (g)	Percent Passing (%)
(in.)	(mm.)		
1 1/2"	37.5		
1"	25.0		
3/4"	19.0		
1/2"	12.5		
3/8"	9.5		
#4	4.75		
#8	2.36		
#16	1.18	0.0	100.0
#30	0.600	0.4	99.9
#50	0.300	4.4	99.2
#100	0.150	12.6	97.6
#200	0.075	28.4	94.6
PAN			

GRAVEL: **0 %**  
 SAND: **5 %**  
 FINES: **95 %**  
 GROUP SYMBOL: **CL-ML**

Cu = D60/D10 = \_\_\_\_\_

Cc = (D30)<sup>2</sup>/(D60\*D10) = \_\_\_\_\_

Remarks: \_\_\_\_\_

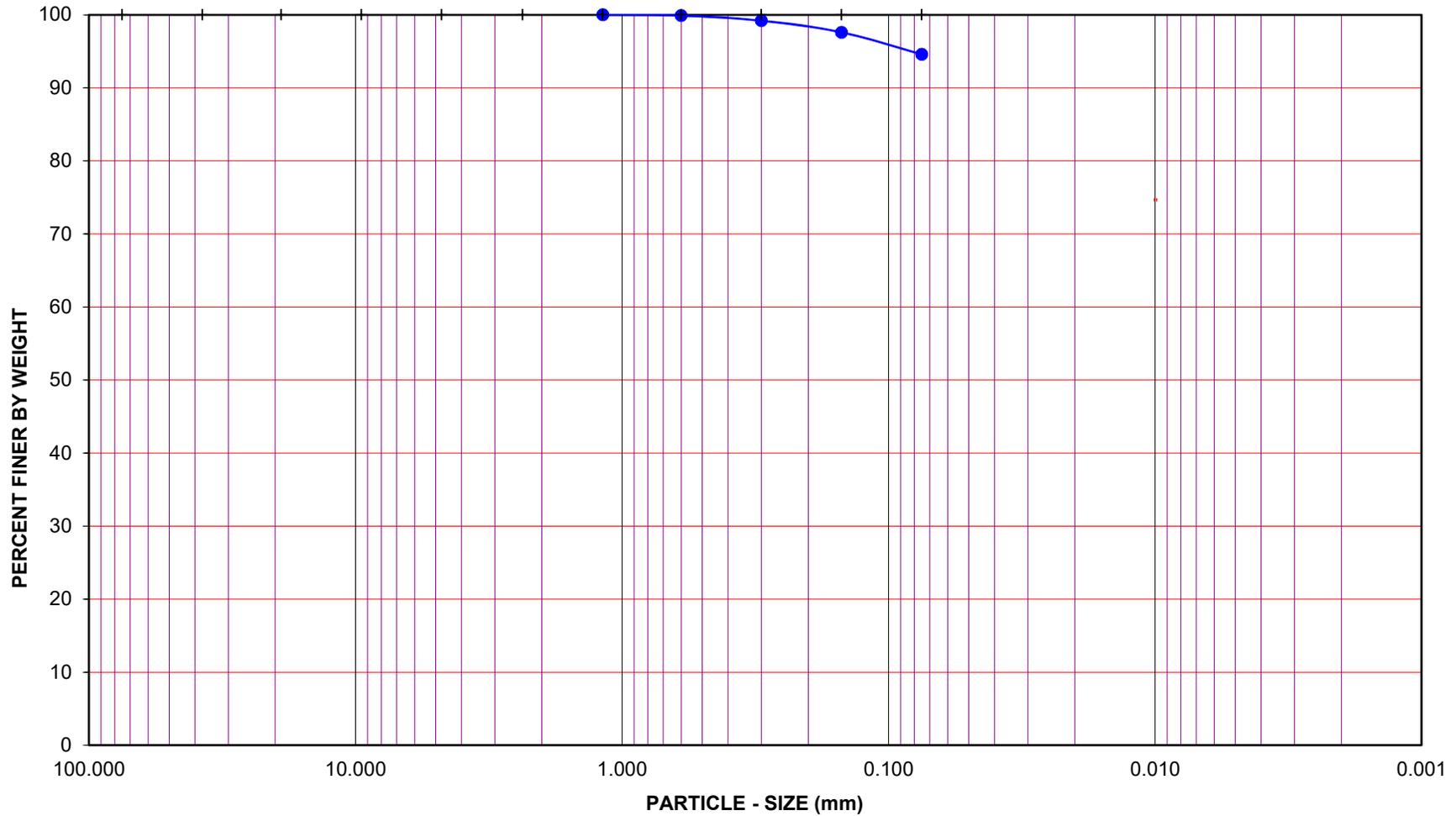
GRAVEL				SAND				FINES			
COARSE		FINE		COARSE	MEDIUM	FINE		SILT		CLAY	

U.S. STANDARD SIEVE OPENING

3.0" 1 1/2" 3/4" 3/8" #4 #8 #16 #30 #50 #100 #200

U.S. STANDARD SIEVE NUMBER

HYDROMETER



Project Name: Legacy-Collier, Proposed Euclid & Walnut  
Mixed-Use, Ontario CA

Project No.: 13493.001

Boring No.: LP-2

Sample No.: R-3

Depth (feet): 15.0

Soil Type : CL-ML

Soil Identification: Olive brown silty clay (CL-ML)

**GR:SA:FI : (%)      0 : 5 : 95**



**PARTICLE - SIZE  
DISTRIBUTION  
ASTM D 6913**



## PARTICLE-SIZE DISTRIBUTION (GRADATION) of SOILS USING SIEVE ANALYSIS

ASTM D 6913

Project Name: Legacy-Collier, Proposed Euclid & Walnut  
Mixed Use, Ontario CA      Tested By: S. Felter    Date: 04/20/22  
 Project No.: 13493.001      Checked By: A. Santos    Date: 04/25/22  
 Boring No.: LP-2      Depth (feet): 18.5  
 Sample No.: R-4  
 Soil Identification: Olive brown silty sand (SM)

		Moisture Content of Total Air - Dry Soil	
Container No.:	R-2	Wt. of Air-Dry Soil + Cont. (g)	0.0
Wt. of Air-Dried Soil + Cont.(g)	799.6	Wt. of Dry Soil + Cont. (g)	0.0
Wt. of Container (g)	107.7	Wt. of Container No. _____ (g)	1.0
Dry Wt. of Soil (g)	691.9	Moisture Content (%)	0.0

After Wet Sieve	Container No.	R-2
	Wt. of Dry Soil + Container (g)	576.0
	Wt. of Container (g)	107.7
	Dry Wt. of Soil Retained on # 200 Sieve (g)	468.3

U. S. Sieve Size		Cumulative Weight Dry Soil Retained (g)	Percent Passing (%)
(in.)	(mm.)		
1 1/2"	37.5		
1"	25.0		
3/4"	19.0		
1/2"	12.5		
3/8"	9.5	0.0	100.0
#4	4.75	0.9	99.9
#8	2.36	3.8	99.5
#16	1.18	13.1	98.1
#30	0.600	43.5	93.7
#50	0.300	150.5	78.2
#100	0.150	340.6	50.8
#200	0.075	464.3	32.9
PAN			

GRAVEL:                    **0 %**  
 SAND:                     **67 %**  
 FINES:                    **33 %**  
 GROUP SYMBOL:        **SM**

Cu = D60/D10 = \_\_\_\_\_

Cc = (D30)<sup>2</sup>/(D60\*D10) = \_\_\_\_\_

Remarks: \_\_\_\_\_

GRAVEL				SAND				FINES			
COARSE		FINE		COARSE	MEDIUM	FINE		SILT		CLAY	

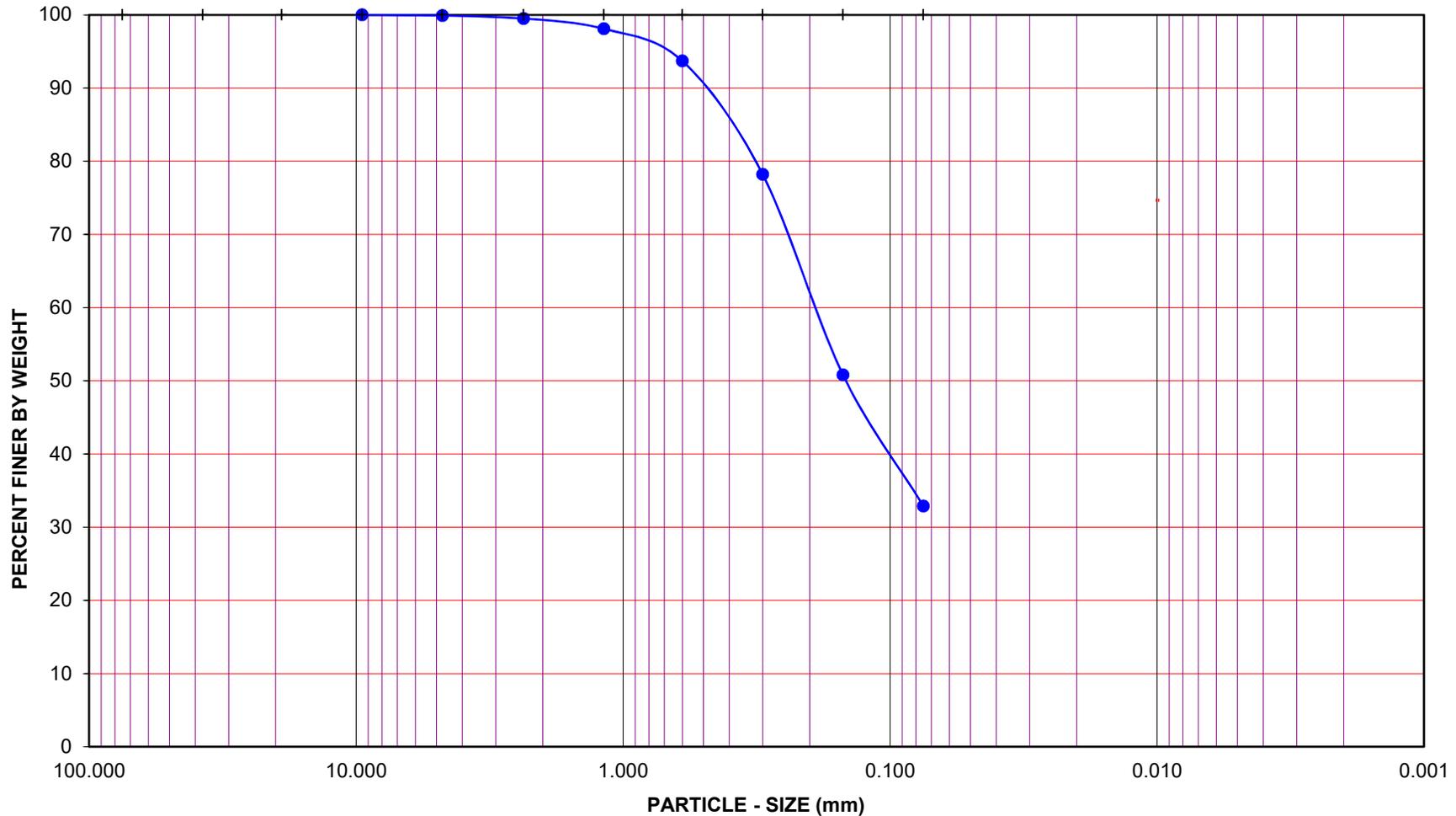
U.S. STANDARD SIEVE OPENING

3.0" 1 1/2" 3/4" 3/8"

U.S. STANDARD SIEVE NUMBER

#4 #8 #16 #30 #50 #100 #200

HYDROMETER



Project Name: Legacy-Collier, Proposed Euclid & Walnut  
Mixed Use, Ontario CA

Project No.: 13493.001

Boring No.: LP-2

Sample No.: R-4

Depth (feet): 18.5

Soil Type : SM

Soil Identification: Olive brown silty sand (SM)

**GR:SA:FI : (%)      0 : 67 : 33**



**PARTICLE - SIZE  
DISTRIBUTION  
ASTM D 6913**



# ONE-DIMENSIONAL SWELL OR SETTLEMENT POTENTIAL OF COHESIVE SOILS ASTM D 4546

Project Name: Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario CA      Tested By: G. Bathala      Date: 04/18/22  
 Project No.: 13493.001      Checked By: A. Santos      Date: 04/26/22  
 Boring No.: LB-1      Sample Type: Ring  
 Sample No.: R-6      Depth (ft.): 25.0  
 Sample Description: Yellowish brown poorly-graded sand with silt (SP-SM)

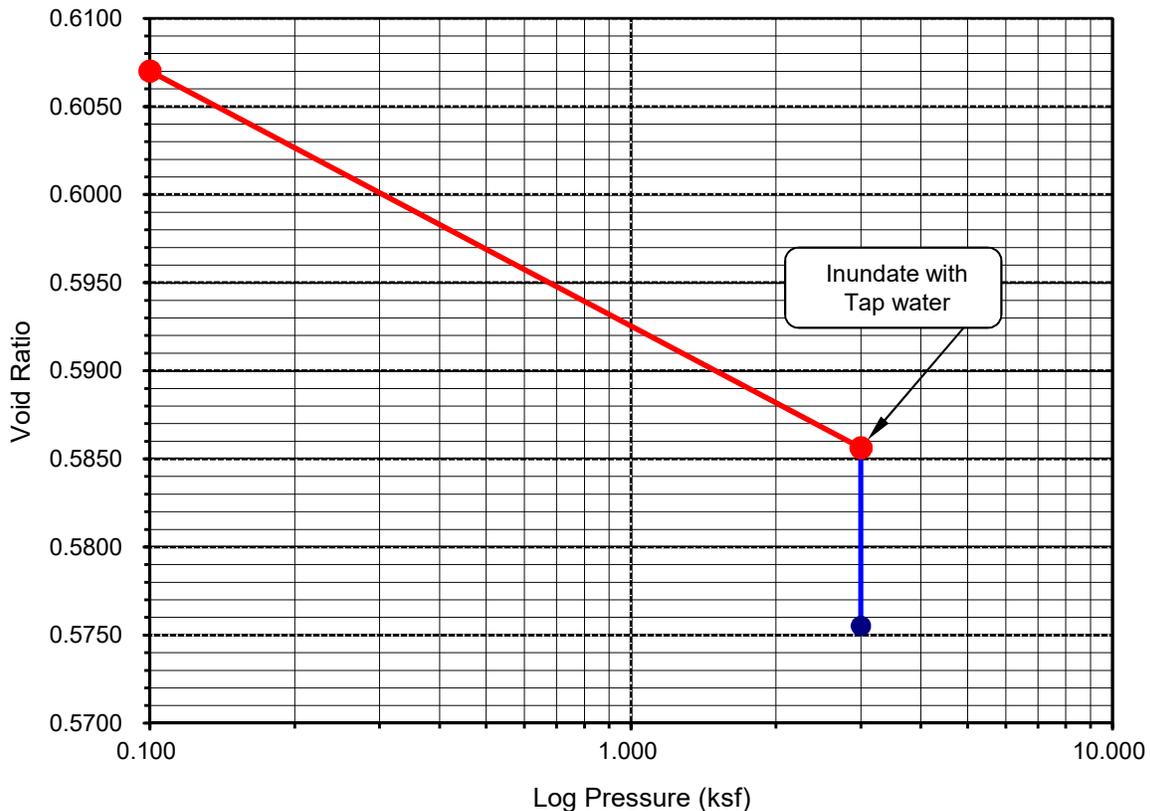
Initial Dry Density (pcf):	104.9
Initial Moisture (%):	3.61
Initial Length (in.):	1.0000
Initial Dial Reading:	0.3076
Diameter(in):	2.415

Final Dry Density (pcf):	107.0
Final Moisture (%):	18.2
Initial Void Ratio:	0.6072
Specific Gravity(assumed):	2.70
Initial Saturation (%):	16.0

Pressure (p) (ksf)	Final Reading (in)	Apparent Thickness (in)	Load Compliance (%)	Swell (+) Settlement (-) % of Sample Thickness	Void Ratio	Corrected Deformation (%)
0.100	0.3075	0.9999	0.00	-0.01	0.6070	-0.01
3.000	0.2890	0.9814	0.52	-1.86	0.5856	-1.34
H2O	0.2827	0.9751	0.52	-2.49	0.5755	-1.97

**Percent Swell (+) / Settlement (-) After Inundation = -0.64**

**Void Ratio - Log Pressure Curve**





# ONE-DIMENSIONAL SWELL OR SETTLEMENT POTENTIAL OF COHESIVE SOILS ASTM D 4546

Project Name: Legacy-Collier, Proposed Euclid & Walnut Mixed-Use, Ontario CA      Tested By: G. Bathala      Date: 04/18/22  
 Project No.: 13493.001      Checked By: A. Santos      Date: 04/26/22  
 Boring No.: LB-1      Sample Type: Ring  
 Sample No.: R-8      Depth (ft.): 35.0  
 Sample Description: Yellowish brown poorly-graded sand with silt (SP-SM)

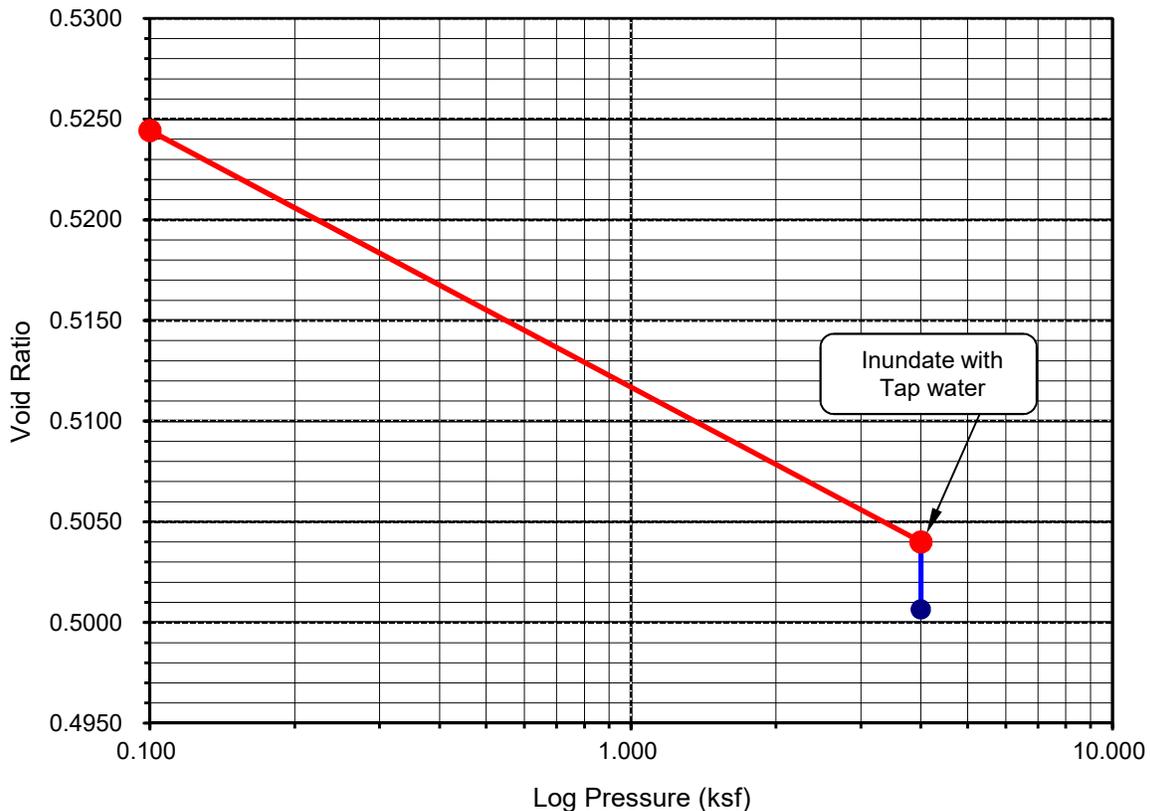
Initial Dry Density (pcf):	110.6
Initial Moisture (%):	3.30
Initial Length (in.):	1.0000
Initial Dial Reading:	0.3373
Diameter(in):	2.415

Final Dry Density (pcf):	112.3
Final Moisture (%) :	15.9
Initial Void Ratio:	0.5246
Specific Gravity(assumed):	2.70
Initial Saturation (%)	17.0

Pressure (p) (ksf)	Final Reading (in)	Apparent Thickness (in)	Load Compliance (%)	Swell (+) Settlement (-) % of Sample Thickness	Void Ratio	Corrected Deformation (%)
0.100	0.3372	0.9999	0.00	-0.01	0.5244	-0.01
4.000	0.3220	0.9847	0.18	-1.53	0.5040	-1.35
H2O	0.3198	0.9825	0.18	-1.75	0.5007	-1.57

**Percent Swell (+) / Settlement (-) After Inundation = -0.22**

**Void Ratio - Log Pressure Curve**



November 29, 2022

Project No. 13493.002

Legacy/Collier Residential, LLC  
5154 California Avenue  
Irvine, California 92617

Attention: Mr. David Pinto

**Subject: Addendum to Geotechnical Exploration Report  
Infiltration Testing  
Proposed “Euclid and Walnut Mixed Use” Development  
112 Walnut Street, 2502 and 2530 Euclid Avenue  
Ontario, San Bernardino County, California**

Reference: Leighton and Associates, Inc., 2022, *Geotechnical Exploration Report, Proposed “Euclid and Walnut Mixed Use” Development, 112 Walnut Street, 2502 and 2530 Euclid Avenue, Ontario, California*, Project No. 13493.001, dated May 13, 2022.

## **Introduction**

Per your request, Leighton and Associates, Inc. (Leighton) performed supplemental infiltration testing for the subject mixed use development. Additional field infiltration testing was performed in coordination with Mr. Steve Ellis of Fuscoe Engineering, Inc. (project civil engineer) to target the locations and depths planned for infiltration. While official infiltration plans were not available, we understand that stormwater infiltration is intended to be achieved utilizing a drywell system to be located in the southern portion of the site extending to approximate depths of no greater than 45 feet below ground surface (bgs).

## **Purpose and Scope**

Purpose of our exploration was to perform field infiltration tests at the proposed device locations and invert depths. The test locations and depths were selected by the project civil engineer. Our Scope of Work included the following:

- ***Pre-Field Exploration Activities*** – Site reconnaissance performed by a professional geologist to mark the proposed infiltration test locations. Underground Service Alert

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(USA) was notified to locate and mark existing underground utilities prior to our subsurface exploration.

- **Field Exploration** – Our supplemental subsurface exploration was performed on August 24, 2022 and included drilling, logging, and sampling of two (2) hollow-stem auger borings (designated LP-3 and LP-4) to depths ranging from approximately 40 to 45 feet below the existing ground surface. The approximate locations of these explorations are shown on Figure 1, *Geotechnical Map*. The corresponding boring logs are presented in Appendix A, *Exploration Logs*.

During drilling of the hollow-stem auger borings drive samples were obtained from the borings for geotechnical laboratory testing. Sample collection was performed by conducting the Standard Penetration Test (SPT) within the borings in accordance with ASTM Test Method D 1586. Samples were collected within the proposed test infiltration zone at 5-foot intervals. During sampling, the sampler was driven below the bottom of the borehole by a 140-pound weight (hammer) free-falling 30 inches. The drilling rig was equipped with an automatic hammer to provide greater consistency in the drop height and striking frequency. The number of blows to drive the sampler the final 12 inches of the 18-inch drive interval is termed the “blowcount” or SPT N-value. N-values provide a measure of relative density in granular (non-cohesive) soils and comparative consistency in cohesive soils. Number of blows per 6 inches of penetration was recorded on the boring logs included in Appendix A.

The borings were logged in the field by a geologist from our firm. Each soil sample collected was reviewed and described in accordance with the Unified Soil Classification System (USCS). The samples were sealed and packaged for transportation to our laboratory for testing. After completion of drilling, the borings were converted to percolation wells for subsequent testing.

- **Percolation Testing** – Borings LP-3 and LP-4 (Figure 1) were converted to temporary percolation test wells upon completion of drilling and sampling. The test wells consisted of 2-inch diameter slotted (0.020-inch) PVC well casing screened within the proposed test zone. In-situ percolation testing was performed in general accordance with the County of San Bernardino guidelines. Upon completion of the percolation testing, the well casing was removed from each boring and the borings were backfilled with soil cuttings and patched at the surface to match existing site conditions.
- **Laboratory Testing** – Selected soil samples obtained from our hollow-stem-auger borings were tested at our in-house geotechnical laboratory. This laboratory testing

program was designed to evaluate the fines content of the soils within the tested zone (i.e. soil particles finer than the No. 200 sieve). . Results are included in Appendix C.

- **Report Preparation** – This report presents our findings, conclusions, and recommendations for the proposed infiltration devices.

### **Infiltration Testing**

Percolation testing was performed in temporary wells installed within borings LP-3 and LP-4 located in the southern region of the site with test zone at depths of 25 to 45 feet bgs and 25 to 40 feet bgs, respectively. The percolation tests were conducted in general accordance with the *San Bernardino County Technical Guidance Document (TGD) for Water Quality Management Plans (2013)*. Results of the percolation testing are presented in Appendix B. The test locations and tested depth intervals are shown on Plate 1.

A boring percolation test is useful for field measurements of the infiltration rate of soils, and is suited for testing when the design depth of the infiltration device is deeper than current existing grades, especially in areas where it is difficult to dig test pits, or where the depths of these test pits would be considerably deep. At the subject site, testing consisted of advancing the borings to the anticipated depth for the invert of the proposed infiltration devices.

The *Percolation Test Procedure* (falling-head test method) as outlined in the County Guidelines was implemented at each percolation test well location. The infiltration rate was calculated by dividing the rate of discharge by the infiltration surface area, or flow area. The volume of discharge was calculated by adding the total volume of water that dropped within the PVC pipe and within the annulus, and incorporating a porosity reduction factor to account for the porosity of the annulus material. The flow area was based on the average water height within the test well.

Detailed results of the field testing data and measured infiltration rate for the test well are presented in Appendix B. The test results are summarized in the table below:

**Table 1 – Measured (Unfactored) Infiltration Rate**

<b>Test Well Designation</b>	<b>Approximate Depth of Test Zone (feet bgs)</b>	<b>Measured Infiltration Rate (inches per hour)</b>
LB-3	25 to 45	0.14
LP-4	25 to 40	0.47

Based on the results of our field percolation testing that was performed at the site, the measured (unfactored) infiltration rates for the two (2) tests performed were 0.14 inches per hour (LP-3) and 0.47 inches per hour (LP-2), respectively. According to the *San Bernardino County Technical Guidance Document (TGD) for Water Quality Management Plans* (2013), the measured infiltration rate at the LP-4 well location technically exceeds the minimum feasibility criteria of 0.3 inch per hour. However, implementation of a minimum factor of safety of 2.0 as required for the design infiltration rate indicates the depth and location tested for both wells are considered infeasible for infiltration.

### Closure

We appreciate the opportunity to work with you on this project. If you have any questions regarding this report, please contact us directly at the phone extensions and/or e-mail addresses listed below.



Respectfully submitted,

LEIGHTON AND ASSOCIATES, INC.

Eric M. Holliday, PG, 9219  
Senior Project Geologist  
Ext 4252, [eholliday@leightongroup.com](mailto:eholliday@leightongroup.com)



John E. Haertle, PE, GE 2352  
Principal Engineer  
Ext: 4268, [jhaertle@leightongroup.com](mailto:jhaertle@leightongroup.com)

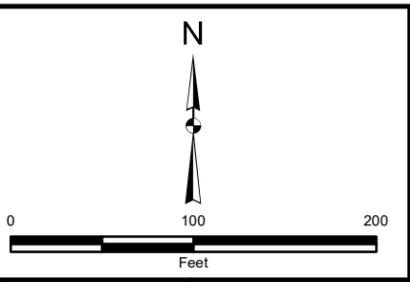
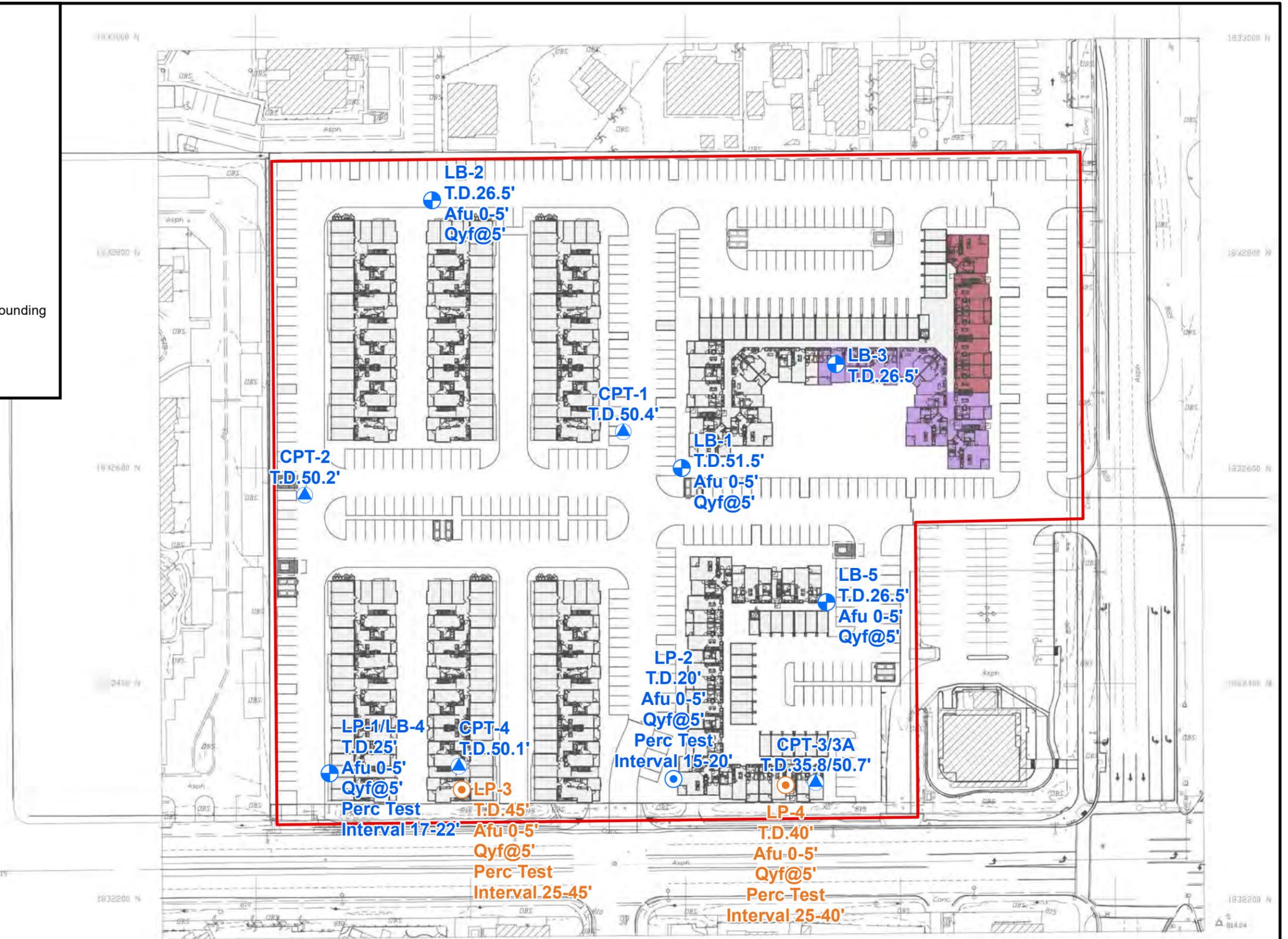
EMH/JEH/lr

Attachments: Figure 1 – *Geotechnical Map*  
Appendix A - *Exploration Logs*  
Appendix B - *Percolation Test Data*  
Appendix C - *Geotechnical Laboratory Testing*

Distribution: (1) Addressee

**LEGEND**

- Afu** Artificial Fill
- Qyf** Quaternary Young Alluvial Fan Deposits
- LP-4** Approximate location of current percolation test well showing percolation test interval in feet below ground surface.
- LB-5** Approximate location of previous hollow-stem auger boring showing total depth (T.D.) and depth to earth units in feet below ground surface. (Leighton, 2022)
- LP-2** Approximate location of previous percolation test well showing percolation test interval in feet below ground surface. (Leighton, 2022)
- CPT-4** Approximate location of previous cone penetrometer test sounding showing total depth (T.D.) in feet below ground surface (Leighton, 2022)
- Approximate Site Boundary



Project: 13493.002    Eng/Geol: JEH/EMH  
 Scale: 1" = 100'    Date: November 2022  
 Base Map: Option A Site Plan, Euclid and Walnut Mixed Use Sheet 01, Dated: 03/10/2022 by AO Architecture Design Relationships

**GEOTECHNICAL MAP**  
 Proposed Euclid and Walnut Mixed-Use Development  
 2502 and 2530 S. Euclid Avenue  
 Ontario, California

**FIGURE 1**



**APPENDIX A**  
**Exploration Logs**

# GEOTECHNICAL BORING LOG LP-3

**Project No.** 13493.002  
**Project** Proposed Euclid and Walnut Mixed-Use Development  
**Drilling Co.** Martini Drilling, Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** See Figure 1 - Geotechnical Map

**Date Drilled** 8-24-22  
**Logged By** BTM  
**Hole Diameter** 8"  
**Ground Elevation** '  
**Sampled By** BTM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
	0	N S							This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual. @Surface: 3 -inches Asphalt Concrete over 6 -inches Base SM <b>Artificial Fill, undocumented (Afu)</b> @0.75': Silty SAND, brown, slightly moist, very fine sand, trace medium to coarse sand and fine subrounded gravel	
	5								<b>Quaternary-Aged Young Alluvial Valley Deposits (Qyf)</b>	
	20			S-1	3 7 11			SM-ML	@20': Clayey Sandy SILT to Clayey Silty SAND, medium dense/very stiff, olive brown, slightly moist, very fine sand, low plasticity, slightly micaceous, friable, pockets of higher clay content	
	25			S-2	4 8 9			SM	@25': Silty SAND, medium dense, mottled reddish brown and grayish brown, slightly moist, very fine sand, nonplastic, slightly micaceous, friable, grading slightly finer toward bottom	-200
	30									

**SAMPLE TYPES:**

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

**TYPE OF TESTS:**

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



\*\*\* This log is a part of a report by Leighton and should not be used as a stand-alone document. \*\*\*

# GEOTECHNICAL BORING LOG LP-3

**Project No.** 13493.002  
**Project** Proposed Euclid and Walnut Mixed-Use Development  
**Drilling Co.** Martini Drilling, Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** See Figure 1 - Geotechnical Map

**Date Drilled** 8-24-22  
**Logged By** BTM  
**Hole Diameter** 8"  
**Ground Elevation** '  
**Sampled By** BTM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	<b>SOIL DESCRIPTION</b>	Type of Tests
30		N S		S-3	9 11 11			ML	<p><i>This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.</i></p> <p>@30': Sandy SILT, very stiff, mottled orange brown and grayish brown, slightly moist, very fine sand, trace coarse sand, nonplastic, friable, slightly micaceous</p> <p>@35': Silty SAND, medium dense, olive brown, moist, very fine sand, micaceous, friable</p> <p>@38.5': Sandy SILT, medium dense, brown, moist, very fine sand, nonplastic, micaceous, friable, trace medium sand</p> <p>@43.5': Interbedded Clayey Sandy SILT and Silty SAND; Clayey Sandy SILT, hard, brown, slightly moist, fine to medium sand, low plasticity, slightly micaceous Silty SAND, very dense, yellowish brown, slightly moist, very fine to fine sand, micaceous, nonplastic, friable</p> <p>Total Depth: 45' bgs No groundwater encountered during drilling Temporary percolation well installed; screened from 25-45' Upon completion of percolation testing, boring backfilled with soil cuttings and patched with asphalt concrete.</p>	-200
35				S-4	7 11 14			SM		
40				S-5	10 11 11			ML		
45				S-6	7 14 37			SM-ML		
50										
55										
60										

**SAMPLE TYPES:**

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

**TYPE OF TESTS:**

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



\*\*\* This log is a part of a report by Leighton and should not be used as a stand-alone document. \*\*\*

# GEOTECHNICAL BORING LOG LP-4

**Project No.** 13493.002  
**Project** Proposed Euclid and Walnut Mixed-Use Development  
**Drilling Co.** Martini Drilling, Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** See Figure 1 - Geotechnical Map

**Date Drilled** 8-24-22  
**Logged By** BTM  
**Hole Diameter** 8"  
**Ground Elevation** '  
**Sampled By** BTM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S			Bulk Driven				This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
0	0							SM	@Surface: 4 -inches Asphalt Concrete over 5 -inches Base <b>Artificial Fill, undocumented (Afu)</b> @0.75': Silty SAND, brown, slightly moist, very fine sand, trace medium to coarse sand and fine subrounded gravel	
5	5								<u>Quaternary-Aged Young Alluvial Valley Deposits (Qyf)</u>	
20	20			S-1	4 5 5			CL/SM	@20': Silty CLAY, stiff, gray-brown, slightly moist, medium plasticity, few very fine sand; grading to Silty SAND, loose, brown, slightly moist, very fine sand, some silt, nonplastic, trace fine subangular gravel	-200
25	25			S-2	5 7 8			SM-SC	@25': Silty SAND, medium dense, grayish brown to yellowish brown, slightly moist, very fine to fine sand, slightly micaceous, some silt; grading to Sandy CLAY/Clayey SAND, medium dense/stiff, reddish brown, slightly moist, very fine to fine sand, low plasticity, slightly micaceous	
30	30									

**SAMPLE TYPES:**

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

**TYPE OF TESTS:**

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



# GEOTECHNICAL BORING LOG LP-4

**Project No.** 13493.002  
**Project** Proposed Euclid and Walnut Mixed-Use Development  
**Drilling Co.** Martini Drilling, Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** See Figure 1 - Geotechnical Map

**Date Drilled** 8-24-22  
**Logged By** BTM  
**Hole Diameter** 8"  
**Ground Elevation** '  
**Sampled By** BTM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S							This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
30		•••••		S-3	8 9 12			SM	@30': Silty SAND, medium dense, orange brown, slightly moist, very fine sand, slightly micaceous, nonplastic, friable	
35		•••••		S-4	8 38 50/5"			SP	@35': Grading to Silty Gravelly SAND, very dense, whitish tan, slightly moist, fine to coarse sand, some fine subangular to subrounded gravel (granitic)	-200
40		•••••		S-5	15 21 25			SM	@38.5': Silty SAND, dense, brown, slightly moist, very fine to fine sand, some silt, nonplastic, slightly micaceous, friable	
45									Total Depth: 40' bgs No groundwater encountered during drilling Temporary percolation well installed; screened from 25-40' Upon completion of percolation testing, boring backfilled with soil cuttings and patched with asphalt concrete.	
50										
55										
60										

**SAMPLE TYPES:**

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

**TYPE OF TESTS:**

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH





**APPENDIX B**  
**Percolation Test Data**

**Boring Percolation Test Data Sheet**

<b>Project Number:</b>	13493.002	<b>Test Hole Number:</b>	LP-3
<b>Project Name:</b>	Legacy - Collier	<b>Date Excavated:</b>	8/24/2022
<b>Earth Description:</b>	Alluvium	<b>Date Tested:</b>	8/24/2022
<b>Liquid Description:</b>	Tap water	<b>Depth of boring (ft):</b>	45
<b>Tested By:</b>	BTM	<b>Radius of boring (in):</b>	4
<b><u>Time Interval Standard</u></b>		<b>Radius of casing (in):</b>	1
<b>Start Time for Pre-Soak:</b>	11:25	<b>Length of slotted of casing (ft):</b>	20
<b>Start Time for Standard:</b>	12:21	<b>Depth to Initial Water Depth (ft):</b>	25.05
<b>Standard Time Interval</b>		<b>Porosity of Annulus Material, n :</b>	1
<b>Between Readings, mins:</b>	10	<b>Bentonite Plug at Bottom:</b>	No

**Percolation Data**

Reading	Time	Time Interval, Δt (min.)	Initial/Final Depth to Water (ft.)	Initial/Final Water Height, H <sub>0</sub> /H <sub>f</sub> (in.)	Total Water Drop, Δd (in.)	Percolation Rate (min./in.)	Infiltration Rate (in./hr.)
1	11:25	25	25.05	239.4	17.5	1.43	0.36
	11:50		26.51	221.9			
2	11:54	25	25.00	240.0	15.4	1.63	0.31
	12:19		26.28	224.6			
3	12:21	10	25.00	240.0	6.4	1.57	0.32
	12:31		25.53	233.6			
4	12:33	10	25.00	240.0	5.4	1.85	0.27
	12:43		25.45	234.6			
5	12:44	10	25.00	240.0	4.6	2.19	0.23
	12:54		25.38	235.4			
6	12:58	10	25.00	240.0	4.2	2.38	0.21
	13:08		25.35	235.8			
7	13:17	10	25.00	240.0	3.1	3.21	0.16
	13:27		25.26	236.9			
8	13:29	10	25.00	240.0	2.9	3.47	0.14
	13:39		25.24	237.1			

Infiltration Rate (I) = Discharge Volume/Surface Area of Test Section/Time Interval

**Infiltration Rate, I (Last Reading) = 0.14 in./hr.**

**Boring Percolation Test Data Sheet**

<b>Project Number:</b>	13493.002	<b>Test Hole Number:</b>	LP-4
<b>Project Name:</b>	Legacy - Collier	<b>Date Excavated:</b>	8/24/2022
<b>Earth Description:</b>	Alluvium	<b>Date Tested:</b>	8/24/2022
<b>Liquid Description:</b>	Tap water	<b>Depth of boring (ft):</b>	40
<b>Tested By:</b>	BTM	<b>Radius of boring (in):</b>	4
<b><u>Time Interval Standard</u></b>		<b>Radius of casing (in):</b>	1
<b>Start Time for Pre-Soak:</b>	10:21	<b>Length of slotted of casing (ft):</b>	15
<b>Start Time for Standard:</b>	11:20	<b>Depth to Initial Water Depth (ft):</b>	25.00
<b>Standard Time Interval</b>		<b>Porosity of Annulus Material, n :</b>	1
<b>Between Readings, mins:</b>	10	<b>Bentonite Plug at Bottom:</b>	No

**Percolation Data**

Reading	Time	Time Interval, Δt (min.)	Initial/Final Depth to Water (ft.)	Initial/Final Water Height, H <sub>0</sub> /H <sub>f</sub> (in.)	Total Water Drop, Δd (in.)	Percolation Rate (min./in.)	Infiltration Rate (in./hr.)
1	10:21	25	25.00	180.0	38.6	0.65	1.14
	10:46		28.22	141.4			
2	10:51	25	25.02	179.8	32.5	0.77	0.94
	11:16		27.73	147.2			
3	11:20	10	25.00	180.0	12.6	0.79	0.86
	11:30		26.05	167.4			
4	11:32	10	25.00	180.0	10.8	0.93	0.73
	11:42		25.90	169.2			
5	11:46	10	25.00	180.0	10.2	0.98	0.69
	11:56		25.85	169.8			
6	12:00	10	25.00	180.0	8.5	1.17	0.58
	12:10		25.71	171.5			
7	12:13	10	25.00	180.0	8.4	1.19	0.57
	12:23		25.70	171.6			
8	12:27	10	25.00	180.0	7.0	1.44	0.47
	12:37		25.58	173.0			
9	12:38	10	25.02	179.8	6.8	1.46	0.46
	12:48		25.59	172.9			
10	12:50	10	25.00	180.0	7.0	1.44	0.47
	13:00		25.58	173.0			

Infiltration Rate (I) = Discharge Volume/Surface Area of Test Section/Time Interval

**Infiltration Rate, I (Last Reading) = 0.47 in./hr.**



**APPENDIX C**  
**Geotechnical Laboratory Testing**

Boring No.	LP-3	LP-3	LP-4	LP-4				
Sample No.	S-2	S-4	S-1	S-4				
Depth (ft.)	25.0	35.0	20.0	35.0				
Sample Type	SPT	SPT	SPT	SPT				
Soil Identification	Yellowish brown silty sand (SM)	Light olive brown silty sand (SM)	Light olive brown sandy silt s(ML)	Light olive brown silty sand with gravel (SM)g				
<b>Moisture Correction</b>								
Wet Weight of Soil + Container (g)	0.00	0.00	0.00	0.00				
Dry Weight of Soil + Container (g)	0.00	0.00	0.00	0.00				
Weight of Container (g)	1.00	1.00	1.00	1.00				
Moisture Content (%)	0.00	0.00	0.00	0.00				
<b>Sample Dry Weight Determination</b>								
Weight of Sample + Container (g)	616.90	794.40	588.90	847.80				
Weight of Container (g)	108.60	108.50	107.30	108.00				
Weight of Dry Sample (g)	508.30	685.90	481.60	739.80				
Container No.:	V-1	927	936	957				
<b>After Wash</b>								
Method (A or B)	A	A	A	A				
Dry Weight of Sample + Cont. (g)	411.10	609.70	340.00	732.50				
Weight of Container (g)	108.60	108.50	107.30	108.00				
Dry Weight of Sample (g)	302.50	501.20	232.70	624.50				
<b>% Passing No. 200 Sieve</b>	<b>40.5</b>	<b>26.9</b>	<b>51.7</b>	<b>15.6</b>				
<b>% Retained No. 200 Sieve</b>	59.5	73.1	48.3	84.4				
	<b>PERCENT PASSING No. 200 SIEVE ASTM D 1140</b>			Project Name: <u>Legacy - Ontario</u>				
				Project No.: <u>13493.002</u>				
				Tested By: <u>J. Domingo</u>		Date: <u>09/12/22</u>		

# DESIGN INFILTRATION RATE AND FACTOR OF SAFETY CALCULATION

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VII.4.1. Site Suitability Considerations

Suitability assessment related considerations include ([Table VII.3](#)):

- Soil assessment methods – the site assessment extent (e.g., number of borings, test pits, etc.) and the measurement method used to estimate the short-term infiltration rate.
- Predominant soil texture/percent fines – soil texture and the percent of fines can greatly influence the potential for clogging.
- Site soil variability – site with spatially heterogeneous soils (vertically or horizontally) as determined from site investigations are more difficult to estimate average properties for resulting in a higher level of uncertainty associated with initial estimates.
- Depth to seasonal high groundwater/impervious layer – groundwater mounding may become an issue during excessively wet conditions where shallow aquifers or shallow clay lenses are present.

**Table VII.3: Suitability Assessment Related Considerations for Infiltration Facility Safety Factors**

Consideration	High Concern	Medium Concern	Low Concern
Assessment methods (see explanation below)	Use of soil survey maps or simple texture analysis to estimate short-term infiltration rates	Direct measurement of $\geq 20$ percent of infiltration area with localized infiltration measurement methods (e.g., infiltrometer)	Direct measurement of $\geq 50$ percent of infiltration area with localized infiltration measurement methods or Use of extensive test pit infiltration measurement methods
Texture Class	Silty and clayey soils with significant fines	Loamy soils	Granular to slightly loamy soils
Site soil variability	Highly variable soils indicated from site assessment or limited soil borings collected during site assessment	Soil borings/test pits indicate moderately homogeneous soils	Multiple soil borings/test pits indicate relatively homogeneous soils
Depth to groundwater/ impervious layer	<5 ft below facility bottom	5-10 ft below facility bottom	>10 below facility bottom

Localized infiltration testing refers to methods such as the double ring infiltrometer test (ASTM D3385-88) which measure infiltration rates over an area less than 10 sq-ft, may include lateral

**Table VII.4: Design Related Considerations for Infiltration Facility Safety Factors**

Consideration	High Concern	Medium Concern	Low Concern
Tributary area size	Greater than 10 acres.	Greater than 2 acres but less than 10 acres.	2 acres or less.
Level of pretreatment/ expected influent sediment loads	Pretreatment from gross solids removal devices only, such as hydrodynamic separators, racks and screens AND tributary area includes landscaped areas, steep slopes, high traffic areas, or any other areas expected to produce high sediment, trash, or debris loads.	Good pretreatment with BMPs that mitigate coarse sediments such as vegetated swales AND influent sediment loads from the tributary area are expected to be relatively low (e.g., low traffic, mild slopes, disconnected impervious areas, etc.).	Excellent pretreatment with BMPs that mitigate fine sediments such as bioretention or media filtration OR sedimentation or facility only treats runoff from relatively clean surfaces, such as rooftops.
Redundancy of treatment	No redundancy in BMP treatment train.	Medium redundancy, other BMPs available in treatment train to maintain at least 50% of function of facility in event of failure.	High redundancy, multiple components capable of operating independently and in parallel, maintaining at least 90% of facility functionality in event of failure.
Compaction during construction	Construction of facility on a compacted site or elevated probability of unintended/ indirect compaction.	Medium probability of unintended/ indirect compaction.	Heavy equipment actively prohibited from infiltration areas during construction and low probability of unintended/ indirect compaction.

VII.4.3. Determining Factor of Safety

A factor of safety shall be used. To assist in selecting the appropriate design infiltration rate, the measured short term infiltration rate should be adjusted using a weighted average of several safety factors using the worksheet shown in [Worksheet H](#) below. The design infiltration rate would be determined as follows:

1. For each consideration shown in [Table VII.3](#) and [Table VII.4](#) above, determine whether the consideration is a high, medium, or low concern.
2. For all high concerns, assign a factor value of 3, for medium concerns, assign a factor value of 2, and for low concerns assign a factor value of 1.
3. Multiply each of the factors by the corresponding weight to get a product.
4. Sum the products within each factor category to obtain a safety factor for each.
5. Multiply the two safety factors together to get the final combined safety factor. If the combined safety factor is less than 2, then 2 shall be used as the safety factor.
6. Divide the measured short term infiltration rate by the combined safety factor to obtain the adjusted design infiltration rate for use in sizing the infiltration facility.

The design infiltration rate shall be used to size BMPs and to evaluate their expected long term performance. This rate shall not be less than 2, but may be higher at the discretion of the design engineer.

**Worksheet H: Factor of Safety and Design Infiltration Rate and Worksheet**

Factor Category		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) $p = w \times v$
A	Suitability Assessment	Soil assessment methods	0.25	<b>1</b>	<b>0.25</b>
		Predominant soil texture	0.25	<b>1</b>	<b>0.25</b>
		Site soil variability	0.25	<b>2</b>	<b>0.50</b>
		Depth to groundwater / impervious layer	0.25	<b>1</b>	<b>0.25</b>
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			
B	Design	Tributary area size <b>Area is &lt; 10ac</b>	0.25	<b>2</b>	<b>0.50</b>
		Level of pretreatment/ expected sediment loads	0.25	<b>3</b>	<b>0.75</b>
		Redundancy	0.25	<b>3</b>	<b>0.75</b>
		Compaction during construction	0.25	<b>3</b>	<b>0.75</b>
		Design Safety Factor, $S_B = \Sigma p$			
Combined Safety Factor, $S_{TOT} = S_A \times S_B$				<b>1.25X2.75</b>	<b>3.44</b>
Measured Infiltration Rate, inch/hr, $K_M$ (corrected for test-specific bias)				<b>@ Test LP2: @ Test LP4:</b>	<b>0.69 in/hr 0.47 in/hr</b>
Design Infiltration Rate, in/hr, $K_{DESIGN} = S_{TOT} \times K_M$				<b>0.69/3.44 0.47/3.44</b>	<b>0.20 in/hr 0.14 in/hr</b>
<b>Supporting Data</b>					
<p>Briefly describe infiltration test and provide reference to test forms:  <a href="#">Please see attached Infiltration test report for detail of testing.</a></p> <p><a href="#">As the design infiltration rates are less than 0.33 in/hour, the INFILTRATION BMP's are not recommended and not proposed</a></p>					

**Note:** The minimum combined adjustment factor shall not be less than 2.0 and the maximum combined adjustment factor shall not exceed 9.0.

## Addendum Appendix D



June 23, 2022

Benjamin Mount  
Legacy/Colliers Residential, LLC  
5141 California Avenue, Suite 100  
Irvine, CA 92617  
Email: bmount@legacypartners.com

LLG Reference: 2.22.4563.1

Subject: **Trip Generation Assessment for the  
Euclid Avenue Mixed-Use Apartment Project**  
Ontario, California

Dear Mr. Mount:

Linscott, Law & Greenspan, Engineers (LLG) is pleased to submit this Trip Generation Assessment associated for the Euclid Avenue Mixed-Use Apartment Project (hereinafter referred to as “Project”) in the City of Ontario, California.

This letter summarizes the traffic generation forecast potential for the proposed demolition of an existing commercial center consisting of an 11,450 SF strip retail center, 4,100 SF fast-food restaurant with drive-through (Carl’s Jr.), and an 89,500 SF K-Mart/Sears appliance repair shop and the construction of 376 apartment units with 10,898 SF of ground floor retail space.

### **PROJECT DESCRIPTION**

The Project site is a 9.4±-acre parcel of land that is located north of Walnut Street and west of Euclid Avenue in the City of Ontario, California. The subject property is currently developed with a 11,450 SF strip retail center, 4,100 SF fast-food restaurant with drive-through (Carl’s Jr.), and a vacant 89,500 SF K-Mart/Sears appliance repair shop. **Figure 1**, located at the rear of this letter report, presents a Vicinity Map, which illustrates the general location of the project and the surrounding street system.

The Project is proposing to demolish the existing commercial center and construct a total of 376 apartment units with 10,898 SF of ground floor retail. The Project is expected to be completed in two phases. Phase 1 would leave the existing Carl’s Jr. site untouched and includes of the development of 4,500 SF ground floor retail space and 346 apartment units consisting of 18 studio units, 190 one-bedroom units, and 138 two-bedroom units. Phase 2 would consist of replacing the existing Carl’s Jr. with additional 30 apartment units and 6,398 SF of ground floor retail space.

Engineers & Planners  
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Transportation  
Parking

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David S. Shender, PE

John A. Boarman, PE

Clare M. Look-Jaeger, PE

Richard E. Barretto, PE

Keil D. Maberry, PE

The proposed Project will provide a total of 625 parking spaces for the residential component and 44 parking spaces for the retail component. Out of the total parking provided, Phase 1 will provide 587 residential spaces and 18 retail spaces, and Phase 2 will provide 38 residential spaces and 26 retail spaces.

Vehicular access is proposed via two right-turn only driveways located along Euclid Avenue and three full access unsignalized driveways located along Walnut Street in close proximity to the site's current driveways. It should be noted that the project is proposing gated access to the residential component.

*Figure 2* presents an existing aerial photograph of the Project site. *Figure 3* presents the proposed site plan for the Project Site.

## PROJECT TRAFFIC CHARACTERISTICS

### Trip Generation Forecast

Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Generation factors and/or equations used in this analysis are based on information found in the 11<sup>th</sup> Edition of *Trip Generation*, published by the Institute of Transportation Engineers (ITE) [Washington, D.C., 2021].

As presented in upper portion of *Table 1*, the trip generation potential of the proposed Project and the existing/entitled land use has been estimated using the average rates for the following:

- ITE Land Use Code 221: Multifamily Housing (Mid-Rise)
- ITE Land Use Code 822: Strip Retail Plaza (<40K)
- ITE Land Use Code 875: Department Store
- ITE Land Use Code 934: Fast Food Restaurant with Drive-Through Window

The middle portion of *Table 1* summarizes the trip generation potential of the existing/entitled land uses and the proposed Project for Phase 1. As shown, the existing/entitled land use is forecast to generate 2,605 daily trips, with 71 trips (44 inbound, 27 outbound) produced in the AM peak hour and 150 trips (76 inbound, 74 outbound) produced in the PM peak hour. The proposed Project is forecast to generate 1,791 daily trips, with 138 trips (35 inbound, 103 outbound) produced in the AM peak hour and 153 trips (91 inbound, 62 outbound) produced in the PM peak hour. Comparison of the trips generated by the proposed Project to the trips generated by the existing/entitled land use indicates that the proposed Project will generate 814

fewer daily trips, 67 more AM peak hour trips, and 3 fewer PM peak hour trips as part of Phase 1.

The lower portion of *Table 1* summarizes the trip generation potential of the existing/entitled land use and the proposed Project for Phase 2. As shown, the existing/entitled land use is forecast to generate 1,438 daily trips, with 91 trips (46 inbound, 45 outbound) produced in the AM peak hour and 61 trips (31 inbound, 30 outbound) produced in the PM peak hour. The proposed Project is forecast to generate 449 daily trips, with 24 trips (11 inbound, 13 outbound) produced in the AM peak hour and 37 trips (20 inbound, 17 outbound) produced in the PM peak hour. Comparison of the trips generated by the proposed Project to the trips generated by the existing/entitled land use indicates that the proposed Project will generate 989 fewer daily trips, 67 fewer AM peak hour trips, and 24 fewer PM peak hour trips as part of Phase 2.

The last row of *Table 1* shows the “net” trip generation potential of both Phases 1 and 2 of the proposed Project combined. As shown, the entirety of the proposed Project is forecast to result in 1,803 fewer daily trips, 0 AM peak hour trips, and 21 fewer PM peak hour trips when compared to the existing/entitled land uses.

## CONCLUSION

Based on the findings above, the proposed Project (Phase 1 and 2) results in a lower trip generation forecast when compared to the existing/entitled land use. Therefore, it is concluded that the proposed Project can be expected to generate trips that would be within the trip budget originally approved for the Project site and would not create any new traffic impacts.

\* \* \* \* \*

Mr. Benjamin Mount  
June 23, 2022  
Page 4

We appreciate the opportunity to be of service on this Project. Should you need further assistance, or have any questions regarding this analysis, please call us at (949) 825-6175.

Sincerely,

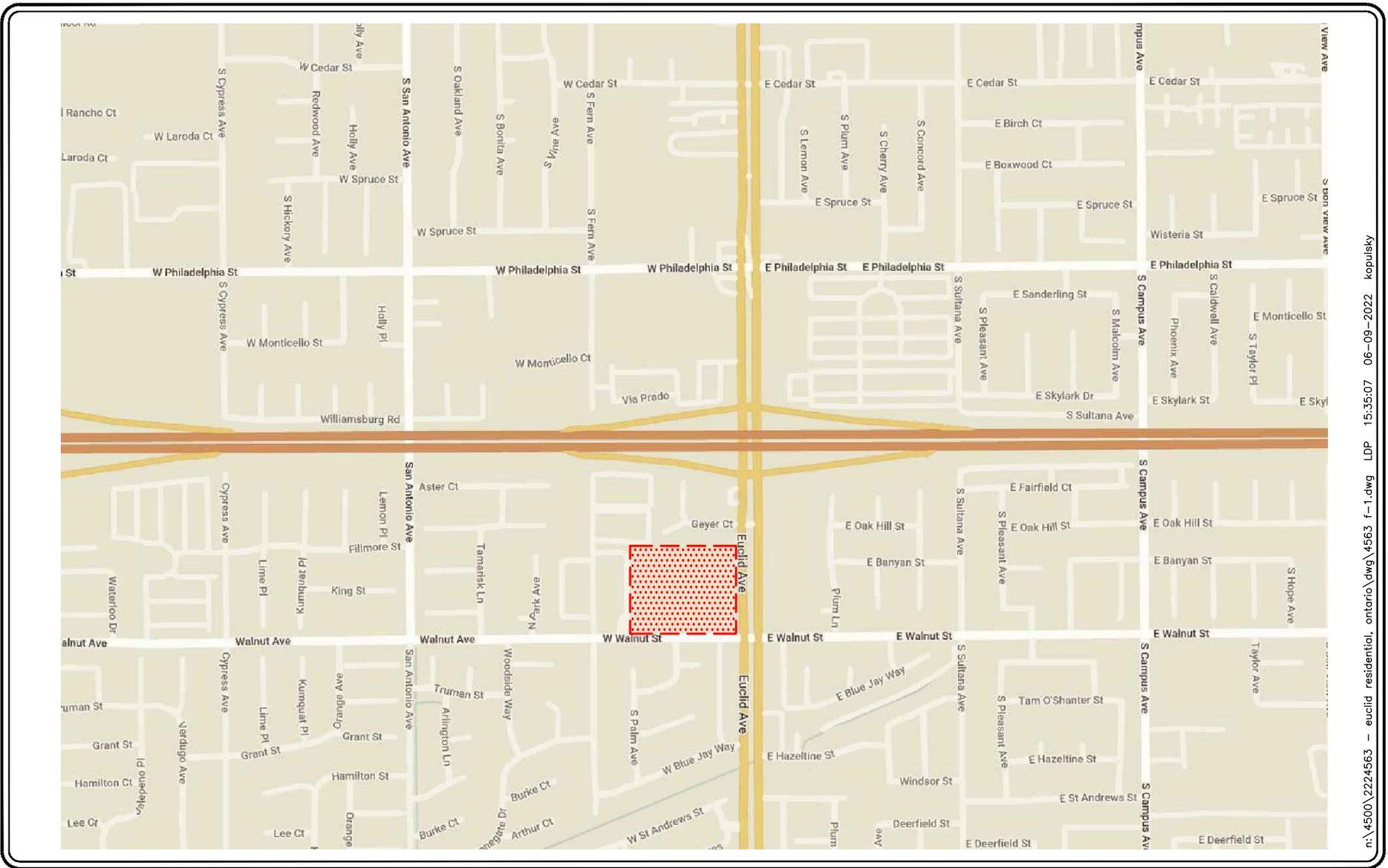
**Linscott, Law & Greenspan, Engineers**



Richard E. Barretto, P.E.  
Principal

Cc. Shane S. Green, P.E., Senior Transportation Engineer  
Attachments





n:\4500\2224563 - euclid residential\_ontario.dwg\4563 f-1.dwg LDP 15:35:07 06-09-2022 kopulsky



SOURCE: GOOGLE

**KEY**

 = PROJECT SITE

# FIGURE 1

## VICINITY MAP

EUCLID AVENUE MIXED-USE APARTMENTS, ONTARIO



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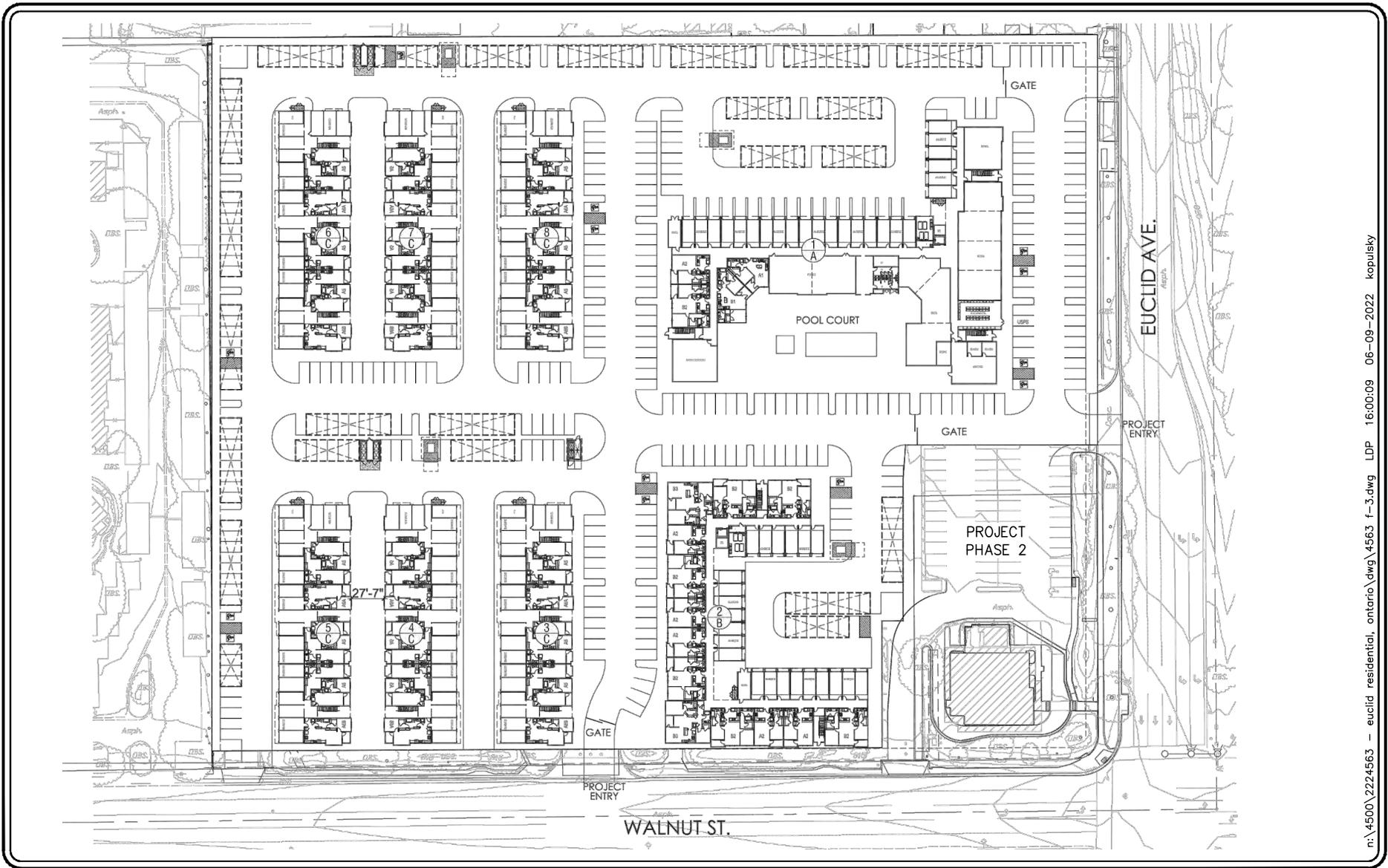
SOURCE: GOOGLE

KEY

 = PROJECT SITE

## FIGURE 2

**EXISTING AERIAL PHOTOGRAPH**  
 EUCLID AVENUE MIXED-USE APARTMENTS, ONTARIO



n:\4500\2224563 - euclid residential, ontario\dwg\4563 f-3.dwg LDP 16:00:09 06-09-2022 kopulsky

SOURCE: AO ARCHITECTS

# FIGURE 3

## PROPOSED SITE PLAN

EUCLID AVENUE MIXED-USE APARTMENTS, ONTARIO

LINSCOTT  
LAW &  
GREENSPAN  
engineers

NO SCALE

TABLE 1  
PROJECT TRAFFIC GENERATION RATES AND FORECAST<sup>1</sup>

Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
<b><u>Trip Generation Rates:</u></b>							
▪ 221: Multifamily Housing (Mid-Rise) (TE/DU)	4.54	23%	77%	0.37	61%	39%	0.39
▪ 822: Strip Retail Plaza (<40K) (TE/TSF)	54.45	60%	40%	2.36	50%	50%	6.59
▪ 875: Department Store (TE/TSF)	25.37 <sup>2</sup>	64%	36%	0.58	50%	50%	1.95
▪ 934: Fast Food Restaurant with Drive-Through Window (TE/TSF)	467.48	51%	49%	44.61	52%	48%	33.03
<b><u>Phase 1 – Entitled/Existing Land Use Trip Generation:</u></b>							
▪ K-Mart (89,500 SF)	2,271	33	19	52	88	87	175
Pass-by Reduction <sup>3</sup>	-227	-3	-2	-5	-35	-35	-70
Shopping Plaza Subtotal	2,044	30	17	47	53	52	105
▪ Strip Retail (11,450 SF)	623	16	11	27	38	37	75
Pass-by Reduction <sup>3</sup>	-62	-2	-1	-3	-15	-15	-30
Shopping Plaza Subtotal	561	14	10	24	23	22	45
<b>Phase 1 Entitled/Existing Land Use Trip Generation Total</b>	<b>2,605</b>	<b>44</b>	<b>27</b>	<b>71</b>	<b>76</b>	<b>74</b>	<b>150</b>
<b><u>Phase 1 – Proposed Project Trip Generation:</u></b>							
▪ Apartments (346 DU)	1,571	29	99	128	82	53	135
▪ Ground Floor Retail (4,500 SF)	245	7	4	11	15	15	30
Pass-by Reduction <sup>3</sup>	-25	-1	0	-1	-6	-6	-12
Ground Floor Retail Subtotal	220	6	4	10	9	9	18
<b>Phase 1 Proposed Project Trip Generation Total</b>	<b>1,791</b>	<b>35</b>	<b>103</b>	<b>138</b>	<b>91</b>	<b>62</b>	<b>153</b>
<b>[A] Phase 1 Net Project Trip Generation Total</b>	<b>-814</b>	<b>-9</b>	<b>76</b>	<b>67</b>	<b>15</b>	<b>-12</b>	<b>3</b>
<b><u>Phase 2 – Entitled/Existing Land Use Trip Generation:</u></b>							
▪ Carl's Jr. (4,100 SF)	1,917	93	90	183	70	65	135
Pass-by Reduction <sup>3</sup>	-479	-47	-45	-92	-39	-35	-74
Carl's Jr. Subtotal	1,438	46	45	91	31	30	61
<b>Phase 2 Entitled/Existing Land Use Trip Generation Total</b>	<b>1,438</b>	<b>46</b>	<b>45</b>	<b>91</b>	<b>31</b>	<b>30</b>	<b>61</b>
<b><u>Phase 2 – Proposed Project Trip Generation:</u></b>							
▪ Apartments (30 DU)	136	3	8	11	7	5	12
▪ Ground Floor Retail (6,398 SF)	348	9	6	15	21	21	42
Pass-by Reduction <sup>3</sup>	-35	-1	-1	-2	-8	-9	-17
Ground Floor Retail Subtotal	313	8	5	13	13	12	25
<b>Phase 2 Proposed Project Trip Generation Total</b>	<b>449</b>	<b>11</b>	<b>13</b>	<b>24</b>	<b>20</b>	<b>17</b>	<b>37</b>
<b>[B] Phase 2 Net Project Trip Generation Total</b>	<b>-989</b>	<b>-35</b>	<b>-32</b>	<b>-67</b>	<b>-11</b>	<b>-13</b>	<b>-24</b>
<b>Phases 1 and 2 Total Net Project Trip Generation ([A] + [B])</b>	<b>-1,803</b>	<b>-44</b>	<b>44</b>	<b>0</b>	<b>4</b>	<b>-25</b>	<b>-21</b>

Notes:  
TE/TSF = Trip ends per 1,000 SF of development  
TE/DU = Trip ends per dwelling unit

<sup>1</sup> Source: *Trip Generation*, 11<sup>th</sup> Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2021).

<sup>2</sup> ITE's *Trip Generation* 11<sup>th</sup> Edition does not provide a Daily trip rate for ITE LU 875 Department Store. Therefore, the daily trip rate has been estimated using the PM peak hour trip rate and the relationship between the Daily and PM peak hour trip rates of ITE LU 821 Shopping Plaza (40-150K).

<sup>3</sup> Pass-by trips are trips made as intermediate stops on the way from an origin to a primary trip destination. Pass-by trips are attracted from traffic passing the site on adjacent streets, which contain direct access to the generator. For this analysis, the following pass-by reduction factors were used (Source: *Trip Generation*, 11<sup>th</sup> Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2021)):

- ITE LU 822 Strip Retail Plaza (<40K): Daily and AM Peak Hour - Estimated to be 10% / PM Peak Hour - Estimated to be 40% which is consistent with ITE LU 821.
- ITE LU 875 Department Store: Daily and AM Peak Hour - Estimated to be 10% / PM Peak Hour - Estimated to be 40% which is consistent with ITE LU 821.
- ITE LU 934 Fast Food Restaurant with Drive-Through Window: Daily - Estimated to be 25% / AM Peak Hour - 50% / PM Peak Hour - 55%

**Appendix B**  
**AERMOD Output**

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```

** Lakes Environmental AERMOD MPI
**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 10.2.1
** Lakes Environmental Software Inc.
** Date: 10/5/2022
** File: C:\Lakes\Ontario_PUD-Legacy_Ops-HRA-TOG_20221005
\Ontario_PUD-Legacy_Ops-HRA-TOG_20221005.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
  TITLEONE C:\Lakes\Ontario_PUD-Legacy_Ops-HRA_20221004
\Ontario_PUD-Legacy_Ops-
  MODELOPT CONC FLAT
  AVERTIME 1 PERIOD
  URBANOPT 2035210 San_Bernardio_County
  POLLUTID PM_2.5
  RUNORNOT RUN
  ERRORFIL Ontario_PUD-Legacy_Ops-HRA-TOG_20221005.err
CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** -----
-----
** Line Source Represented by Area Sources
** LINE AREA Source ID = ARLN01
** DESCRSRC SR 60 WB Freeway TOG Ex
** PREFIX
** Length of Side = 18.29
** Ratio = 10
** Vertical Dimension = 1.20
** Emission Rate = 0.0000307319
** Nodes = 5
** 440650.044, 3765727.326, 260.07, 1.30
** 440119.780, 3765731.800, 261.41, 1.30
** 439661.922, 3765732.944, 260.96, 1.30

```

\*\* 439171.250, 3765734.039, 252.11, 1.30  
\*\* 438870.985, 3765732.123, 258.88, 1.30  
\*\* -----

-----

LOCATION	A0000012	AREA	440650.121	3765736.471	0.0
LOCATION	A0000013	AREA	440473.366	3765737.962	0.0
LOCATION	A0000014	AREA	440296.612	3765739.454	0.0
LOCATION	A0000015	AREA	440119.803	3765740.945	0.0
LOCATION	A0000016	AREA	439967.184	3765741.327	0.0
LOCATION	A0000017	AREA	439814.564	3765741.708	0.0
LOCATION	A0000018	AREA	439661.942	3765742.089	0.0
LOCATION	A0000019	AREA	439498.385	3765742.454	0.0
LOCATION	A0000020	AREA	439334.828	3765742.819	0.0
LOCATION	A0000021	AREA	439171.191	3765743.184	0.0
LOCATION	A0000022	AREA	439021.059	3765742.226	0.0

\*\* End of LINE AREA Source ID = ARLN01  
\*\* -----

-----

\*\* Line Source Represented by Area Sources  
\*\* LINE AREA Source ID = ARLN02  
\*\* DESCRSRC SR 60 EB Freeway TOG Ex  
\*\* PREFIX  
\*\* Length of Side = 18.29  
\*\* Ratio = 10  
\*\* Vertical Dimension = 1.20  
\*\* Emission Rate = 0.0000307481  
\*\* Nodes = 6  
\*\* 438872.217, 3765713.798, 258.90, 1.30  
\*\* 439571.019, 3765709.354, 260.53, 1.30  
\*\* 439744.944, 3765708.790, 261.20, 1.30  
\*\* 440090.503, 3765708.356, 261.51, 1.30  
\*\* 440405.345, 3765708.356, 260.60, 1.30  
\*\* 440650.831, 3765711.094, 260.06, 1.30  
\*\* -----

-----

LOCATION	A0000001	AREA	438872.159	3765704.654	0.0
LOCATION	A0000002	AREA	439046.860	3765703.543	0.0
LOCATION	A0000003	AREA	439221.560	3765702.432	0.0
LOCATION	A0000004	AREA	439396.261	3765701.321	0.0
LOCATION	A0000005	AREA	439570.990	3765700.210	0.0
LOCATION	A0000006	AREA	439744.932	3765699.646	0.0
LOCATION	A0000007	AREA	439917.712	3765699.429	0.0
LOCATION	A0000008	AREA	440090.503	3765699.212	0.0
LOCATION	A0000009	AREA	440247.924	3765699.212	0.0
LOCATION	A0000010	AREA	440405.447	3765699.212	0.0
LOCATION	A0000011	AREA	440528.190	3765700.581	0.0

\*\* End of LINE AREA Source ID = ARLN02  
\*\* -----

-----

\*\* Line Source Represented by Area Sources  
\*\* LINE AREA Source ID = ARLN03  
\*\* DESCRSRC SR 60 WB On-Ramp TOG Ex

```

** PREFIX
** Length of Side = 3.96
** Ratio = 10
** Vertical Dimension = 1.20
** Emission Rate = 0.0005311802
** Nodes = 6
** 439895.137, 3765792.036, 254.44, 1.30
** 439830.262, 3765782.314, 255.62, 1.30
** 439602.637, 3765750.155, 260.12, 1.30
** 439556.367, 3765746.633, 260.49, 1.30
** 439478.285, 3765744.597, 260.25, 1.30
** 439423.199, 3765742.703, 260.08, 1.30
** -----

```

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-----
LOCATION A0000023      AREA      439894.844 3765793.995 0.0
LOCATION A0000024      AREA      439862.406 3765789.134 0.0
LOCATION A0000025      AREA      439829.985 3765784.276 0.0
LOCATION A0000026      AREA      439792.048 3765778.916 0.0
LOCATION A0000027      AREA      439754.110 3765773.556 0.0
LOCATION A0000028      AREA      439716.172 3765768.196 0.0
LOCATION A0000029      AREA      439678.235 3765762.836 0.0
LOCATION A0000030      AREA      439640.297 3765757.477 0.0
LOCATION A0000031      AREA      439602.486 3765752.131 0.0
LOCATION A0000032      AREA      439579.352 3765750.369 0.0
LOCATION A0000033      AREA      439556.316 3765748.613 0.0
LOCATION A0000034      AREA      439517.274 3765747.595 0.0
LOCATION A0000035      AREA      439478.217 3765746.577 0.0
LOCATION A0000036      AREA      439450.674 3765745.630 0.0

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** End of LINE AREA Source ID = ARLN03
** -----

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-----
** Line Source Represented by Area Sources

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```

** LINE AREA Source ID = ARLN04
** DESCRSRC SR 60 EB Offramp TOG Ex

```

```

** PREFIX
** Length of Side = 7.62
** Ratio = 10
** Vertical Dimension = 1.20
** Emission Rate = 0.0003007914
** Nodes = 5
** 439895.389, 3765645.743, 252.80, 1.30
** 439818.641, 3765660.066, 254.56, 1.30
** 439755.474, 3765672.004, 257.06, 1.30
** 439662.806, 3765681.323, 259.67, 1.30
** 439463.024, 3765701.522, 260.17, 1.30
** -----

```

```

-----
LOCATION A0000037      AREA      439896.088 3765649.489 0.0
LOCATION A0000038      AREA      439857.714 3765656.650 0.0
LOCATION A0000039      AREA      439819.349 3765663.810 0.0
LOCATION A0000040      AREA      439755.856 3765675.795 0.0
LOCATION A0000041      AREA      439709.522 3765680.454 0.0

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LOCATION A0000042      AREA      439663.190 3765685.113 0.0
LOCATION A0000043      AREA      439596.595 3765691.846 0.0
LOCATION A0000044      AREA      439530.001 3765698.580 0.0
** End of LINE AREA Source ID = ARLN04
** -----

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-----
** Line Source Represented by Area Sources

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```

** LINE AREA Source ID = ARLN05
** DESCRSRC SR 60 EB On-Ramp TOG Ex

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```

** PREFIX
** Length of Side = 3.96
** Ratio = 10
** Vertical Dimension = 1.20
** Emission Rate = 0.000496591
** Nodes = 7

```

```

** 439941.297, 3765645.292, 253.26, 1.30
** 439993.010, 3765652.773, 253.93, 1.30
** 440155.834, 3765673.927, 258.66, 1.30
** 440268.609, 3765688.074, 259.90, 1.30
** 440322.372, 3765691.635, 260.22, 1.30
** 440354.630, 3765692.689, 260.13, 1.30
** 440446.541, 3765695.419, 259.97, 1.30
** -----

```

```

-----
LOCATION A0000045      AREA      439941.581 3765643.331 0.0
LOCATION A0000046      AREA      439967.437 3765647.072 0.0
LOCATION A0000047      AREA      439993.265 3765650.809 0.0
LOCATION A0000048      AREA      440025.830 3765655.039 0.0
LOCATION A0000049      AREA      440058.395 3765659.270 0.0
LOCATION A0000050      AREA      440090.960 3765663.501 0.0
LOCATION A0000051      AREA      440123.524 3765667.732 0.0
LOCATION A0000052      AREA      440156.081 3765671.961 0.0
LOCATION A0000053      AREA      440193.672 3765676.677 0.0
LOCATION A0000054      AREA      440231.264 3765681.392 0.0
LOCATION A0000055      AREA      440268.740 3765686.097 0.0
LOCATION A0000056      AREA      440295.621 3765687.877 0.0
LOCATION A0000057      AREA      440322.437 3765689.655 0.0
LOCATION A0000058      AREA      440354.688 3765690.708 0.0
LOCATION A0000059      AREA      440385.325 3765691.619 0.0
LOCATION A0000060      AREA      440415.962 3765692.529 0.0

```

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** End of LINE AREA Source ID = ARLN05
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-----
** Line Source Represented by Area Sources

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```

** LINE AREA Source ID = ARLN06
** DESCRSRC SR 60 WB Off-ramp TOG Ex

```

```

** PREFIX
** Length of Side = 11.58
** Ratio = 10
** Vertical Dimension = 1.20
** Emission Rate = 0.0001897523
** Nodes = 6

```

```

** 440392.606, 3765738.840, 260.54, 1.30
** 440310.837, 3765747.261, 260.35, 1.30
** 440224.880, 3765756.031, 259.69, 1.30
** 440137.544, 3765763.271, 258.13, 1.30
** 440102.580, 3765767.415, 257.28, 1.30
** 439940.966, 3765792.538, 254.87, 1.30
** -----

```

```

-----
LOCATION A0000061      AREA      440393.199 3765744.601 0.0
LOCATION A0000062      AREA      440311.425 3765753.022 0.0
LOCATION A0000063      AREA      440225.359 3765761.802 0.0
LOCATION A0000064      AREA      440138.226 3765769.022 0.0
LOCATION A0000065      AREA      440103.469 3765773.137 0.0
LOCATION A0000066      AREA      440022.663 3765785.699 0.0
** End of LINE AREA Source ID = ARLN06
** -----

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-----
** Line Source Represented by Area Sources
** LINE AREA Source ID = ARLN07
** DESCRSRC SR 60 WB Freeway TOG Evap
** PREFIX
** Length of Side = 18.29
** Ratio = 10
** Vertical Dimension = 1.20
** Emission Rate = 0.0000307319
** Nodes = 5
** 440650.040, 3765727.330, 260.07, 1.30
** 440119.780, 3765731.800, 261.41, 1.30
** 439661.920, 3765732.940, 260.96, 1.30
** 439171.250, 3765734.040, 252.11, 1.30
** 438870.980, 3765732.120, 258.88, 1.30
** -----

```

```

-----
LOCATION A0000067      AREA      440650.117 3765736.475 0.0
LOCATION A0000068      AREA      440473.364 3765737.965 0.0
LOCATION A0000069      AREA      440296.610 3765739.455 0.0
LOCATION A0000070      AREA      440119.803 3765740.945 0.0
LOCATION A0000071      AREA      439967.183 3765741.325 0.0
LOCATION A0000072      AREA      439814.563 3765741.705 0.0
LOCATION A0000073      AREA      439661.941 3765742.085 0.0
LOCATION A0000074      AREA      439498.384 3765742.452 0.0
LOCATION A0000075      AREA      439334.827 3765742.818 0.0
LOCATION A0000076      AREA      439171.192 3765743.185 0.0
LOCATION A0000077      AREA      439021.057 3765742.225 0.0
** End of LINE AREA Source ID = ARLN07
** -----

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-----
** Line Source Represented by Area Sources
** LINE AREA Source ID = ARLN08
** DESCRSRC SR EB Freeway TOG Evap
** PREFIX
** Length of Side = 18.29

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```

** Ratio = 10
** Vertical Dimension = 1.20
** Emission Rate = 0.0000307396
** Nodes = 6
** 438872.220, 3765713.800, 258.90, 1.30
** 439571.020, 3765709.350, 260.53, 1.30
** 439744.940, 3765708.790, 261.20, 1.30
** 440090.500, 3765708.360, 261.51, 1.30
** 440405.350, 3765708.360, 260.60, 1.30
** 440650.830, 3765711.090, 260.06, 1.30
** -----

```

```

-----
LOCATION A0000078      AREA      438872.162 3765704.655 0.0
LOCATION A0000079      AREA      439046.862 3765703.543 0.0
LOCATION A0000080      AREA      439221.562 3765702.430 0.0
LOCATION A0000081      AREA      439396.262 3765701.318 0.0
LOCATION A0000082      AREA      439570.991 3765700.205 0.0
LOCATION A0000083      AREA      439744.929 3765699.645 0.0
LOCATION A0000084      AREA      439917.709 3765699.430 0.0
LOCATION A0000085      AREA      440090.500 3765699.215 0.0
LOCATION A0000086      AREA      440247.925 3765699.215 0.0
LOCATION A0000087      AREA      440405.452 3765699.216 0.0
LOCATION A0000088      AREA      440528.192 3765700.581 0.0
** End of LINE AREA Source ID = ARLN08
** -----

```

```

-----
** Line Source Represented by Area Sources
** LINE AREA Source ID = ARLN09
** DESCRSRC SR 60 WB On-ramp TOG Evap
** PREFIX
** Length of Side = 3.96
** Ratio = 10
** Vertical Dimension = 1.20
** Emission Rate = 0.0005314996
** Nodes = 6
** 439895.140, 3765792.040, 254.44, 1.30
** 439830.260, 3765782.310, 255.62, 1.30
** 439602.640, 3765750.160, 260.12, 1.30
** 439556.370, 3765746.630, 260.49, 1.30
** 439478.280, 3765744.600, 260.25, 1.30
** 439423.200, 3765742.700, 260.08, 1.30
** -----

```

```

-----
LOCATION A0000089      AREA      439894.846 3765793.998 0.0
LOCATION A0000090      AREA      439862.406 3765789.133 0.0
LOCATION A0000091      AREA      439829.983 3765784.271 0.0
LOCATION A0000092      AREA      439792.046 3765778.912 0.0
LOCATION A0000093      AREA      439754.110 3765773.554 0.0
LOCATION A0000094      AREA      439716.173 3765768.196 0.0
LOCATION A0000095      AREA      439678.236 3765762.837 0.0
LOCATION A0000096      AREA      439640.300 3765757.479 0.0
LOCATION A0000097      AREA      439602.489 3765752.134 0.0

```

```

LOCATION A0000098      AREA      439579.354 3765750.369 0.0
LOCATION A0000099      AREA      439556.319 3765748.609 0.0
LOCATION A0000100      AREA      439517.274 3765747.594 0.0
LOCATION A0000101      AREA      439478.212 3765746.579 0.0
LOCATION A0000102      AREA      439450.672 3765745.629 0.0
** End of LINE AREA Source ID = ARLN09
** -----
-----
** Line Source Represented by Area Sources
** LINE AREA Source ID = ARLN10
** DESCRSRC SR 60 EB Off-ramp TOG Evap
** PREFIX
** Length of Side = 7.62
** Ratio = 10
** Vertical Dimension = 1.20
** Emission Rate = 0.0003007882
** Nodes = 5
** 439895.390, 3765645.740, 252.80, 1.30
** 439818.640, 3765660.070, 254.55, 1.30
** 439755.470, 3765672.000, 257.06, 1.30
** 439662.810, 3765681.320, 259.67, 1.30
** 439463.020, 3765701.520, 260.17, 1.30
** -----
-----
LOCATION A0000103      AREA      439896.089 3765649.485 0.0
LOCATION A0000104      AREA      439857.714 3765656.650 0.0
LOCATION A0000105      AREA      439819.347 3765663.814 0.0
LOCATION A0000106      AREA      439755.851 3765675.791 0.0
LOCATION A0000107      AREA      439709.521 3765680.451 0.0
LOCATION A0000108      AREA      439663.193 3765685.111 0.0
LOCATION A0000109      AREA      439596.597 3765691.844 0.0
LOCATION A0000110      AREA      439530.000 3765698.577 0.0
** End of LINE AREA Source ID = ARLN10
** -----
-----
** Line Source Represented by Area Sources
** LINE AREA Source ID = ARLN11
** DESCRSRC SR 60 EB On-ramp TOG Evap
** PREFIX
** Length of Side = 3.96
** Ratio = 10
** Vertical Dimension = 1.20
** Emission Rate = 0.0004968954
** Nodes = 7
** 439941.300, 3765645.290, 253.26, 1.30
** 439993.010, 3765652.770, 253.93, 1.30
** 440155.830, 3765673.930, 258.66, 1.30
** 440268.610, 3765688.070, 259.90, 1.30
** 440322.370, 3765691.630, 260.22, 1.30
** 440354.630, 3765692.690, 260.13, 1.30
** 440446.540, 3765695.420, 259.97, 1.30
** -----

```

```

-----
LOCATION A0000111      AREA      439941.583 3765643.330 0.0
LOCATION A0000112      AREA      439967.438 3765647.070 0.0
LOCATION A0000113      AREA      439993.265 3765650.807 0.0
LOCATION A0000114      AREA      440025.829 3765655.039 0.0
LOCATION A0000115      AREA      440058.393 3765659.271 0.0
LOCATION A0000116      AREA      440090.957 3765663.503 0.0
LOCATION A0000117      AREA      440123.521 3765667.735 0.0
LOCATION A0000118      AREA      440156.076 3765671.965 0.0
LOCATION A0000119      AREA      440193.670 3765676.679 0.0
LOCATION A0000120      AREA      440231.263 3765681.392 0.0
LOCATION A0000121      AREA      440268.741 3765686.094 0.0
LOCATION A0000122      AREA      440295.621 3765687.874 0.0
LOCATION A0000123      AREA      440322.435 3765689.651 0.0
LOCATION A0000124      AREA      440354.689 3765690.711 0.0
LOCATION A0000125      AREA      440385.325 3765691.621 0.0
LOCATION A0000126      AREA      440415.962 3765692.531 0.0
** End of LINE AREA Source ID = ARLN11
** -----
-----
** Line Source Represented by Area Sources
** LINE AREA Source ID = ARLN12
** DESCRSRC SR 60 WB Off-ramp TOG Evap
** PREFIX
** Length of Side = 11.58
** Ratio = 10
** Vertical Dimension = 1.20
** Emission Rate = 0.000189791
** Nodes = 6
** 440392.610, 3765738.840, 260.54, 1.30
** 440310.840, 3765747.260, 260.35, 1.30
** 440224.880, 3765756.030, 259.69, 1.30
** 440137.540, 3765763.270, 258.13, 1.30
** 440102.580, 3765767.410, 257.28, 1.30
** 439940.970, 3765792.540, 254.87, 1.30
** -----
-----
LOCATION A0000127      AREA      440393.203 3765744.600 0.0
LOCATION A0000128      AREA      440311.428 3765753.020 0.0
LOCATION A0000129      AREA      440225.358 3765761.800 0.0
LOCATION A0000130      AREA      440138.221 3765769.020 0.0
LOCATION A0000131      AREA      440103.470 3765773.131 0.0
LOCATION A0000132      AREA      440022.665 3765785.696 0.0
** End of LINE AREA Source ID = ARLN12
** Source Parameters **
** LINE AREA Source ID = ARLN01
SRCPARAM A0000012    0.0000307319      1.300      176.761
18.290 -179.517      1.200
SRCPARAM A0000013    0.0000307319      1.300      176.761
18.290 -179.517      1.200
SRCPARAM A0000014    0.0000307319      1.300      176.761
18.290 -179.517      1.200

```

	SRCPARAM A0000015	0.0000307319	1.300	152.620
18.290	-179.857	1.200		
	SRCPARAM A0000016	0.0000307319	1.300	152.620
18.290	-179.857	1.200		
	SRCPARAM A0000017	0.0000307319	1.300	152.620
18.290	-179.857	1.200		
	SRCPARAM A0000018	0.0000307319	1.300	163.558
18.290	-179.872	1.200		
	SRCPARAM A0000019	0.0000307319	1.300	163.558
18.290	-179.872	1.200		
	SRCPARAM A0000020	0.0000307319	1.300	163.558
18.290	-179.872	1.200		
	SRCPARAM A0000021	0.0000307319	1.300	150.135
18.290	179.634	1.200		
	SRCPARAM A0000022	0.0000307319	1.300	150.135
18.290	179.634	1.200		
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**	LINE AREA Source ID = ARLN02			
	SRCPARAM A0000001	0.0000307481	1.300	174.704
18.288	0.364	1.200		
	SRCPARAM A0000002	0.0000307481	1.300	174.704
18.288	0.364	1.200		
	SRCPARAM A0000003	0.0000307481	1.300	174.704
18.288	0.364	1.200		
	SRCPARAM A0000004	0.0000307481	1.300	174.704
18.288	0.364	1.200		
	SRCPARAM A0000005	0.0000307481	1.300	173.925
18.288	0.186	1.200		
	SRCPARAM A0000006	0.0000307481	1.300	172.780
18.288	0.072	1.200		
	SRCPARAM A0000007	0.0000307481	1.300	172.780
18.288	0.072	1.200		
	SRCPARAM A0000008	0.0000307481	1.300	157.421
18.288	0.000	1.200		
	SRCPARAM A0000009	0.0000307481	1.300	157.421
18.288	0.000	1.200		
	SRCPARAM A0000010	0.0000307481	1.300	122.750
18.288	-0.639	1.200		
	SRCPARAM A0000011	0.0000307481	1.300	122.750
18.288	-0.639	1.200		
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**	LINE AREA Source ID = ARLN03			
	SRCPARAM A0000023	0.0005311802	1.300	32.800
3.962	171.477	1.200		
	SRCPARAM A0000024	0.0005311802	1.300	32.800
3.962	171.477	1.200		
	SRCPARAM A0000025	0.0005311802	1.300	38.314
3.962	171.958	1.200		
	SRCPARAM A0000026	0.0005311802	1.300	38.314
3.962	171.958	1.200		

	SRCPARAM A0000027	0.0005311802	1.300	38.314
3.962	171.958	1.200		
	SRCPARAM A0000028	0.0005311802	1.300	38.314
3.962	171.958	1.200		
	SRCPARAM A0000029	0.0005311802	1.300	38.314
3.962	171.958	1.200		
	SRCPARAM A0000030	0.0005311802	1.300	38.314
3.962	171.958	1.200		
	SRCPARAM A0000031	0.0005311802	1.300	23.202
3.962	175.647	1.200		
	SRCPARAM A0000032	0.0005311802	1.300	23.202
3.962	175.647	1.200		
	SRCPARAM A0000033	0.0005311802	1.300	39.055
3.962	178.506	1.200		
	SRCPARAM A0000034	0.0005311802	1.300	39.055
3.962	178.506	1.200		
	SRCPARAM A0000035	0.0005311802	1.300	27.559
3.962	178.031	1.200		
	SRCPARAM A0000036	0.0005311802	1.300	27.559
3.962	178.031	1.200		
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**	LINE AREA Source ID = ARLN04			
	SRCPARAM A0000037	0.0003007914	1.300	39.036
7.620	-169.429	1.200		
	SRCPARAM A0000038	0.0003007914	1.300	39.036
7.620	-169.429	1.200		
	SRCPARAM A0000039	0.0003007914	1.300	64.285
7.620	-169.298	1.200		
	SRCPARAM A0000040	0.0003007914	1.300	46.568
7.620	-174.258	1.200		
	SRCPARAM A0000041	0.0003007914	1.300	46.568
7.620	-174.258	1.200		
	SRCPARAM A0000042	0.0003007914	1.300	66.934
7.620	-174.227	1.200		
	SRCPARAM A0000043	0.0003007914	1.300	66.934
7.620	-174.227	1.200		
	SRCPARAM A0000044	0.0003007914	1.300	66.934
7.620	-174.227	1.200		
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**	LINE AREA Source ID = ARLN05			
	SRCPARAM A0000045	0.000496591	1.300	26.125
3.962	-8.232	1.200		
	SRCPARAM A0000046	0.000496591	1.300	26.125
3.962	-8.232	1.200		
	SRCPARAM A0000047	0.000496591	1.300	32.839
3.962	-7.402	1.200		
	SRCPARAM A0000048	0.000496591	1.300	32.839
3.962	-7.402	1.200		
	SRCPARAM A0000049	0.000496591	1.300	32.839
3.962	-7.402	1.200		

	SRCPARAM A0000050	0.000496591	1.300	32.839
3.962	-7.402	1.200		
	SRCPARAM A0000051	0.000496591	1.300	32.839
3.962	-7.402	1.200		
	SRCPARAM A0000052	0.000496591	1.300	37.886
3.962	-7.150	1.200		
	SRCPARAM A0000053	0.000496591	1.300	37.886
3.962	-7.150	1.200		
	SRCPARAM A0000054	0.000496591	1.300	37.886
3.962	-7.150	1.200		
	SRCPARAM A0000055	0.000496591	1.300	26.940
3.962	-3.790	1.200		
	SRCPARAM A0000056	0.000496591	1.300	26.940
3.962	-3.790	1.200		
	SRCPARAM A0000057	0.000496591	1.300	32.275
3.962	-1.871	1.200		
	SRCPARAM A0000058	0.000496591	1.300	30.651
3.962	-1.702	1.200		
	SRCPARAM A0000059	0.000496591	1.300	30.651
3.962	-1.702	1.200		
	SRCPARAM A0000060	0.000496591	1.300	30.651
3.962	-1.702	1.200		
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**	LINE AREA Source ID = ARLN06			
	SRCPARAM A0000061	0.0001897523	1.300	82.201
11.582	-174.121	1.200		
	SRCPARAM A0000062	0.0001897523	1.300	86.403
11.582	-174.174	1.200		
	SRCPARAM A0000063	0.0001897523	1.300	87.635
11.582	-175.261	1.200		
	SRCPARAM A0000064	0.0001897523	1.300	35.209
11.582	-173.241	1.200		
	SRCPARAM A0000065	0.0001897523	1.300	81.777
11.582	-171.164	1.200		
	SRCPARAM A0000066	0.0001897523	1.300	81.777
11.582	-171.164	1.200		
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**	LINE AREA Source ID = ARLN07			
	SRCPARAM A0000067	0.0000307319	1.300	176.760
18.290	-179.517	1.200		
	SRCPARAM A0000068	0.0000307319	1.300	176.760
18.290	-179.517	1.200		
	SRCPARAM A0000069	0.0000307319	1.300	176.760
18.290	-179.517	1.200		
	SRCPARAM A0000070	0.0000307319	1.300	152.620
18.290	-179.857	1.200		
	SRCPARAM A0000071	0.0000307319	1.300	152.620
18.290	-179.857	1.200		
	SRCPARAM A0000072	0.0000307319	1.300	152.620
18.290	-179.857	1.200		

	SRCPARAM A0000073	0.0000307319	1.300	163.557
18.290	-179.872	1.200		
	SRCPARAM A0000074	0.0000307319	1.300	163.557
18.290	-179.872	1.200		
	SRCPARAM A0000075	0.0000307319	1.300	163.557
18.290	-179.872	1.200		
	SRCPARAM A0000076	0.0000307319	1.300	150.138
18.290	179.634	1.200		
	SRCPARAM A0000077	0.0000307319	1.300	150.138
18.290	179.634	1.200		
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**	LINE AREA Source ID = ARLN08			
	SRCPARAM A0000078	0.0000307396	1.300	174.704
18.290	0.365	1.200		
	SRCPARAM A0000079	0.0000307396	1.300	174.704
18.290	0.365	1.200		
	SRCPARAM A0000080	0.0000307396	1.300	174.704
18.290	0.365	1.200		
	SRCPARAM A0000081	0.0000307396	1.300	174.704
18.290	0.365	1.200		
	SRCPARAM A0000082	0.0000307396	1.300	173.921
18.290	0.184	1.200		
	SRCPARAM A0000083	0.0000307396	1.300	172.780
18.290	0.071	1.200		
	SRCPARAM A0000084	0.0000307396	1.300	172.780
18.290	0.071	1.200		
	SRCPARAM A0000085	0.0000307396	1.300	157.425
18.290	0.000	1.200		
	SRCPARAM A0000086	0.0000307396	1.300	157.425
18.290	0.000	1.200		
	SRCPARAM A0000087	0.0000307396	1.300	122.748
18.290	-0.637	1.200		
	SRCPARAM A0000088	0.0000307396	1.300	122.748
18.290	-0.637	1.200		
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**	LINE AREA Source ID = ARLN09			
	SRCPARAM A0000089	0.0005314996	1.300	32.803
3.960	171.471	1.200		
	SRCPARAM A0000090	0.0005314996	1.300	32.803
3.960	171.471	1.200		
	SRCPARAM A0000091	0.0005314996	1.300	38.313
3.960	171.960	1.200		
	SRCPARAM A0000092	0.0005314996	1.300	38.313
3.960	171.960	1.200		
	SRCPARAM A0000093	0.0005314996	1.300	38.313
3.960	171.960	1.200		
	SRCPARAM A0000094	0.0005314996	1.300	38.313
3.960	171.960	1.200		
	SRCPARAM A0000095	0.0005314996	1.300	38.313
3.960	171.960	1.200		

	SRCPARAM A0000096	0.0005314996	1.300	38.313
3.960	171.960	1.200		
	SRCPARAM A0000097	0.0005314996	1.300	23.202
3.960	175.637	1.200		
	SRCPARAM A0000098	0.0005314996	1.300	23.202
3.960	175.637	1.200		
	SRCPARAM A0000099	0.0005314996	1.300	39.058
3.960	178.511	1.200		
	SRCPARAM A0000100	0.0005314996	1.300	39.058
3.960	178.511	1.200		
	SRCPARAM A0000101	0.0005314996	1.300	27.556
3.960	178.024	1.200		
	SRCPARAM A0000102	0.0005314996	1.300	27.556
3.960	178.024	1.200		
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**	LINE AREA Source ID = ARLN10			
	SRCPARAM A0000103	0.0003007882	1.300	39.038
7.620	-169.424	1.200		
	SRCPARAM A0000104	0.0003007882	1.300	39.038
7.620	-169.424	1.200		
	SRCPARAM A0000105	0.0003007882	1.300	64.287
7.620	-169.305	1.200		
	SRCPARAM A0000106	0.0003007882	1.300	46.564
7.620	-174.256	1.200		
	SRCPARAM A0000107	0.0003007882	1.300	46.564
7.620	-174.256	1.200		
	SRCPARAM A0000108	0.0003007882	1.300	66.936
7.620	-174.227	1.200		
	SRCPARAM A0000109	0.0003007882	1.300	66.936
7.620	-174.227	1.200		
	SRCPARAM A0000110	0.0003007882	1.300	66.936
7.620	-174.227	1.200		
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**	LINE AREA Source ID = ARLN11			
	SRCPARAM A0000111	0.0004968954	1.300	26.124
3.960	-8.231	1.200		
	SRCPARAM A0000112	0.0004968954	1.300	26.124
3.960	-8.231	1.200		
	SRCPARAM A0000113	0.0004968954	1.300	32.838
3.960	-7.405	1.200		
	SRCPARAM A0000114	0.0004968954	1.300	32.838
3.960	-7.405	1.200		
	SRCPARAM A0000115	0.0004968954	1.300	32.838
3.960	-7.405	1.200		
	SRCPARAM A0000116	0.0004968954	1.300	32.838
3.960	-7.405	1.200		
	SRCPARAM A0000117	0.0004968954	1.300	32.838
3.960	-7.405	1.200		
	SRCPARAM A0000118	0.0004968954	1.300	37.888
3.960	-7.146	1.200		

SRCPARAM A0000119	0.0004968954	1.300	37.888
3.960 -7.146 1.200			
SRCPARAM A0000120	0.0004968954	1.300	37.888
3.960 -7.146 1.200			
SRCPARAM A0000121	0.0004968954	1.300	26.939
3.960 -3.789 1.200			
SRCPARAM A0000122	0.0004968954	1.300	26.939
3.960 -3.789 1.200			
SRCPARAM A0000123	0.0004968954	1.300	32.277
3.960 -1.882 1.200			
SRCPARAM A0000124	0.0004968954	1.300	30.650
3.960 -1.701 1.200			
SRCPARAM A0000125	0.0004968954	1.300	30.650
3.960 -1.701 1.200			
SRCPARAM A0000126	0.0004968954	1.300	30.650
3.960 -1.701 1.200			
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** LINE AREA Source ID = ARLN12			
SRCPARAM A0000127	0.000189791	1.300	82.202
11.580 -174.121 1.200			
SRCPARAM A0000128	0.000189791	1.300	86.406
11.580 -174.175 1.200			
SRCPARAM A0000129	0.000189791	1.300	87.640
11.580 -175.261 1.200			
SRCPARAM A0000130	0.000189791	1.300	35.204
11.580 -173.246 1.200			
SRCPARAM A0000131	0.000189791	1.300	81.776
11.580 -171.161 1.200			
SRCPARAM A0000132	0.000189791	1.300	81.776
11.580 -171.161 1.200			
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URBANSRC ALL			
** Variable Emissions Type: "By Hour-of-Day (HROFDY)"			
** Variable Emission Scenario: "ARLN01"			
EMISFACT A0000012	HROFDY 0.0144 0.0199 0.0203 0.0312		
0.0647 0.0749			
EMISFACT A0000012	HROFDY 0.0843 0.0915 0.0901 0.0889 0.09		
0.0923			
EMISFACT A0000012	HROFDY 0.0943 0.0964 0.0998 0.102 0.103		
0.1			
EMISFACT A0000012	HROFDY 0.0886 0.0729 0.0626 0.0593		
0.0491 0.0361			
EMISFACT A0000013	HROFDY 0.0144 0.0199 0.0203 0.0312		
0.0647 0.0749			
EMISFACT A0000013	HROFDY 0.0843 0.0915 0.0901 0.0889 0.09		
0.0923			
EMISFACT A0000013	HROFDY 0.0943 0.0964 0.0998 0.102 0.103		
0.1			
EMISFACT A0000013	HROFDY 0.0886 0.0729 0.0626 0.0593		

0.0491 0.0361						
EMISFACT A0000014	HROFDY	0.0144	0.0199	0.0203	0.0312	
0.0647 0.0749						
EMISFACT A0000014	HROFDY	0.0843	0.0915	0.0901	0.0889	0.09
0.0923						
EMISFACT A0000014	HROFDY	0.0943	0.0964	0.0998	0.102	0.103
0.1						
EMISFACT A0000014	HROFDY	0.0886	0.0729	0.0626	0.0593	
0.0491 0.0361						
EMISFACT A0000015	HROFDY	0.0144	0.0199	0.0203	0.0312	
0.0647 0.0749						
EMISFACT A0000015	HROFDY	0.0843	0.0915	0.0901	0.0889	0.09
0.0923						
EMISFACT A0000015	HROFDY	0.0943	0.0964	0.0998	0.102	0.103
0.1						
EMISFACT A0000015	HROFDY	0.0886	0.0729	0.0626	0.0593	
0.0491 0.0361						
EMISFACT A0000016	HROFDY	0.0144	0.0199	0.0203	0.0312	
0.0647 0.0749						
EMISFACT A0000016	HROFDY	0.0843	0.0915	0.0901	0.0889	0.09
0.0923						
EMISFACT A0000016	HROFDY	0.0943	0.0964	0.0998	0.102	0.103
0.1						
EMISFACT A0000016	HROFDY	0.0886	0.0729	0.0626	0.0593	
0.0491 0.0361						
EMISFACT A0000017	HROFDY	0.0144	0.0199	0.0203	0.0312	
0.0647 0.0749						
EMISFACT A0000017	HROFDY	0.0843	0.0915	0.0901	0.0889	0.09
0.0923						
EMISFACT A0000017	HROFDY	0.0943	0.0964	0.0998	0.102	0.103
0.1						
EMISFACT A0000017	HROFDY	0.0886	0.0729	0.0626	0.0593	
0.0491 0.0361						
EMISFACT A0000018	HROFDY	0.0144	0.0199	0.0203	0.0312	
0.0647 0.0749						
EMISFACT A0000018	HROFDY	0.0843	0.0915	0.0901	0.0889	0.09
0.0923						
EMISFACT A0000018	HROFDY	0.0943	0.0964	0.0998	0.102	0.103
0.1						
EMISFACT A0000018	HROFDY	0.0886	0.0729	0.0626	0.0593	
0.0491 0.0361						
EMISFACT A0000019	HROFDY	0.0144	0.0199	0.0203	0.0312	
0.0647 0.0749						
EMISFACT A0000019	HROFDY	0.0843	0.0915	0.0901	0.0889	0.09
0.0923						
EMISFACT A0000019	HROFDY	0.0943	0.0964	0.0998	0.102	0.103
0.1						
EMISFACT A0000019	HROFDY	0.0886	0.0729	0.0626	0.0593	
0.0491 0.0361						
EMISFACT A0000020	HROFDY	0.0144	0.0199	0.0203	0.0312	
0.0647 0.0749						
EMISFACT A0000020	HROFDY	0.0843	0.0915	0.0901	0.0889	0.09

0.0923	EMISFACT A0000020	HROFDY	0.0943	0.0964	0.0998	0.102	0.103
0.1	EMISFACT A0000020	HROFDY	0.0886	0.0729	0.0626	0.0593	
0.0491 0.0361	EMISFACT A0000021	HROFDY	0.0144	0.0199	0.0203	0.0312	
0.0647 0.0749	EMISFACT A0000021	HROFDY	0.0843	0.0915	0.0901	0.0889	0.09
0.0923	EMISFACT A0000021	HROFDY	0.0943	0.0964	0.0998	0.102	0.103
0.1	EMISFACT A0000021	HROFDY	0.0886	0.0729	0.0626	0.0593	
0.0491 0.0361	EMISFACT A0000022	HROFDY	0.0144	0.0199	0.0203	0.0312	
0.0647 0.0749	EMISFACT A0000022	HROFDY	0.0843	0.0915	0.0901	0.0889	0.09
0.0923	EMISFACT A0000022	HROFDY	0.0943	0.0964	0.0998	0.102	0.103
0.1	EMISFACT A0000022	HROFDY	0.0886	0.0729	0.0626	0.0593	
0.0491 0.0361							

\*\* Variable Emissions Type: "By Hour-of-Day (HROFDY)"

\*\* Variable Emission Scenario: "ARLN02"

EMISFACT A0000001	HROFDY	0.0172	0.0124	0.0108	0.0126		
0.0203 0.034	EMISFACT A0000001	HROFDY	0.0431	0.0457	0.0439	0.0414	0.042
0.0439	EMISFACT A0000001	HROFDY	0.0463	0.0483	0.0501	0.0491	
0.0508 0.0506	EMISFACT A0000001	HROFDY	0.0472	0.0459	0.0417	0.0408	
0.0334 0.0248	EMISFACT A0000002	HROFDY	0.0172	0.0124	0.0108	0.0126	
0.0203 0.034	EMISFACT A0000002	HROFDY	0.0431	0.0457	0.0439	0.0414	0.042
0.0439	EMISFACT A0000002	HROFDY	0.0463	0.0483	0.0501	0.0491	
0.0508 0.0506	EMISFACT A0000002	HROFDY	0.0472	0.0459	0.0417	0.0408	
0.0334 0.0248	EMISFACT A0000003	HROFDY	0.0172	0.0124	0.0108	0.0126	
0.0203 0.034	EMISFACT A0000003	HROFDY	0.0431	0.0457	0.0439	0.0414	0.042
0.0439	EMISFACT A0000003	HROFDY	0.0463	0.0483	0.0501	0.0491	
0.0508 0.0506	EMISFACT A0000003	HROFDY	0.0472	0.0459	0.0417	0.0408	
0.0334 0.0248	EMISFACT A0000004	HROFDY	0.0172	0.0124	0.0108	0.0126	
0.0203 0.034	EMISFACT A0000004	HROFDY	0.0431	0.0457	0.0439	0.0414	0.042
0.0439							

EMISFACT A0000004	HROFDY 0.0463 0.0483 0.0501 0.0491
0.0508 0.0506	
EMISFACT A0000004	HROFDY 0.0472 0.0459 0.0417 0.0408
0.0334 0.0248	
EMISFACT A0000005	HROFDY 0.0172 0.0124 0.0108 0.0126
0.0203 0.034	
EMISFACT A0000005	HROFDY 0.0431 0.0457 0.0439 0.0414 0.042
0.0439	
EMISFACT A0000005	HROFDY 0.0463 0.0483 0.0501 0.0491
0.0508 0.0506	
EMISFACT A0000005	HROFDY 0.0472 0.0459 0.0417 0.0408
0.0334 0.0248	
EMISFACT A0000006	HROFDY 0.0172 0.0124 0.0108 0.0126
0.0203 0.034	
EMISFACT A0000006	HROFDY 0.0431 0.0457 0.0439 0.0414 0.042
0.0439	
EMISFACT A0000006	HROFDY 0.0463 0.0483 0.0501 0.0491
0.0508 0.0506	
EMISFACT A0000006	HROFDY 0.0472 0.0459 0.0417 0.0408
0.0334 0.0248	
EMISFACT A0000007	HROFDY 0.0172 0.0124 0.0108 0.0126
0.0203 0.034	
EMISFACT A0000007	HROFDY 0.0431 0.0457 0.0439 0.0414 0.042
0.0439	
EMISFACT A0000007	HROFDY 0.0463 0.0483 0.0501 0.0491
0.0508 0.0506	
EMISFACT A0000007	HROFDY 0.0472 0.0459 0.0417 0.0408
0.0334 0.0248	
EMISFACT A0000008	HROFDY 0.0172 0.0124 0.0108 0.0126
0.0203 0.034	
EMISFACT A0000008	HROFDY 0.0431 0.0457 0.0439 0.0414 0.042
0.0439	
EMISFACT A0000008	HROFDY 0.0463 0.0483 0.0501 0.0491
0.0508 0.0506	
EMISFACT A0000008	HROFDY 0.0472 0.0459 0.0417 0.0408
0.0334 0.0248	
EMISFACT A0000009	HROFDY 0.0172 0.0124 0.0108 0.0126
0.0203 0.034	
EMISFACT A0000009	HROFDY 0.0431 0.0457 0.0439 0.0414 0.042
0.0439	
EMISFACT A0000009	HROFDY 0.0463 0.0483 0.0501 0.0491
0.0508 0.0506	
EMISFACT A0000009	HROFDY 0.0472 0.0459 0.0417 0.0408
0.0334 0.0248	
EMISFACT A0000010	HROFDY 0.0172 0.0124 0.0108 0.0126
0.0203 0.034	
EMISFACT A0000010	HROFDY 0.0431 0.0457 0.0439 0.0414 0.042
0.0439	
EMISFACT A0000010	HROFDY 0.0463 0.0483 0.0501 0.0491
0.0508 0.0506	
EMISFACT A0000010	HROFDY 0.0472 0.0459 0.0417 0.0408
0.0334 0.0248	

EMISFACT A0000011	HROFDY 0.0172 0.0124 0.0108 0.0126
0.0203 0.034	
EMISFACT A0000011	HROFDY 0.0431 0.0457 0.0439 0.0414 0.042
0.0439	
EMISFACT A0000011	HROFDY 0.0463 0.0483 0.0501 0.0491
0.0508 0.0506	
EMISFACT A0000011	HROFDY 0.0472 0.0459 0.0417 0.0408
0.0334 0.0248	

\*\* Variable Emissions Type: "By Hour-of-Day (HROFDY)"

\*\* Variable Emission Scenario: "ARLN03"

EMISFACT A0000023	HROFDY 0.00251 0.00197 0.00201 0.00309
0.00642 0.00758	
EMISFACT A0000023	HROFDY 0.00854 0.00911 0.00896 0.00884
0.00896 0.00918	
EMISFACT A0000023	HROFDY 0.00938 0.00959 0.00993 0.0101
0.0102 0.0101	
EMISFACT A0000023	HROFDY 0.00897 0.00724 0.00634 0.00589
0.00487 0.00358	
EMISFACT A0000024	HROFDY 0.00251 0.00197 0.00201 0.00309
0.00642 0.00758	
EMISFACT A0000024	HROFDY 0.00854 0.00911 0.00896 0.00884
0.00896 0.00918	
EMISFACT A0000024	HROFDY 0.00938 0.00959 0.00993 0.0101
0.0102 0.0101	
EMISFACT A0000024	HROFDY 0.00897 0.00724 0.00634 0.00589
0.00487 0.00358	
EMISFACT A0000025	HROFDY 0.00251 0.00197 0.00201 0.00309
0.00642 0.00758	
EMISFACT A0000025	HROFDY 0.00854 0.00911 0.00896 0.00884
0.00896 0.00918	
EMISFACT A0000025	HROFDY 0.00938 0.00959 0.00993 0.0101
0.0102 0.0101	
EMISFACT A0000025	HROFDY 0.00897 0.00724 0.00634 0.00589
0.00487 0.00358	
EMISFACT A0000026	HROFDY 0.00251 0.00197 0.00201 0.00309
0.00642 0.00758	
EMISFACT A0000026	HROFDY 0.00854 0.00911 0.00896 0.00884
0.00896 0.00918	
EMISFACT A0000026	HROFDY 0.00938 0.00959 0.00993 0.0101
0.0102 0.0101	
EMISFACT A0000026	HROFDY 0.00897 0.00724 0.00634 0.00589
0.00487 0.00358	
EMISFACT A0000027	HROFDY 0.00251 0.00197 0.00201 0.00309
0.00642 0.00758	
EMISFACT A0000027	HROFDY 0.00854 0.00911 0.00896 0.00884
0.00896 0.00918	
EMISFACT A0000027	HROFDY 0.00938 0.00959 0.00993 0.0101
0.0102 0.0101	
EMISFACT A0000027	HROFDY 0.00897 0.00724 0.00634 0.00589
0.00487 0.00358	
EMISFACT A0000028	HROFDY 0.00251 0.00197 0.00201 0.00309

0.00642 0.00758	
EMISFACT A0000028	HROFDY 0.00854 0.00911 0.00896 0.00884
0.00896 0.00918	
EMISFACT A0000028	HROFDY 0.00938 0.00959 0.00993 0.0101
0.0102 0.0101	
EMISFACT A0000028	HROFDY 0.00897 0.00724 0.00634 0.00589
0.00487 0.00358	
EMISFACT A0000029	HROFDY 0.00251 0.00197 0.00201 0.00309
0.00642 0.00758	
EMISFACT A0000029	HROFDY 0.00854 0.00911 0.00896 0.00884
0.00896 0.00918	
EMISFACT A0000029	HROFDY 0.00938 0.00959 0.00993 0.0101
0.0102 0.0101	
EMISFACT A0000029	HROFDY 0.00897 0.00724 0.00634 0.00589
0.00487 0.00358	
EMISFACT A0000030	HROFDY 0.00251 0.00197 0.00201 0.00309
0.00642 0.00758	
EMISFACT A0000030	HROFDY 0.00854 0.00911 0.00896 0.00884
0.00896 0.00918	
EMISFACT A0000030	HROFDY 0.00938 0.00959 0.00993 0.0101
0.0102 0.0101	
EMISFACT A0000030	HROFDY 0.00897 0.00724 0.00634 0.00589
0.00487 0.00358	
EMISFACT A0000031	HROFDY 0.00251 0.00197 0.00201 0.00309
0.00642 0.00758	
EMISFACT A0000031	HROFDY 0.00854 0.00911 0.00896 0.00884
0.00896 0.00918	
EMISFACT A0000031	HROFDY 0.00938 0.00959 0.00993 0.0101
0.0102 0.0101	
EMISFACT A0000031	HROFDY 0.00897 0.00724 0.00634 0.00589
0.00487 0.00358	
EMISFACT A0000032	HROFDY 0.00251 0.00197 0.00201 0.00309
0.00642 0.00758	
EMISFACT A0000032	HROFDY 0.00854 0.00911 0.00896 0.00884
0.00896 0.00918	
EMISFACT A0000032	HROFDY 0.00938 0.00959 0.00993 0.0101
0.0102 0.0101	
EMISFACT A0000032	HROFDY 0.00897 0.00724 0.00634 0.00589
0.00487 0.00358	
EMISFACT A0000033	HROFDY 0.00251 0.00197 0.00201 0.00309
0.00642 0.00758	
EMISFACT A0000033	HROFDY 0.00854 0.00911 0.00896 0.00884
0.00896 0.00918	
EMISFACT A0000033	HROFDY 0.00938 0.00959 0.00993 0.0101
0.0102 0.0101	
EMISFACT A0000033	HROFDY 0.00897 0.00724 0.00634 0.00589
0.00487 0.00358	
EMISFACT A0000034	HROFDY 0.00251 0.00197 0.00201 0.00309
0.00642 0.00758	
EMISFACT A0000034	HROFDY 0.00854 0.00911 0.00896 0.00884
0.00896 0.00918	
EMISFACT A0000034	HROFDY 0.00938 0.00959 0.00993 0.0101

0.0102	0.0101					
	EMISFACT	A0000034	HROFDY	0.00897	0.00724	0.00634 0.00589
0.00487	0.00358					
	EMISFACT	A0000035	HROFDY	0.00251	0.00197	0.00201 0.00309
0.00642	0.00758					
	EMISFACT	A0000035	HROFDY	0.00854	0.00911	0.00896 0.00884
0.00896	0.00918					
	EMISFACT	A0000035	HROFDY	0.00938	0.00959	0.00993 0.0101
0.0102	0.0101					
	EMISFACT	A0000035	HROFDY	0.00897	0.00724	0.00634 0.00589
0.00487	0.00358					
	EMISFACT	A0000036	HROFDY	0.00251	0.00197	0.00201 0.00309
0.00642	0.00758					
	EMISFACT	A0000036	HROFDY	0.00854	0.00911	0.00896 0.00884
0.00896	0.00918					
	EMISFACT	A0000036	HROFDY	0.00938	0.00959	0.00993 0.0101
0.0102	0.0101					
	EMISFACT	A0000036	HROFDY	0.00897	0.00724	0.00634 0.00589
0.00487	0.00358					

\*\* Variable Emissions Type: "By Hour-of-Day (HROFDY)"

\*\* Variable Emission Scenario: "ARLN04"

	EMISFACT	A0000037	HROFDY	0.00261	0.00188	0.00165 0.00192
0.00309	0.00518					
	EMISFACT	A0000037	HROFDY	0.00727	0.00811	0.0078 0.00734
0.00745	0.00779					
	EMISFACT	A0000037	HROFDY	0.00822	0.00857	0.00885 0.00868
0.00852	0.00849					
	EMISFACT	A0000037	HROFDY	0.00837	0.00775	0.00703 0.00621
0.00508	0.00378					
	EMISFACT	A0000038	HROFDY	0.00261	0.00188	0.00165 0.00192
0.00309	0.00518					
	EMISFACT	A0000038	HROFDY	0.00727	0.00811	0.0078 0.00734
0.00745	0.00779					
	EMISFACT	A0000038	HROFDY	0.00822	0.00857	0.00885 0.00868
0.00852	0.00849					
	EMISFACT	A0000038	HROFDY	0.00837	0.00775	0.00703 0.00621
0.00508	0.00378					
	EMISFACT	A0000039	HROFDY	0.00261	0.00188	0.00165 0.00192
0.00309	0.00518					
	EMISFACT	A0000039	HROFDY	0.00727	0.00811	0.0078 0.00734
0.00745	0.00779					
	EMISFACT	A0000039	HROFDY	0.00822	0.00857	0.00885 0.00868
0.00852	0.00849					
	EMISFACT	A0000039	HROFDY	0.00837	0.00775	0.00703 0.00621
0.00508	0.00378					
	EMISFACT	A0000040	HROFDY	0.00261	0.00188	0.00165 0.00192
0.00309	0.00518					
	EMISFACT	A0000040	HROFDY	0.00727	0.00811	0.0078 0.00734
0.00745	0.00779					
	EMISFACT	A0000040	HROFDY	0.00822	0.00857	0.00885 0.00868
0.00852	0.00849					

EMISFACT A0000040	HROFDY 0.00837 0.00775 0.00703 0.00621
0.00508 0.00378	
EMISFACT A0000041	HROFDY 0.00261 0.00188 0.00165 0.00192
0.00309 0.00518	
EMISFACT A0000041	HROFDY 0.00727 0.00811 0.0078 0.00734
0.00745 0.00779	
EMISFACT A0000041	HROFDY 0.00822 0.00857 0.00885 0.00868
0.00852 0.00849	
EMISFACT A0000041	HROFDY 0.00837 0.00775 0.00703 0.00621
0.00508 0.00378	
EMISFACT A0000042	HROFDY 0.00261 0.00188 0.00165 0.00192
0.00309 0.00518	
EMISFACT A0000042	HROFDY 0.00727 0.00811 0.0078 0.00734
0.00745 0.00779	
EMISFACT A0000042	HROFDY 0.00822 0.00857 0.00885 0.00868
0.00852 0.00849	
EMISFACT A0000042	HROFDY 0.00837 0.00775 0.00703 0.00621
0.00508 0.00378	
EMISFACT A0000043	HROFDY 0.00261 0.00188 0.00165 0.00192
0.00309 0.00518	
EMISFACT A0000043	HROFDY 0.00727 0.00811 0.0078 0.00734
0.00745 0.00779	
EMISFACT A0000043	HROFDY 0.00822 0.00857 0.00885 0.00868
0.00852 0.00849	
EMISFACT A0000043	HROFDY 0.00837 0.00775 0.00703 0.00621
0.00508 0.00378	
EMISFACT A0000044	HROFDY 0.00261 0.00188 0.00165 0.00192
0.00309 0.00518	
EMISFACT A0000044	HROFDY 0.00727 0.00811 0.0078 0.00734
0.00745 0.00779	
EMISFACT A0000044	HROFDY 0.00822 0.00857 0.00885 0.00868
0.00852 0.00849	
EMISFACT A0000044	HROFDY 0.00837 0.00775 0.00703 0.00621
0.00508 0.00378	

\*\* Variable Emissions Type: "By Hour-of-Day (HROFDY)"

\*\* Variable Emission Scenario: "ARLN05"

EMISFACT A0000045	HROFDY 0.00401 0.00288 0.00253 0.00294
0.00474 0.00794	
EMISFACT A0000045	HROFDY 0.0111 0.0124 0.012 0.0113 0.0114
0.0119	
EMISFACT A0000045	HROFDY 0.0126 0.0131 0.0136 0.0133
0.0131 0.013	
EMISFACT A0000045	HROFDY 0.0128 0.0119 0.0108 0.00951
0.00779 0.0058	
EMISFACT A0000046	HROFDY 0.00401 0.00288 0.00253 0.00294
0.00474 0.00794	
EMISFACT A0000046	HROFDY 0.0111 0.0124 0.012 0.0113 0.0114
0.0119	
EMISFACT A0000046	HROFDY 0.0126 0.0131 0.0136 0.0133
0.0131 0.013	
EMISFACT A0000046	HROFDY 0.0128 0.0119 0.0108 0.00951

0.00779 0.0058	EMISFACT A0000047	HROFDY 0.00401 0.00288 0.00253 0.00294
0.00474 0.00794	EMISFACT A0000047	HROFDY 0.0111 0.0124 0.012 0.0113 0.0114
0.0119	EMISFACT A0000047	HROFDY 0.0126 0.0131 0.0136 0.0133
0.0131 0.013	EMISFACT A0000047	HROFDY 0.0128 0.0119 0.0108 0.00951
0.00779 0.0058	EMISFACT A0000048	HROFDY 0.00401 0.00288 0.00253 0.00294
0.00474 0.00794	EMISFACT A0000048	HROFDY 0.0111 0.0124 0.012 0.0113 0.0114
0.0119	EMISFACT A0000048	HROFDY 0.0126 0.0131 0.0136 0.0133
0.0131 0.013	EMISFACT A0000048	HROFDY 0.0128 0.0119 0.0108 0.00951
0.00779 0.0058	EMISFACT A0000049	HROFDY 0.00401 0.00288 0.00253 0.00294
0.00474 0.00794	EMISFACT A0000049	HROFDY 0.0111 0.0124 0.012 0.0113 0.0114
0.0119	EMISFACT A0000049	HROFDY 0.0126 0.0131 0.0136 0.0133
0.0131 0.013	EMISFACT A0000049	HROFDY 0.0128 0.0119 0.0108 0.00951
0.00779 0.0058	EMISFACT A0000050	HROFDY 0.00401 0.00288 0.00253 0.00294
0.00474 0.00794	EMISFACT A0000050	HROFDY 0.0111 0.0124 0.012 0.0113 0.0114
0.0119	EMISFACT A0000050	HROFDY 0.0126 0.0131 0.0136 0.0133
0.0131 0.013	EMISFACT A0000050	HROFDY 0.0128 0.0119 0.0108 0.00951
0.00779 0.0058	EMISFACT A0000051	HROFDY 0.00401 0.00288 0.00253 0.00294
0.00474 0.00794	EMISFACT A0000051	HROFDY 0.0111 0.0124 0.012 0.0113 0.0114
0.0119	EMISFACT A0000051	HROFDY 0.0126 0.0131 0.0136 0.0133
0.0131 0.013	EMISFACT A0000051	HROFDY 0.0128 0.0119 0.0108 0.00951
0.00779 0.0058	EMISFACT A0000052	HROFDY 0.00401 0.00288 0.00253 0.00294
0.00474 0.00794	EMISFACT A0000052	HROFDY 0.0111 0.0124 0.012 0.0113 0.0114
0.0119	EMISFACT A0000052	HROFDY 0.0126 0.0131 0.0136 0.0133
0.0131 0.013	EMISFACT A0000052	HROFDY 0.0128 0.0119 0.0108 0.00951
0.00779 0.0058	EMISFACT A0000053	HROFDY 0.00401 0.00288 0.00253 0.00294
0.00474 0.00794	EMISFACT A0000053	HROFDY 0.0111 0.0124 0.012 0.0113 0.0114

0.0119	EMISFACT A0000053	HROFDY 0.0126 0.0131 0.0136 0.0133
0.0131 0.013	EMISFACT A0000053	HROFDY 0.0128 0.0119 0.0108 0.00951
0.00779 0.0058	EMISFACT A0000054	HROFDY 0.00401 0.00288 0.00253 0.00294
0.00474 0.00794	EMISFACT A0000054	HROFDY 0.0111 0.0124 0.012 0.0113 0.0114
0.0119	EMISFACT A0000054	HROFDY 0.0126 0.0131 0.0136 0.0133
0.0131 0.013	EMISFACT A0000054	HROFDY 0.0128 0.0119 0.0108 0.00951
0.00779 0.0058	EMISFACT A0000055	HROFDY 0.00401 0.00288 0.00253 0.00294
0.00474 0.00794	EMISFACT A0000055	HROFDY 0.0111 0.0124 0.012 0.0113 0.0114
0.0119	EMISFACT A0000055	HROFDY 0.0126 0.0131 0.0136 0.0133
0.0131 0.013	EMISFACT A0000055	HROFDY 0.0128 0.0119 0.0108 0.00951
0.00779 0.0058	EMISFACT A0000056	HROFDY 0.00401 0.00288 0.00253 0.00294
0.00474 0.00794	EMISFACT A0000056	HROFDY 0.0111 0.0124 0.012 0.0113 0.0114
0.0119	EMISFACT A0000056	HROFDY 0.0126 0.0131 0.0136 0.0133
0.0131 0.013	EMISFACT A0000056	HROFDY 0.0128 0.0119 0.0108 0.00951
0.00779 0.0058	EMISFACT A0000057	HROFDY 0.00401 0.00288 0.00253 0.00294
0.00474 0.00794	EMISFACT A0000057	HROFDY 0.0111 0.0124 0.012 0.0113 0.0114
0.0119	EMISFACT A0000057	HROFDY 0.0126 0.0131 0.0136 0.0133
0.0131 0.013	EMISFACT A0000057	HROFDY 0.0128 0.0119 0.0108 0.00951
0.00779 0.0058	EMISFACT A0000058	HROFDY 0.00401 0.00288 0.00253 0.00294
0.00474 0.00794	EMISFACT A0000058	HROFDY 0.0111 0.0124 0.012 0.0113 0.0114
0.0119	EMISFACT A0000058	HROFDY 0.0126 0.0131 0.0136 0.0133
0.0131 0.013	EMISFACT A0000058	HROFDY 0.0128 0.0119 0.0108 0.00951
0.00779 0.0058	EMISFACT A0000059	HROFDY 0.00401 0.00288 0.00253 0.00294
0.00474 0.00794	EMISFACT A0000059	HROFDY 0.0111 0.0124 0.012 0.0113 0.0114
0.0119	EMISFACT A0000059	HROFDY 0.0126 0.0131 0.0136 0.0133
0.0131 0.013	EMISFACT A0000059	HROFDY 0.0128 0.0119 0.0108 0.00951

0.00779 0.0058  
 EMISFACT A0000060 HROFDY 0.00401 0.00288 0.00253 0.00294  
 0.00474 0.00794  
 EMISFACT A0000060 HROFDY 0.0111 0.0124 0.012 0.0113 0.0114  
 0.0119  
 EMISFACT A0000060 HROFDY 0.0126 0.0131 0.0136 0.0133  
 0.0131 0.013  
 EMISFACT A0000060 HROFDY 0.0128 0.0119 0.0108 0.00951  
 0.00779 0.0058

\*\* Variable Emissions Type: "By Hour-of-Day (HROFDY)"

\*\* Variable Emission Scenario: "ARLN06"

EMISFACT A0000061 HROFDY 0.000402 0.000316 0.000322  
 0.000495 0.00103 0.00121  
 EMISFACT A0000061 HROFDY 0.00137 0.00146 0.00144 0.00142  
 0.00143 0.00147  
 EMISFACT A0000061 HROFDY 0.0015 0.00154 0.00159 0.00162  
 0.00164 0.00162  
 EMISFACT A0000061 HROFDY 0.00144 0.00116 0.00102 0.000942  
 0.000781 0.000574  
 EMISFACT A0000062 HROFDY 0.000402 0.000316 0.000322  
 0.000495 0.00103 0.00121  
 EMISFACT A0000062 HROFDY 0.00137 0.00146 0.00144 0.00142  
 0.00143 0.00147  
 EMISFACT A0000062 HROFDY 0.0015 0.00154 0.00159 0.00162  
 0.00164 0.00162  
 EMISFACT A0000062 HROFDY 0.00144 0.00116 0.00102 0.000942  
 0.000781 0.000574  
 EMISFACT A0000063 HROFDY 0.000402 0.000316 0.000322  
 0.000495 0.00103 0.00121  
 EMISFACT A0000063 HROFDY 0.00137 0.00146 0.00144 0.00142  
 0.00143 0.00147  
 EMISFACT A0000063 HROFDY 0.0015 0.00154 0.00159 0.00162  
 0.00164 0.00162  
 EMISFACT A0000063 HROFDY 0.00144 0.00116 0.00102 0.000942  
 0.000781 0.000574  
 EMISFACT A0000064 HROFDY 0.000402 0.000316 0.000322  
 0.000495 0.00103 0.00121  
 EMISFACT A0000064 HROFDY 0.00137 0.00146 0.00144 0.00142  
 0.00143 0.00147  
 EMISFACT A0000064 HROFDY 0.0015 0.00154 0.00159 0.00162  
 0.00164 0.00162  
 EMISFACT A0000064 HROFDY 0.00144 0.00116 0.00102 0.000942  
 0.000781 0.000574  
 EMISFACT A0000065 HROFDY 0.000402 0.000316 0.000322  
 0.000495 0.00103 0.00121  
 EMISFACT A0000065 HROFDY 0.00137 0.00146 0.00144 0.00142  
 0.00143 0.00147  
 EMISFACT A0000065 HROFDY 0.0015 0.00154 0.00159 0.00162  
 0.00164 0.00162  
 EMISFACT A0000065 HROFDY 0.00144 0.00116 0.00102 0.000942  
 0.000781 0.000574

EMISFACT A0000066	HROFDY 0.000402 0.000316 0.000322
0.000495 0.00103 0.00121	
EMISFACT A0000066	HROFDY 0.00137 0.00146 0.00144 0.00142
0.00143 0.00147	
EMISFACT A0000066	HROFDY 0.0015 0.00154 0.00159 0.00162
0.00164 0.00162	
EMISFACT A0000066	HROFDY 0.00144 0.00116 0.00102 0.000942
0.000781 0.000574	

\*\* Variable Emissions Type: "By Hour-of-Day (HROFDY)"

\*\* Variable Emission Scenario: "ARLN07"

EMISFACT A0000067	HROFDY 0.0109 0.00855 0.00871 0.0134
0.0278 0.0356	
EMISFACT A0000067	HROFDY 0.0401 0.0467 0.0459 0.0453
0.0459 0.047	
EMISFACT A0000067	HROFDY 0.0481 0.0491 0.0509 0.0519
0.0524 0.0476	
EMISFACT A0000067	HROFDY 0.0421 0.0314 0.0298 0.0255
0.0211 0.0155	
EMISFACT A0000068	HROFDY 0.0109 0.00855 0.00871 0.0134
0.0278 0.0356	
EMISFACT A0000068	HROFDY 0.0401 0.0467 0.0459 0.0453
0.0459 0.047	
EMISFACT A0000068	HROFDY 0.0481 0.0491 0.0509 0.0519
0.0524 0.0476	
EMISFACT A0000068	HROFDY 0.0421 0.0314 0.0298 0.0255
0.0211 0.0155	
EMISFACT A0000069	HROFDY 0.0109 0.00855 0.00871 0.0134
0.0278 0.0356	
EMISFACT A0000069	HROFDY 0.0401 0.0467 0.0459 0.0453
0.0459 0.047	
EMISFACT A0000069	HROFDY 0.0481 0.0491 0.0509 0.0519
0.0524 0.0476	
EMISFACT A0000069	HROFDY 0.0421 0.0314 0.0298 0.0255
0.0211 0.0155	
EMISFACT A0000070	HROFDY 0.0109 0.00855 0.00871 0.0134
0.0278 0.0356	
EMISFACT A0000070	HROFDY 0.0401 0.0467 0.0459 0.0453
0.0459 0.047	
EMISFACT A0000070	HROFDY 0.0481 0.0491 0.0509 0.0519
0.0524 0.0476	
EMISFACT A0000070	HROFDY 0.0421 0.0314 0.0298 0.0255
0.0211 0.0155	
EMISFACT A0000071	HROFDY 0.0109 0.00855 0.00871 0.0134
0.0278 0.0356	
EMISFACT A0000071	HROFDY 0.0401 0.0467 0.0459 0.0453
0.0459 0.047	
EMISFACT A0000071	HROFDY 0.0481 0.0491 0.0509 0.0519
0.0524 0.0476	
EMISFACT A0000071	HROFDY 0.0421 0.0314 0.0298 0.0255
0.0211 0.0155	
EMISFACT A0000072	HROFDY 0.0109 0.00855 0.00871 0.0134

0.0278	0.0356				
	EMISFACT A0000072	HROFDY	0.0401	0.0467	0.0459 0.0453
0.0459	0.047				
	EMISFACT A0000072	HROFDY	0.0481	0.0491	0.0509 0.0519
0.0524	0.0476				
	EMISFACT A0000072	HROFDY	0.0421	0.0314	0.0298 0.0255
0.0211	0.0155				
	EMISFACT A0000073	HROFDY	0.0109	0.00855	0.00871 0.0134
0.0278	0.0356				
	EMISFACT A0000073	HROFDY	0.0401	0.0467	0.0459 0.0453
0.0459	0.047				
	EMISFACT A0000073	HROFDY	0.0481	0.0491	0.0509 0.0519
0.0524	0.0476				
	EMISFACT A0000073	HROFDY	0.0421	0.0314	0.0298 0.0255
0.0211	0.0155				
	EMISFACT A0000074	HROFDY	0.0109	0.00855	0.00871 0.0134
0.0278	0.0356				
	EMISFACT A0000074	HROFDY	0.0401	0.0467	0.0459 0.0453
0.0459	0.047				
	EMISFACT A0000074	HROFDY	0.0481	0.0491	0.0509 0.0519
0.0524	0.0476				
	EMISFACT A0000074	HROFDY	0.0421	0.0314	0.0298 0.0255
0.0211	0.0155				
	EMISFACT A0000075	HROFDY	0.0109	0.00855	0.00871 0.0134
0.0278	0.0356				
	EMISFACT A0000075	HROFDY	0.0401	0.0467	0.0459 0.0453
0.0459	0.047				
	EMISFACT A0000075	HROFDY	0.0481	0.0491	0.0509 0.0519
0.0524	0.0476				
	EMISFACT A0000075	HROFDY	0.0421	0.0314	0.0298 0.0255
0.0211	0.0155				
	EMISFACT A0000076	HROFDY	0.0109	0.00855	0.00871 0.0134
0.0278	0.0356				
	EMISFACT A0000076	HROFDY	0.0401	0.0467	0.0459 0.0453
0.0459	0.047				
	EMISFACT A0000076	HROFDY	0.0481	0.0491	0.0509 0.0519
0.0524	0.0476				
	EMISFACT A0000076	HROFDY	0.0421	0.0314	0.0298 0.0255
0.0211	0.0155				
	EMISFACT A0000077	HROFDY	0.0109	0.00855	0.00871 0.0134
0.0278	0.0356				
	EMISFACT A0000077	HROFDY	0.0401	0.0467	0.0459 0.0453
0.0459	0.047				
	EMISFACT A0000077	HROFDY	0.0481	0.0491	0.0509 0.0519
0.0524	0.0476				
	EMISFACT A0000077	HROFDY	0.0421	0.0314	0.0298 0.0255
0.0211	0.0155				

\*\* Variable Emissions Type: "By Hour-of-Day (HROFDY)"

\*\* Variable Emission Scenario: "ARLN08"

	EMISFACT A0000078	HROFDY	0.013	0.00932	0.00817 0.00951
0.0153	0.0257				

EMISFACT A0000078	HROFDY 0.039 0.0475 0.0456 0.043 0.0436
0.0456	
EMISFACT A0000078	HROFDY 0.0481 0.0502 0.057 0.0559 0.061
0.0608	
EMISFACT A0000078	HROFDY 0.049 0.0416 0.0377 0.0307 0.0252
0.0187	
EMISFACT A0000079	HROFDY 0.013 0.00932 0.00817 0.00951
0.0153 0.0257	
EMISFACT A0000079	HROFDY 0.039 0.0475 0.0456 0.043 0.0436
0.0456	
EMISFACT A0000079	HROFDY 0.0481 0.0502 0.057 0.0559 0.061
0.0608	
EMISFACT A0000079	HROFDY 0.049 0.0416 0.0377 0.0307 0.0252
0.0187	
EMISFACT A0000080	HROFDY 0.013 0.00932 0.00817 0.00951
0.0153 0.0257	
EMISFACT A0000080	HROFDY 0.039 0.0475 0.0456 0.043 0.0436
0.0456	
EMISFACT A0000080	HROFDY 0.0481 0.0502 0.057 0.0559 0.061
0.0608	
EMISFACT A0000080	HROFDY 0.049 0.0416 0.0377 0.0307 0.0252
0.0187	
EMISFACT A0000081	HROFDY 0.013 0.00932 0.00817 0.00951
0.0153 0.0257	
EMISFACT A0000081	HROFDY 0.039 0.0475 0.0456 0.043 0.0436
0.0456	
EMISFACT A0000081	HROFDY 0.0481 0.0502 0.057 0.0559 0.061
0.0608	
EMISFACT A0000081	HROFDY 0.049 0.0416 0.0377 0.0307 0.0252
0.0187	
EMISFACT A0000082	HROFDY 0.013 0.00932 0.00817 0.00951
0.0153 0.0257	
EMISFACT A0000082	HROFDY 0.039 0.0475 0.0456 0.043 0.0436
0.0456	
EMISFACT A0000082	HROFDY 0.0481 0.0502 0.057 0.0559 0.061
0.0608	
EMISFACT A0000082	HROFDY 0.049 0.0416 0.0377 0.0307 0.0252
0.0187	
EMISFACT A0000083	HROFDY 0.013 0.00932 0.00817 0.00951
0.0153 0.0257	
EMISFACT A0000083	HROFDY 0.039 0.0475 0.0456 0.043 0.0436
0.0456	
EMISFACT A0000083	HROFDY 0.0481 0.0502 0.057 0.0559 0.061
0.0608	
EMISFACT A0000083	HROFDY 0.049 0.0416 0.0377 0.0307 0.0252
0.0187	
EMISFACT A0000084	HROFDY 0.013 0.00932 0.00817 0.00951
0.0153 0.0257	
EMISFACT A0000084	HROFDY 0.039 0.0475 0.0456 0.043 0.0436
0.0456	
EMISFACT A0000084	HROFDY 0.0481 0.0502 0.057 0.0559 0.061
0.0608	

EMISFACT A0000084	HROFDY 0.049 0.0416 0.0377 0.0307 0.0252
0.0187	
EMISFACT A0000085	HROFDY 0.013 0.00932 0.00817 0.00951
0.0153 0.0257	
EMISFACT A0000085	HROFDY 0.039 0.0475 0.0456 0.043 0.0436
0.0456	
EMISFACT A0000085	HROFDY 0.0481 0.0502 0.057 0.0559 0.061
0.0608	
EMISFACT A0000085	HROFDY 0.049 0.0416 0.0377 0.0307 0.0252
0.0187	
EMISFACT A0000086	HROFDY 0.013 0.00932 0.00817 0.00951
0.0153 0.0257	
EMISFACT A0000086	HROFDY 0.039 0.0475 0.0456 0.043 0.0436
0.0456	
EMISFACT A0000086	HROFDY 0.0481 0.0502 0.057 0.0559 0.061
0.0608	
EMISFACT A0000086	HROFDY 0.049 0.0416 0.0377 0.0307 0.0252
0.0187	
EMISFACT A0000087	HROFDY 0.013 0.00932 0.00817 0.00951
0.0153 0.0257	
EMISFACT A0000087	HROFDY 0.039 0.0475 0.0456 0.043 0.0436
0.0456	
EMISFACT A0000087	HROFDY 0.0481 0.0502 0.057 0.0559 0.061
0.0608	
EMISFACT A0000087	HROFDY 0.049 0.0416 0.0377 0.0307 0.0252
0.0187	
EMISFACT A0000088	HROFDY 0.013 0.00932 0.00817 0.00951
0.0153 0.0257	
EMISFACT A0000088	HROFDY 0.039 0.0475 0.0456 0.043 0.0436
0.0456	
EMISFACT A0000088	HROFDY 0.0481 0.0502 0.057 0.0559 0.061
0.0608	
EMISFACT A0000088	HROFDY 0.049 0.0416 0.0377 0.0307 0.0252
0.0187	

\*\* Variable Emissions Type: "By Hour-of-Day (HROFDY)"

\*\* Variable Emission Scenario: "ARLN09"

EMISFACT A0000089	HROFDY 0.00341 0.00268 0.00273 0.0042
0.00872 0.00114	
EMISFACT A0000089	HROFDY 0.0116 0.0124 0.0122 0.012 0.0122
0.0125	
EMISFACT A0000089	HROFDY 0.0127 0.013 0.0135 0.0138 0.0139
0.0138	
EMISFACT A0000089	HROFDY 0.0122 0.00983 0.00861 0.008
0.00662 0.00487	
EMISFACT A0000090	HROFDY 0.00341 0.00268 0.00273 0.0042
0.00872 0.00114	
EMISFACT A0000090	HROFDY 0.0116 0.0124 0.0122 0.012 0.0122
0.0125	
EMISFACT A0000090	HROFDY 0.0127 0.013 0.0135 0.0138 0.0139
0.0138	
EMISFACT A0000090	HROFDY 0.0122 0.00983 0.00861 0.008

0.00662 0.00487	EMISFACT A0000091	HROFDY 0.00341 0.00268 0.00273 0.0042
0.00872 0.00114	EMISFACT A0000091	HROFDY 0.0116 0.0124 0.0122 0.012 0.0122
0.0125	EMISFACT A0000091	HROFDY 0.0127 0.013 0.0135 0.0138 0.0139
0.0138	EMISFACT A0000091	HROFDY 0.0122 0.00983 0.00861 0.008
0.00662 0.00487	EMISFACT A0000092	HROFDY 0.00341 0.00268 0.00273 0.0042
0.00872 0.00114	EMISFACT A0000092	HROFDY 0.0116 0.0124 0.0122 0.012 0.0122
0.0125	EMISFACT A0000092	HROFDY 0.0127 0.013 0.0135 0.0138 0.0139
0.0138	EMISFACT A0000092	HROFDY 0.0122 0.00983 0.00861 0.008
0.00662 0.00487	EMISFACT A0000093	HROFDY 0.00341 0.00268 0.00273 0.0042
0.00872 0.00114	EMISFACT A0000093	HROFDY 0.0116 0.0124 0.0122 0.012 0.0122
0.0125	EMISFACT A0000093	HROFDY 0.0127 0.013 0.0135 0.0138 0.0139
0.0138	EMISFACT A0000093	HROFDY 0.0122 0.00983 0.00861 0.008
0.00662 0.00487	EMISFACT A0000094	HROFDY 0.00341 0.00268 0.00273 0.0042
0.00872 0.00114	EMISFACT A0000094	HROFDY 0.0116 0.0124 0.0122 0.012 0.0122
0.0125	EMISFACT A0000094	HROFDY 0.0127 0.013 0.0135 0.0138 0.0139
0.0138	EMISFACT A0000094	HROFDY 0.0122 0.00983 0.00861 0.008
0.00662 0.00487	EMISFACT A0000095	HROFDY 0.00341 0.00268 0.00273 0.0042
0.00872 0.00114	EMISFACT A0000095	HROFDY 0.0116 0.0124 0.0122 0.012 0.0122
0.0125	EMISFACT A0000095	HROFDY 0.0127 0.013 0.0135 0.0138 0.0139
0.0138	EMISFACT A0000095	HROFDY 0.0122 0.00983 0.00861 0.008
0.00662 0.00487	EMISFACT A0000096	HROFDY 0.00341 0.00268 0.00273 0.0042
0.00872 0.00114	EMISFACT A0000096	HROFDY 0.0116 0.0124 0.0122 0.012 0.0122
0.0125	EMISFACT A0000096	HROFDY 0.0127 0.013 0.0135 0.0138 0.0139
0.0138	EMISFACT A0000096	HROFDY 0.0122 0.00983 0.00861 0.008
0.00662 0.00487	EMISFACT A0000097	HROFDY 0.00341 0.00268 0.00273 0.0042
0.00872 0.00114	EMISFACT A0000097	HROFDY 0.0116 0.0124 0.0122 0.012 0.0122

0.0125	EMISFACT A0000097	HROFDY 0.0127 0.013 0.0135 0.0138 0.0139
0.0138	EMISFACT A0000097	HROFDY 0.0122 0.00983 0.00861 0.008
0.00662 0.00487	EMISFACT A0000098	HROFDY 0.00341 0.00268 0.00273 0.0042
0.00872 0.00114	EMISFACT A0000098	HROFDY 0.0116 0.0124 0.0122 0.012 0.0122
0.0125	EMISFACT A0000098	HROFDY 0.0127 0.013 0.0135 0.0138 0.0139
0.0138	EMISFACT A0000098	HROFDY 0.0122 0.00983 0.00861 0.008
0.00662 0.00487	EMISFACT A0000099	HROFDY 0.00341 0.00268 0.00273 0.0042
0.00872 0.00114	EMISFACT A0000099	HROFDY 0.0116 0.0124 0.0122 0.012 0.0122
0.0125	EMISFACT A0000099	HROFDY 0.0127 0.013 0.0135 0.0138 0.0139
0.0138	EMISFACT A0000099	HROFDY 0.0122 0.00983 0.00861 0.008
0.00662 0.00487	EMISFACT A0000100	HROFDY 0.00341 0.00268 0.00273 0.0042
0.00872 0.00114	EMISFACT A0000100	HROFDY 0.0116 0.0124 0.0122 0.012 0.0122
0.0125	EMISFACT A0000100	HROFDY 0.0127 0.013 0.0135 0.0138 0.0139
0.0138	EMISFACT A0000100	HROFDY 0.0122 0.00983 0.00861 0.008
0.00662 0.00487	EMISFACT A0000101	HROFDY 0.00341 0.00268 0.00273 0.0042
0.00872 0.00114	EMISFACT A0000101	HROFDY 0.0116 0.0124 0.0122 0.012 0.0122
0.0125	EMISFACT A0000101	HROFDY 0.0127 0.013 0.0135 0.0138 0.0139
0.0138	EMISFACT A0000101	HROFDY 0.0122 0.00983 0.00861 0.008
0.00662 0.00487	EMISFACT A0000102	HROFDY 0.00341 0.00268 0.00273 0.0042
0.00872 0.00114	EMISFACT A0000102	HROFDY 0.0116 0.0124 0.0122 0.012 0.0122
0.0125	EMISFACT A0000102	HROFDY 0.0127 0.013 0.0135 0.0138 0.0139
0.0138	EMISFACT A0000102	HROFDY 0.0122 0.00983 0.00861 0.008
0.00662 0.00487		
** Variable Emissions Type: "By Hour-of-Day (HROFDY)"		
** Variable Emission Scenario: "ARLN10"		
EMISFACT A0000103	HROFDY 0.000395 0.000284 0.000249	
0.00029 0.000466 0.000782		
EMISFACT A0000103	HROFDY 0.0011 0.00122 0.00118 0.00111	
0.00112 0.00118		

EMISFACT A0000103	HROFDY	0.00124	0.00129	0.00134	0.00131
0.00129 0.00128					
EMISFACT A0000103	HROFDY	0.00126	0.00117	0.00106	0.000937
0.000767 0.000571					
EMISFACT A0000104	HROFDY	0.000395	0.000284	0.000249	
0.00029 0.000466 0.000782					
EMISFACT A0000104	HROFDY	0.0011	0.00122	0.00118	0.00111
0.00112 0.00118					
EMISFACT A0000104	HROFDY	0.00124	0.00129	0.00134	0.00131
0.00129 0.00128					
EMISFACT A0000104	HROFDY	0.00126	0.00117	0.00106	0.000937
0.000767 0.000571					
EMISFACT A0000105	HROFDY	0.000395	0.000284	0.000249	
0.00029 0.000466 0.000782					
EMISFACT A0000105	HROFDY	0.0011	0.00122	0.00118	0.00111
0.00112 0.00118					
EMISFACT A0000105	HROFDY	0.00124	0.00129	0.00134	0.00131
0.00129 0.00128					
EMISFACT A0000105	HROFDY	0.00126	0.00117	0.00106	0.000937
0.000767 0.000571					
EMISFACT A0000106	HROFDY	0.000395	0.000284	0.000249	
0.00029 0.000466 0.000782					
EMISFACT A0000106	HROFDY	0.0011	0.00122	0.00118	0.00111
0.00112 0.00118					
EMISFACT A0000106	HROFDY	0.00124	0.00129	0.00134	0.00131
0.00129 0.00128					
EMISFACT A0000106	HROFDY	0.00126	0.00117	0.00106	0.000937
0.000767 0.000571					
EMISFACT A0000107	HROFDY	0.000395	0.000284	0.000249	
0.00029 0.000466 0.000782					
EMISFACT A0000107	HROFDY	0.0011	0.00122	0.00118	0.00111
0.00112 0.00118					
EMISFACT A0000107	HROFDY	0.00124	0.00129	0.00134	0.00131
0.00129 0.00128					
EMISFACT A0000107	HROFDY	0.00126	0.00117	0.00106	0.000937
0.000767 0.000571					
EMISFACT A0000108	HROFDY	0.000395	0.000284	0.000249	
0.00029 0.000466 0.000782					
EMISFACT A0000108	HROFDY	0.0011	0.00122	0.00118	0.00111
0.00112 0.00118					
EMISFACT A0000108	HROFDY	0.00124	0.00129	0.00134	0.00131
0.00129 0.00128					
EMISFACT A0000108	HROFDY	0.00126	0.00117	0.00106	0.000937
0.000767 0.000571					
EMISFACT A0000109	HROFDY	0.000395	0.000284	0.000249	
0.00029 0.000466 0.000782					
EMISFACT A0000109	HROFDY	0.0011	0.00122	0.00118	0.00111
0.00112 0.00118					
EMISFACT A0000109	HROFDY	0.00124	0.00129	0.00134	0.00131
0.00129 0.00128					
EMISFACT A0000109	HROFDY	0.00126	0.00117	0.00106	0.000937
0.000767 0.000571					

EMISFACT A0000110	HROFDY	0.000395	0.000284	0.000249
0.00029 0.000466 0.000782				
EMISFACT A0000110	HROFDY	0.0011	0.00122	0.00118 0.00111
0.00112 0.00118				
EMISFACT A0000110	HROFDY	0.00124	0.00129	0.00134 0.00131
0.00129 0.00128				
EMISFACT A0000110	HROFDY	0.00126	0.00117	0.00106 0.000937
0.000767 0.000571				

\*\* Variable Emissions Type: "By Hour-of-Day (HROFDY)"

\*\* Variable Emission Scenario: "ARLN11"

EMISFACT A0000111	HROFDY	0.00545	0.00392	0.00343 0.004
0.00644 0.0012				
EMISFACT A0000111	HROFDY	0.0151	0.0169	0.0162 0.0153
0.0155 0.0162				
EMISFACT A0000111	HROFDY	0.0171	0.0178	0.0184 0.0181
0.0177 0.0177				
EMISFACT A0000111	HROFDY	0.0174	0.0161	0.0146 0.0129
0.0106 0.00788				
EMISFACT A0000112	HROFDY	0.00545	0.00392	0.00343 0.004
0.00644 0.0012				
EMISFACT A0000112	HROFDY	0.0151	0.0169	0.0162 0.0153
0.0155 0.0162				
EMISFACT A0000112	HROFDY	0.0171	0.0178	0.0184 0.0181
0.0177 0.0177				
EMISFACT A0000112	HROFDY	0.0174	0.0161	0.0146 0.0129
0.0106 0.00788				
EMISFACT A0000113	HROFDY	0.00545	0.00392	0.00343 0.004
0.00644 0.0012				
EMISFACT A0000113	HROFDY	0.0151	0.0169	0.0162 0.0153
0.0155 0.0162				
EMISFACT A0000113	HROFDY	0.0171	0.0178	0.0184 0.0181
0.0177 0.0177				
EMISFACT A0000113	HROFDY	0.0174	0.0161	0.0146 0.0129
0.0106 0.00788				
EMISFACT A0000114	HROFDY	0.00545	0.00392	0.00343 0.004
0.00644 0.0012				
EMISFACT A0000114	HROFDY	0.0151	0.0169	0.0162 0.0153
0.0155 0.0162				
EMISFACT A0000114	HROFDY	0.0171	0.0178	0.0184 0.0181
0.0177 0.0177				
EMISFACT A0000114	HROFDY	0.0174	0.0161	0.0146 0.0129
0.0106 0.00788				
EMISFACT A0000115	HROFDY	0.00545	0.00392	0.00343 0.004
0.00644 0.0012				
EMISFACT A0000115	HROFDY	0.0151	0.0169	0.0162 0.0153
0.0155 0.0162				
EMISFACT A0000115	HROFDY	0.0171	0.0178	0.0184 0.0181
0.0177 0.0177				
EMISFACT A0000115	HROFDY	0.0174	0.0161	0.0146 0.0129
0.0106 0.00788				
EMISFACT A0000116	HROFDY	0.00545	0.00392	0.00343 0.004

0.00644 0.0012	
EMISFACT A0000116	HROFDY 0.0151 0.0169 0.0162 0.0153
0.0155 0.0162	
EMISFACT A0000116	HROFDY 0.0171 0.0178 0.0184 0.0181
0.0177 0.0177	
EMISFACT A0000116	HROFDY 0.0174 0.0161 0.0146 0.0129
0.0106 0.00788	
EMISFACT A0000117	HROFDY 0.00545 0.00392 0.00343 0.004
0.00644 0.0012	
EMISFACT A0000117	HROFDY 0.0151 0.0169 0.0162 0.0153
0.0155 0.0162	
EMISFACT A0000117	HROFDY 0.0171 0.0178 0.0184 0.0181
0.0177 0.0177	
EMISFACT A0000117	HROFDY 0.0174 0.0161 0.0146 0.0129
0.0106 0.00788	
EMISFACT A0000118	HROFDY 0.00545 0.00392 0.00343 0.004
0.00644 0.0012	
EMISFACT A0000118	HROFDY 0.0151 0.0169 0.0162 0.0153
0.0155 0.0162	
EMISFACT A0000118	HROFDY 0.0171 0.0178 0.0184 0.0181
0.0177 0.0177	
EMISFACT A0000118	HROFDY 0.0174 0.0161 0.0146 0.0129
0.0106 0.00788	
EMISFACT A0000119	HROFDY 0.00545 0.00392 0.00343 0.004
0.00644 0.0012	
EMISFACT A0000119	HROFDY 0.0151 0.0169 0.0162 0.0153
0.0155 0.0162	
EMISFACT A0000119	HROFDY 0.0171 0.0178 0.0184 0.0181
0.0177 0.0177	
EMISFACT A0000119	HROFDY 0.0174 0.0161 0.0146 0.0129
0.0106 0.00788	
EMISFACT A0000120	HROFDY 0.00545 0.00392 0.00343 0.004
0.00644 0.0012	
EMISFACT A0000120	HROFDY 0.0151 0.0169 0.0162 0.0153
0.0155 0.0162	
EMISFACT A0000120	HROFDY 0.0171 0.0178 0.0184 0.0181
0.0177 0.0177	
EMISFACT A0000120	HROFDY 0.0174 0.0161 0.0146 0.0129
0.0106 0.00788	
EMISFACT A0000121	HROFDY 0.00545 0.00392 0.00343 0.004
0.00644 0.0012	
EMISFACT A0000121	HROFDY 0.0151 0.0169 0.0162 0.0153
0.0155 0.0162	
EMISFACT A0000121	HROFDY 0.0171 0.0178 0.0184 0.0181
0.0177 0.0177	
EMISFACT A0000121	HROFDY 0.0174 0.0161 0.0146 0.0129
0.0106 0.00788	
EMISFACT A0000122	HROFDY 0.00545 0.00392 0.00343 0.004
0.00644 0.0012	
EMISFACT A0000122	HROFDY 0.0151 0.0169 0.0162 0.0153
0.0155 0.0162	
EMISFACT A0000122	HROFDY 0.0171 0.0178 0.0184 0.0181

0.0177	0.0177				
	EMISFACT A0000122	HROFDY	0.0174	0.0161	0.0146 0.0129
0.0106	0.00788				
	EMISFACT A0000123	HROFDY	0.00545	0.00392	0.00343 0.004
0.00644	0.0012				
	EMISFACT A0000123	HROFDY	0.0151	0.0169	0.0162 0.0153
0.0155	0.0162				
	EMISFACT A0000123	HROFDY	0.0171	0.0178	0.0184 0.0181
0.0177	0.0177				
	EMISFACT A0000123	HROFDY	0.0174	0.0161	0.0146 0.0129
0.0106	0.00788				
	EMISFACT A0000124	HROFDY	0.00545	0.00392	0.00343 0.004
0.00644	0.0012				
	EMISFACT A0000124	HROFDY	0.0151	0.0169	0.0162 0.0153
0.0155	0.0162				
	EMISFACT A0000124	HROFDY	0.0171	0.0178	0.0184 0.0181
0.0177	0.0177				
	EMISFACT A0000124	HROFDY	0.0174	0.0161	0.0146 0.0129
0.0106	0.00788				
	EMISFACT A0000125	HROFDY	0.00545	0.00392	0.00343 0.004
0.00644	0.0012				
	EMISFACT A0000125	HROFDY	0.0151	0.0169	0.0162 0.0153
0.0155	0.0162				
	EMISFACT A0000125	HROFDY	0.0171	0.0178	0.0184 0.0181
0.0177	0.0177				
	EMISFACT A0000125	HROFDY	0.0174	0.0161	0.0146 0.0129
0.0106	0.00788				
	EMISFACT A0000126	HROFDY	0.00545	0.00392	0.00343 0.004
0.00644	0.0012				
	EMISFACT A0000126	HROFDY	0.0151	0.0169	0.0162 0.0153
0.0155	0.0162				
	EMISFACT A0000126	HROFDY	0.0171	0.0178	0.0184 0.0181
0.0177	0.0177				
	EMISFACT A0000126	HROFDY	0.0174	0.0161	0.0146 0.0129
0.0106	0.00788				

\*\* Variable Emissions Type: "By Hour-of-Day (HROFDY)"  
 \*\* Variable Emission Scenario: "ARLN12"

	EMISFACT A0000127	HROFDY	0.000482	0.000379	0.000386
0.000594	0.00123	0.00146			
	EMISFACT A0000127	HROFDY	0.00164	0.00175	0.00172 0.0017
0.00172	0.00176				
	EMISFACT A0000127	HROFDY	0.0018	0.00184	0.00191 0.00194
0.00196	0.00195				
	EMISFACT A0000127	HROFDY	0.00172	0.00139	0.00122 0.00113
0.000937	0.000689				
	EMISFACT A0000128	HROFDY	0.000482	0.000379	0.000386
0.000594	0.00123	0.00146			
	EMISFACT A0000128	HROFDY	0.00164	0.00175	0.00172 0.0017
0.00172	0.00176				
	EMISFACT A0000128	HROFDY	0.0018	0.00184	0.00191 0.00194
0.00196	0.00195				

EMISFACT A0000128	HROFDY	0.00172	0.00139	0.00122	0.00113
0.000937 0.000689					
EMISFACT A0000129	HROFDY	0.000482	0.000379	0.000386	
0.000594 0.00123 0.00146					
EMISFACT A0000129	HROFDY	0.00164	0.00175	0.00172	0.0017
0.00172 0.00176					
EMISFACT A0000129	HROFDY	0.0018	0.00184	0.00191	0.00194
0.00196 0.00195					
EMISFACT A0000129	HROFDY	0.00172	0.00139	0.00122	0.00113
0.000937 0.000689					
EMISFACT A0000130	HROFDY	0.000482	0.000379	0.000386	
0.000594 0.00123 0.00146					
EMISFACT A0000130	HROFDY	0.00164	0.00175	0.00172	0.0017
0.00172 0.00176					
EMISFACT A0000130	HROFDY	0.0018	0.00184	0.00191	0.00194
0.00196 0.00195					
EMISFACT A0000130	HROFDY	0.00172	0.00139	0.00122	0.00113
0.000937 0.000689					
EMISFACT A0000131	HROFDY	0.000482	0.000379	0.000386	
0.000594 0.00123 0.00146					
EMISFACT A0000131	HROFDY	0.00164	0.00175	0.00172	0.0017
0.00172 0.00176					
EMISFACT A0000131	HROFDY	0.0018	0.00184	0.00191	0.00194
0.00196 0.00195					
EMISFACT A0000131	HROFDY	0.00172	0.00139	0.00122	0.00113
0.000937 0.000689					
EMISFACT A0000132	HROFDY	0.000482	0.000379	0.000386	
0.000594 0.00123 0.00146					
EMISFACT A0000132	HROFDY	0.00164	0.00175	0.00172	0.0017
0.00172 0.00176					
EMISFACT A0000132	HROFDY	0.0018	0.00184	0.00191	0.00194
0.00196 0.00195					
EMISFACT A0000132	HROFDY	0.00172	0.00139	0.00122	0.00113
0.000937 0.000689					
SRCGROUP Exh	A0000012	A0000013	A0000014	A0000015	A0000016
A0000017					
SRCGROUP Exh	A0000018	A0000019	A0000020	A0000021	A0000022
A0000001					
SRCGROUP Exh	A0000002	A0000003	A0000004	A0000005	A0000006
A0000007					
SRCGROUP Exh	A0000008	A0000009	A0000010	A0000011	A0000023
A0000024					
SRCGROUP Exh	A0000025	A0000026	A0000027	A0000028	A0000029
A0000030					
SRCGROUP Exh	A0000031	A0000032	A0000033	A0000034	A0000035
A0000036					
SRCGROUP Exh	A0000037	A0000038	A0000039	A0000040	A0000041
A0000042					
SRCGROUP Exh	A0000043	A0000044	A0000045	A0000046	A0000047
A0000048					
SRCGROUP Exh	A0000049	A0000050	A0000051	A0000052	A0000053
A0000054					

A0000059	SRCGROUP Exh	A0000055	A0000056	A0000057	A0000058	A0000059
A0000060						
A0000066	SRCGROUP Exh	A0000061	A0000062	A0000063	A0000064	A0000065
A0000072	SRCGROUP Evap	A0000067	A0000068	A0000069	A0000070	A0000071
A0000078	SRCGROUP Evap	A0000073	A0000074	A0000075	A0000076	A0000077
A0000084	SRCGROUP Evap	A0000079	A0000080	A0000081	A0000082	A0000083
A0000090	SRCGROUP Evap	A0000085	A0000086	A0000087	A0000088	A0000089
A0000096	SRCGROUP Evap	A0000091	A0000092	A0000093	A0000094	A0000095
A0000102	SRCGROUP Evap	A0000097	A0000098	A0000099	A0000100	A0000101
A0000108	SRCGROUP Evap	A0000103	A0000104	A0000105	A0000106	A0000107
A0000114	SRCGROUP Evap	A0000109	A0000110	A0000111	A0000112	A0000113
A0000120	SRCGROUP Evap	A0000115	A0000116	A0000117	A0000118	A0000119
A0000126	SRCGROUP Evap	A0000121	A0000122	A0000123	A0000124	A0000125
A0000132	SRCGROUP Evap	A0000127	A0000128	A0000129	A0000130	A0000131
A0000017	SRCGROUP FreeExh	A0000012	A0000013	A0000014	A0000015	A0000016
A0000001	SRCGROUP FreeExh	A0000018	A0000019	A0000020	A0000021	A0000022
A0000007	SRCGROUP FreeExh	A0000002	A0000003	A0000004	A0000005	A0000006
A0000028	SRCGROUP OnOffExh	A0000008	A0000009	A0000010	A0000011	
A0000034	SRCGROUP OnOffExh	A0000023	A0000024	A0000025	A0000026	A0000027
A0000040	SRCGROUP OnOffExh	A0000029	A0000030	A0000031	A0000032	A0000033
A0000046	SRCGROUP OnOffExh	A0000035	A0000036	A0000037	A0000038	A0000039
A0000052	SRCGROUP OnOffExh	A0000041	A0000042	A0000043	A0000044	A0000045
A0000058	SRCGROUP OnOffExh	A0000047	A0000048	A0000049	A0000050	A0000051
A0000064	SRCGROUP OnOffExh	A0000053	A0000054	A0000055	A0000056	A0000057
A0000072	SRCGROUP FreeEvap	A0000067	A0000068	A0000069	A0000070	A0000071
A0000078	SRCGROUP FreeEvap	A0000073	A0000074	A0000075	A0000076	A0000077

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SRCGROUP FreeEvap A0000079 A0000080 A0000081 A0000082 A0000083
A0000084
SRCGROUP FreeEvap A0000085 A0000086 A0000087 A0000088
SRCGROUP OnOffEva A0000089 A0000090 A0000091 A0000092 A0000093
A0000094
SRCGROUP OnOffEva A0000095 A0000096 A0000097 A0000098 A0000099
A0000100
SRCGROUP OnOffEva A0000101 A0000102 A0000103 A0000104 A0000105
A0000106
SRCGROUP OnOffEva A0000107 A0000108 A0000109 A0000110 A0000111
A0000112
SRCGROUP OnOffEva A0000113 A0000114 A0000115 A0000116 A0000117
A0000118
SRCGROUP OnOffEva A0000119 A0000120 A0000121 A0000122 A0000123
A0000124
SRCGROUP OnOffEva A0000125 A0000126 A0000127 A0000128 A0000129
A0000130
SRCGROUP OnOffEva A0000131 A0000132
SRCGROUP ALL

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SO FINISHED

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\*\* AERMOD Receptor Pathway

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RE STARTING

\*\* DESCRREC "UCART01" "Receptors generated from Uniform Cartesian Grid"

DISCCART	439674.00	3765310.00
DISCCART	439679.00	3765310.00
DISCCART	439684.00	3765310.00
DISCCART	439689.00	3765310.00
DISCCART	439694.00	3765310.00
DISCCART	439699.00	3765310.00
DISCCART	439704.00	3765310.00
DISCCART	439709.00	3765310.00
DISCCART	439714.00	3765310.00
DISCCART	439719.00	3765310.00
DISCCART	439729.00	3765310.00
DISCCART	439734.00	3765310.00
DISCCART	439739.00	3765310.00
DISCCART	439744.00	3765310.00
DISCCART	439749.00	3765310.00
DISCCART	439764.00	3765310.00
DISCCART	439769.00	3765310.00
DISCCART	439774.00	3765310.00
DISCCART	439779.00	3765310.00
DISCCART	439784.00	3765310.00
DISCCART	439789.00	3765310.00
DISCCART	439794.00	3765310.00
DISCCART	439799.00	3765310.00

DISCCART	439804.00	3765310.00
DISCCART	439809.00	3765310.00
DISCCART	439814.00	3765310.00
DISCCART	439819.00	3765310.00
DISCCART	439824.00	3765310.00
DISCCART	439829.00	3765310.00
DISCCART	439839.00	3765310.00
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DISCCART	439854.00	3765310.00
DISCCART	439859.00	3765310.00
DISCCART	439864.00	3765310.00
DISCCART	439869.00	3765310.00
DISCCART	439874.00	3765310.00
DISCCART	439879.00	3765310.00
DISCCART	439884.00	3765310.00
DISCCART	439674.00	3765315.00
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DISCCART	439689.00	3765315.00
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DISCCART	439849.00	3765440.00
DISCCART	439854.00	3765440.00
DISCCART	439859.00	3765440.00
DISCCART	439674.00	3765445.00

DISCCART	439679.00	3765445.00
DISCCART	439684.00	3765445.00
DISCCART	439689.00	3765445.00
DISCCART	439694.00	3765445.00
DISCCART	439699.00	3765445.00
DISCCART	439704.00	3765445.00
DISCCART	439709.00	3765445.00
DISCCART	439714.00	3765445.00
DISCCART	439719.00	3765445.00
DISCCART	439729.00	3765445.00
DISCCART	439734.00	3765445.00
DISCCART	439739.00	3765445.00
DISCCART	439744.00	3765445.00
DISCCART	439749.00	3765445.00
DISCCART	439774.00	3765445.00
DISCCART	439779.00	3765445.00
DISCCART	439784.00	3765445.00
DISCCART	439789.00	3765445.00
DISCCART	439794.00	3765445.00
DISCCART	439799.00	3765445.00
DISCCART	439804.00	3765445.00
DISCCART	439809.00	3765445.00
DISCCART	439814.00	3765445.00
DISCCART	439819.00	3765445.00
DISCCART	439824.00	3765445.00
DISCCART	439829.00	3765445.00
DISCCART	439834.00	3765445.00
DISCCART	439839.00	3765445.00
DISCCART	439844.00	3765445.00
DISCCART	439849.00	3765445.00
DISCCART	439854.00	3765445.00
DISCCART	439859.00	3765445.00
DISCCART	439674.00	3765450.00
DISCCART	439679.00	3765450.00
DISCCART	439684.00	3765450.00
DISCCART	439689.00	3765450.00
DISCCART	439694.00	3765450.00
DISCCART	439699.00	3765450.00
DISCCART	439704.00	3765450.00
DISCCART	439709.00	3765450.00
DISCCART	439714.00	3765450.00
DISCCART	439719.00	3765450.00
DISCCART	439729.00	3765450.00
DISCCART	439734.00	3765450.00
DISCCART	439739.00	3765450.00
DISCCART	439744.00	3765450.00
DISCCART	439749.00	3765450.00
DISCCART	439774.00	3765450.00
DISCCART	439844.00	3765450.00
DISCCART	439849.00	3765450.00
DISCCART	439854.00	3765450.00
DISCCART	439859.00	3765450.00

DISCCART	439674.00	3765455.00
DISCCART	439679.00	3765455.00
DISCCART	439684.00	3765455.00
DISCCART	439689.00	3765455.00
DISCCART	439694.00	3765455.00
DISCCART	439699.00	3765455.00
DISCCART	439704.00	3765455.00
DISCCART	439709.00	3765455.00
DISCCART	439714.00	3765455.00
DISCCART	439719.00	3765455.00
DISCCART	439729.00	3765455.00
DISCCART	439734.00	3765455.00
DISCCART	439739.00	3765455.00
DISCCART	439744.00	3765455.00
DISCCART	439749.00	3765455.00
DISCCART	439844.00	3765455.00
DISCCART	439849.00	3765455.00
DISCCART	439854.00	3765455.00
DISCCART	439859.00	3765455.00
DISCCART	439674.00	3765460.00
DISCCART	439679.00	3765460.00
DISCCART	439684.00	3765460.00
DISCCART	439689.00	3765460.00
DISCCART	439694.00	3765460.00
DISCCART	439699.00	3765460.00
DISCCART	439704.00	3765460.00
DISCCART	439709.00	3765460.00
DISCCART	439714.00	3765460.00
DISCCART	439719.00	3765460.00
DISCCART	439729.00	3765460.00
DISCCART	439734.00	3765460.00
DISCCART	439739.00	3765460.00
DISCCART	439744.00	3765460.00
DISCCART	439749.00	3765460.00
DISCCART	439789.00	3765460.00
DISCCART	439794.00	3765460.00
DISCCART	439799.00	3765460.00
DISCCART	439804.00	3765460.00
DISCCART	439809.00	3765460.00
DISCCART	439814.00	3765460.00
DISCCART	439819.00	3765460.00
DISCCART	439824.00	3765460.00
DISCCART	439829.00	3765460.00
DISCCART	439844.00	3765460.00
DISCCART	439849.00	3765460.00
DISCCART	439854.00	3765460.00
DISCCART	439859.00	3765460.00
DISCCART	439674.00	3765465.00
DISCCART	439679.00	3765465.00
DISCCART	439684.00	3765465.00
DISCCART	439689.00	3765465.00
DISCCART	439694.00	3765465.00

DISCCART	439699.00	3765465.00
DISCCART	439704.00	3765465.00
DISCCART	439709.00	3765465.00
DISCCART	439714.00	3765465.00
DISCCART	439719.00	3765465.00
DISCCART	439729.00	3765465.00
DISCCART	439734.00	3765465.00
DISCCART	439739.00	3765465.00
DISCCART	439744.00	3765465.00
DISCCART	439749.00	3765465.00
DISCCART	439789.00	3765465.00
DISCCART	439794.00	3765465.00
DISCCART	439799.00	3765465.00
DISCCART	439804.00	3765465.00
DISCCART	439809.00	3765465.00
DISCCART	439814.00	3765465.00
DISCCART	439819.00	3765465.00
DISCCART	439824.00	3765465.00
DISCCART	439829.00	3765465.00
DISCCART	439844.00	3765465.00
DISCCART	439849.00	3765465.00
DISCCART	439854.00	3765465.00
DISCCART	439859.00	3765465.00
DISCCART	439674.00	3765470.00
DISCCART	439679.00	3765470.00
DISCCART	439684.00	3765470.00
DISCCART	439689.00	3765470.00
DISCCART	439694.00	3765470.00
DISCCART	439699.00	3765470.00
DISCCART	439704.00	3765470.00
DISCCART	439709.00	3765470.00
DISCCART	439714.00	3765470.00
DISCCART	439719.00	3765470.00
DISCCART	439729.00	3765470.00
DISCCART	439734.00	3765470.00
DISCCART	439739.00	3765470.00
DISCCART	439744.00	3765470.00
DISCCART	439749.00	3765470.00
DISCCART	439789.00	3765470.00
DISCCART	439794.00	3765470.00
DISCCART	439799.00	3765470.00
DISCCART	439804.00	3765470.00
DISCCART	439809.00	3765470.00
DISCCART	439814.00	3765470.00
DISCCART	439819.00	3765470.00
DISCCART	439824.00	3765470.00
DISCCART	439829.00	3765470.00
DISCCART	439844.00	3765470.00
DISCCART	439849.00	3765470.00
DISCCART	439854.00	3765470.00
DISCCART	439859.00	3765470.00
DISCCART	439674.00	3765475.00

DISCCART	439679.00	3765475.00
DISCCART	439684.00	3765475.00
DISCCART	439689.00	3765475.00
DISCCART	439694.00	3765475.00
DISCCART	439699.00	3765475.00
DISCCART	439704.00	3765475.00
DISCCART	439709.00	3765475.00
DISCCART	439714.00	3765475.00
DISCCART	439719.00	3765475.00
DISCCART	439729.00	3765475.00
DISCCART	439734.00	3765475.00
DISCCART	439739.00	3765475.00
DISCCART	439744.00	3765475.00
DISCCART	439749.00	3765475.00
DISCCART	439754.00	3765475.00
DISCCART	439789.00	3765475.00
DISCCART	439794.00	3765475.00
DISCCART	439799.00	3765475.00
DISCCART	439804.00	3765475.00
DISCCART	439809.00	3765475.00
DISCCART	439814.00	3765475.00
DISCCART	439819.00	3765475.00
DISCCART	439824.00	3765475.00
DISCCART	439829.00	3765475.00

\*\* DESCRREC "UCART03" "Receptors generated from Uniform Cartesian Grid"

DISCCART	439269.00	3764900.00
DISCCART	439369.00	3764900.00
DISCCART	439469.00	3764900.00
DISCCART	439569.00	3764900.00
DISCCART	439669.00	3764900.00
DISCCART	439769.00	3764900.00
DISCCART	439869.00	3764900.00
DISCCART	439969.00	3764900.00
DISCCART	440069.00	3764900.00
DISCCART	440169.00	3764900.00
DISCCART	440269.00	3764900.00
DISCCART	439269.00	3765000.00
DISCCART	439369.00	3765000.00
DISCCART	439469.00	3765000.00
DISCCART	439569.00	3765000.00
DISCCART	439669.00	3765000.00
DISCCART	439769.00	3765000.00
DISCCART	439869.00	3765000.00
DISCCART	439969.00	3765000.00
DISCCART	440069.00	3765000.00
DISCCART	440169.00	3765000.00
DISCCART	440269.00	3765000.00
DISCCART	439269.00	3765100.00
DISCCART	439369.00	3765100.00
DISCCART	439469.00	3765100.00
DISCCART	439569.00	3765100.00

DISCCART	439669.00	3765100.00
DISCCART	439769.00	3765100.00
DISCCART	439869.00	3765100.00
DISCCART	439969.00	3765100.00
DISCCART	440069.00	3765100.00
DISCCART	440169.00	3765100.00
DISCCART	440269.00	3765100.00
DISCCART	439269.00	3765200.00
DISCCART	439369.00	3765200.00
DISCCART	439469.00	3765200.00
DISCCART	439569.00	3765200.00
DISCCART	439669.00	3765200.00
DISCCART	439769.00	3765200.00
DISCCART	439869.00	3765200.00
DISCCART	439969.00	3765200.00
DISCCART	440069.00	3765200.00
DISCCART	440169.00	3765200.00
DISCCART	440269.00	3765200.00
DISCCART	439269.00	3765300.00
DISCCART	439369.00	3765300.00
DISCCART	439469.00	3765300.00
DISCCART	439569.00	3765300.00
DISCCART	439669.00	3765300.00
DISCCART	439769.00	3765300.00
DISCCART	439869.00	3765300.00
DISCCART	439969.00	3765300.00
DISCCART	440069.00	3765300.00
DISCCART	440169.00	3765300.00
DISCCART	440269.00	3765300.00
DISCCART	439269.00	3765400.00
DISCCART	439369.00	3765400.00
DISCCART	439469.00	3765400.00
DISCCART	439569.00	3765400.00
DISCCART	439669.00	3765400.00
DISCCART	439769.00	3765400.00
DISCCART	439869.00	3765400.00
DISCCART	439969.00	3765400.00
DISCCART	440069.00	3765400.00
DISCCART	440169.00	3765400.00
DISCCART	440269.00	3765400.00
DISCCART	439269.00	3765500.00
DISCCART	439369.00	3765500.00
DISCCART	439469.00	3765500.00
DISCCART	439569.00	3765500.00
DISCCART	439669.00	3765500.00
DISCCART	439769.00	3765500.00
DISCCART	439869.00	3765500.00
DISCCART	439969.00	3765500.00
DISCCART	440069.00	3765500.00
DISCCART	440169.00	3765500.00
DISCCART	440269.00	3765500.00
DISCCART	439269.00	3765600.00

DISCCART	439369.00	3765600.00
DISCCART	439469.00	3765600.00
DISCCART	439569.00	3765600.00
DISCCART	439669.00	3765600.00
DISCCART	439769.00	3765600.00
DISCCART	439869.00	3765600.00
DISCCART	439969.00	3765600.00
DISCCART	440069.00	3765600.00
DISCCART	440169.00	3765600.00
DISCCART	440269.00	3765600.00
DISCCART	439269.00	3765700.00
DISCCART	439369.00	3765700.00
DISCCART	439469.00	3765700.00
DISCCART	439569.00	3765700.00
DISCCART	439669.00	3765700.00
DISCCART	439769.00	3765700.00
DISCCART	439869.00	3765700.00
DISCCART	439969.00	3765700.00
DISCCART	440069.00	3765700.00
DISCCART	440169.00	3765700.00
DISCCART	440269.00	3765700.00
DISCCART	439269.00	3765800.00
DISCCART	439369.00	3765800.00
DISCCART	439469.00	3765800.00
DISCCART	439569.00	3765800.00
DISCCART	439669.00	3765800.00
DISCCART	439769.00	3765800.00
DISCCART	439869.00	3765800.00
DISCCART	439969.00	3765800.00
DISCCART	440069.00	3765800.00
DISCCART	440169.00	3765800.00
DISCCART	440269.00	3765800.00
DISCCART	439269.00	3765900.00
DISCCART	439369.00	3765900.00
DISCCART	439469.00	3765900.00
DISCCART	439569.00	3765900.00
DISCCART	439669.00	3765900.00
DISCCART	439769.00	3765900.00
DISCCART	439869.00	3765900.00
DISCCART	439969.00	3765900.00
DISCCART	440069.00	3765900.00
DISCCART	440169.00	3765900.00
DISCCART	440269.00	3765900.00

\*\* DESCRREC "UCART02" "Receptors generated from Uniform Cartesian Grid"

DISCCART	439649.00	3765310.00
DISCCART	439679.00	3765310.00
DISCCART	439709.00	3765310.00
DISCCART	439739.00	3765310.00
DISCCART	439769.00	3765310.00
DISCCART	439799.00	3765310.00
DISCCART	439829.00	3765310.00

DISCCART	439859.00	3765310.00
DISCCART	439889.00	3765310.00
DISCCART	439649.00	3765340.00
DISCCART	439679.00	3765340.00
DISCCART	439709.00	3765340.00
DISCCART	439739.00	3765340.00
DISCCART	439769.00	3765340.00
DISCCART	439799.00	3765340.00
DISCCART	439829.00	3765340.00
DISCCART	439859.00	3765340.00
DISCCART	439889.00	3765340.00
DISCCART	439649.00	3765370.00
DISCCART	439679.00	3765370.00
DISCCART	439709.00	3765370.00
DISCCART	439739.00	3765370.00
DISCCART	439769.00	3765370.00
DISCCART	439799.00	3765370.00
DISCCART	439829.00	3765370.00
DISCCART	439859.00	3765370.00
DISCCART	439889.00	3765370.00
DISCCART	439649.00	3765400.00
DISCCART	439679.00	3765400.00
DISCCART	439709.00	3765400.00
DISCCART	439739.00	3765400.00
DISCCART	439769.00	3765400.00
DISCCART	439799.00	3765400.00
DISCCART	439829.00	3765400.00
DISCCART	439859.00	3765400.00
DISCCART	439889.00	3765400.00
DISCCART	439649.00	3765430.00
DISCCART	439679.00	3765430.00
DISCCART	439709.00	3765430.00
DISCCART	439739.00	3765430.00
DISCCART	439769.00	3765430.00
DISCCART	439799.00	3765430.00
DISCCART	439829.00	3765430.00
DISCCART	439859.00	3765430.00
DISCCART	439889.00	3765430.00
DISCCART	439649.00	3765460.00
DISCCART	439679.00	3765460.00
DISCCART	439709.00	3765460.00
DISCCART	439739.00	3765460.00
DISCCART	439769.00	3765460.00
DISCCART	439799.00	3765460.00
DISCCART	439829.00	3765460.00
DISCCART	439859.00	3765460.00
DISCCART	439889.00	3765460.00
DISCCART	439649.00	3765490.00
DISCCART	439679.00	3765490.00
DISCCART	439709.00	3765490.00
DISCCART	439739.00	3765490.00
DISCCART	439769.00	3765490.00

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DISCCART      439799.00    3765490.00
DISCCART      439829.00    3765490.00
DISCCART      439859.00    3765490.00
DISCCART      439889.00    3765490.00
RE FINISHED
**
*****
** AERMOD Meteorology Pathway
*****
**
**
ME STARTING
  SURFFILE "C:\Users\sjremote\Desktop\Ontario_PUD-Legacy
\OntarioIntlAirportADJU (1)\KONT_V9_ADJU\KONT_v9.SFC"
  PROFFILE "C:\Users\sjremote\Desktop\Ontario_PUD-Legacy
\OntarioIntlAirportADJU (1)\KONT_V9_ADJU\KONT_v9.PFL"
  SURFDATA 3102 2012 Ontario_Apt
  UAIRDATA 3190 2012
  PROFBASE 289.0 METERS
ME FINISHED
**
*****
** AERMOD Output Pathway
*****
**
**
OU STARTING
  RECTABLE ALLAVE 1ST
  RECTABLE 1 1ST
** Auto-Generated Plotfiles
  PLOTFILE 1 ALL 1ST ONTARIO_PUD-LEGACY_OPS-HRA-TOG_20221005.AD
\01H1GALL.PLT 31
  PLOTFILE 1 Exh 1ST ONTARIO_PUD-LEGACY_OPS-HRA-TOG_20221005.AD
\01H1G001.PLT 32
  PLOTFILE 1 Evap 1ST ONTARIO_PUD-LEGACY_OPS-HRA-TOG_20221005.AD
\01H1G002.PLT 33
  PLOTFILE 1 FreeExh 1ST ONTARIO_PUD-LEGACY_OPS-HRA-TOG_
20221005.AD\01H1G003.PLT 34
  PLOTFILE 1 OnOffExh 1ST ONTARIO_PUD-LEGACY_OPS-HRA-TOG_
20221005.AD\01H1G004.PLT 35
  PLOTFILE 1 FreeEvap 1ST ONTARIO_PUD-LEGACY_OPS-HRA-TOG_
20221005.AD\01H1G005.PLT 36
  PLOTFILE 1 OnOffEva 1ST ONTARIO_PUD-LEGACY_OPS-HRA-TOG_
20221005.AD\01H1G006.PLT 37
  PLOTFILE PERIOD ALL ONTARIO_PUD-LEGACY_OPS-HRA-TOG_20221005.AD
\PE00GALL.PLT 38
  PLOTFILE PERIOD Exh ONTARIO_PUD-LEGACY_OPS-HRA-TOG_20221005.AD
\PE00G001.PLT 39
  PLOTFILE PERIOD Evap ONTARIO_PUD-LEGACY_OPS-HRA-TOG_
20221005.AD\PE00G002.PLT 40
  PLOTFILE PERIOD FreeExh ONTARIO_PUD-LEGACY_OPS-HRA-TOG_
20221005.AD\PE00G003.PLT 41

```

```
PLOTFILE PERIOD OnOffExh ONTARIO_PUD-LEGACY_OPS-HRA-TOG_
20221005.AD\PE00G004.PLT 42
PLOTFILE PERIOD FreeEvap ONTARIO_PUD-LEGACY_OPS-HRA-TOG_
20221005.AD\PE00G005.PLT 43
PLOTFILE PERIOD OnOffEva ONTARIO_PUD-LEGACY_OPS-HRA-TOG_
20221005.AD\PE00G006.PLT 44
SUMMFILE Ontario_PUD-Legacy_Ops-HRA-TOG_20221005.sum
OU FINISHED
```

\*\*\* Message Summary For AERMOD Model Setup \*\*\*

----- Summary of Total Messages -----

```
A Total of          0 Fatal Error Message(s)
A Total of          2 Warning Message(s)
A Total of          0 Informational Message(s)
```

```
***** FATAL ERROR MESSAGES *****
*** NONE ***
```

```
***** WARNING MESSAGES *****
ME W186    2290      MEOPEN: THRESH_1MIN 1-min ASOS wind speed
threshold used          0.50
ME W187    2290      MEOPEN: ADJ_U* Option for Stable Low Winds
used in AERMET
```

```
*****
*** SETUP Finishes Successfully ***
*****
```

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
10/05/22  
\*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
\*\*\* 08:30:01

PAGE 1

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* MODEL SETUP

OPTIONS SUMMARY \*\*\*

-----  
-----

\*\*Model Is Setup For Calculation of Average CONCentration  
Values.

-- DEPOSITION LOGIC --

\*\*NO GAS DEPOSITION Data Provided.

\*\*NO PARTICLE DEPOSITION Data Provided.

\*\*Model Uses NO DRY DEPLETION. DRYDPLT = F

\*\*Model Uses NO WET DEPLETION. WETDPLT = F

\*\*Model Uses URBAN Dispersion Algorithm for the SBL for 132  
Source(s),

for Total of 1 Urban Area(s):

Urban Population = 2035210.0 ; Urban Roughness Length =  
1.000 m

\*\*Model Allows User-Specified Options:

1. Stack-tip Downwash.

2. Model Assumes Receptors on FLAT Terrain.

3. Use Calms Processing Routine.

4. Use Missing Data Processing Routine.

5. No Exponential Decay.

6. Urban Roughness Length of 1.0 Meter Used.

\*\*Other Options Specified:

ADJ\_U\* - Use ADJ\_U\* option for SBL in AERMET

CCVR\_Sub - Meteorological data includes CCVR  
substitutions

TEMP\_Sub - Meteorological data includes TEMP  
substitutions

\*\*Model Assumes No FLAGPOLE Receptor Heights.

\*\*The User Specified a Pollutant Type of: PM\_2.5

\*\*Model Calculates 1 Short Term Average(s) of: 1-HR  
and Calculates PERIOD Averages

\*\*This Run Includes: 132 Source(s); 7 Source Group(s);

and 1115 Receptor(s)  
with: 0 POINT(s), including  
0 POINTCAP(s) and 0 POINTHOR(s)  
and: 0 VOLUME source(s)  
and: 132 AREA type source(s)  
and: 0 LINE source(s)  
and: 0 RLINE/RLINEXT source(s)  
and: 0 OPENPIT source(s)  
and: 0 BUOYANT LINE source(s) with a total  
of 0 line(s)

\*\*Model Set To Continue RUNNING After the Setup Testing.

\*\*The AERMET Input Meteorological Data Version Date: 16216

\*\*Output Options Selected:  
Model Outputs Tables of PERIOD Averages by Receptor  
Model Outputs Tables of Highest Short Term Values by  
Receptor (RECTABLE Keyword)  
Model Outputs External File(s) of High Values for  
Plotting (PLOTFILE Keyword)  
Model Outputs Separate Summary File of High Ranked  
Values (SUMMFILE Keyword)

\*\*NOTE: The Following Flags May Appear Following CONC Values:  
c for Calm Hours

m for Missing Hours

b for Both Calm and Missing Hours

\*\*Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) =  
289.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0  
Emission Units =  
GRAMS/SEC ; Emission Rate Unit  
Factor = 0.10000E+07  
Output Units = MICROGRAMS/M\*\*3

\*\*Approximate Storage Requirements of Model = 4.0 MB of  
RAM.

\*\*Input Runstream File: aermod.inp  
\*\*Output Print File: aermod.out

\*\*Detailed Error/Message File: Ontario\_PUD-Legacy\_Ops-HRA-TOG\_  
20221005.err  
\*\*File for Summary of Results: Ontario\_PUD-Legacy\_Ops-HRA-TOG\_  
20221005.sum

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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 \*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* AREA SOURCE

DATA \*\*\*

RELEASE RATE	X-DIM	NUMBER OF AREA	EMISSION RATE (GRAMS/SEC OF AREA)	ORIENT.	COORD (SW CORNER) INIT. (METERS)	URBAN SOURCE	BASE EMISSION SCALAR
SOURCE	PART.	(METERS)	(METERS)	(DEG.)	(METERS)	(METERS)	(METERS) BY
A0000012	0	0.30732E-04	440650.1	3765736.5	289.0		
1.30	176.76	18.29	-179.52	1.20	YES	HROFDY	
A0000013	0	0.30732E-04	440473.4	3765738.0	289.0		
1.30	176.76	18.29	-179.52	1.20	YES	HROFDY	
A0000014	0	0.30732E-04	440296.6	3765739.5	289.0		
1.30	176.76	18.29	-179.52	1.20	YES	HROFDY	
A0000015	0	0.30732E-04	440119.8	3765740.9	289.0		
1.30	152.62	18.29	-179.86	1.20	YES	HROFDY	
A0000016	0	0.30732E-04	439967.2	3765741.3	289.0		
1.30	152.62	18.29	-179.86	1.20	YES	HROFDY	
A0000017	0	0.30732E-04	439814.6	3765741.7	289.0		
1.30	152.62	18.29	-179.86	1.20	YES	HROFDY	
A0000018	0	0.30732E-04	439661.9	3765742.1	289.0		
1.30	163.56	18.29	-179.87	1.20	YES	HROFDY	
A0000019	0	0.30732E-04	439498.4	3765742.5	289.0		
1.30	163.56	18.29	-179.87	1.20	YES	HROFDY	
A0000020	0	0.30732E-04	439334.8	3765742.8	289.0		
1.30	163.56	18.29	-179.87	1.20	YES	HROFDY	
A0000021	0	0.30732E-04	439171.2	3765743.2	289.0		
1.30	150.13	18.29	179.63	1.20	YES	HROFDY	
A0000022	0	0.30732E-04	439021.1	3765742.2	289.0		
1.30	150.13	18.29	179.63	1.20	YES	HROFDY	
A0000001	0	0.30748E-04	438872.2	3765704.7	289.0		
1.30	174.70	18.29	0.36	1.20	YES	HROFDY	
A0000002	0	0.30748E-04	439046.9	3765703.5	289.0		
1.30	174.70	18.29	0.36	1.20	YES	HROFDY	
A0000003	0	0.30748E-04	439221.6	3765702.4	289.0		

1.30	174.70	18.29	0.36	1.20	YES	HROFDY
A0000004		0	0.30748E-04	439396.3	3765701.3	289.0
1.30	174.70	18.29	0.36	1.20	YES	HROFDY
A0000005		0	0.30748E-04	439571.0	3765700.2	289.0
1.30	173.93	18.29	0.19	1.20	YES	HROFDY
A0000006		0	0.30748E-04	439744.9	3765699.6	289.0
1.30	172.78	18.29	0.07	1.20	YES	HROFDY
A0000007		0	0.30748E-04	439917.7	3765699.4	289.0
1.30	172.78	18.29	0.07	1.20	YES	HROFDY
A0000008		0	0.30748E-04	440090.5	3765699.2	289.0
1.30	157.42	18.29	0.00	1.20	YES	HROFDY
A0000009		0	0.30748E-04	440247.9	3765699.2	289.0
1.30	157.42	18.29	0.00	1.20	YES	HROFDY
A0000010		0	0.30748E-04	440405.4	3765699.2	289.0
1.30	122.75	18.29	-0.64	1.20	YES	HROFDY
A0000011		0	0.30748E-04	440528.2	3765700.6	289.0
1.30	122.75	18.29	-0.64	1.20	YES	HROFDY
A0000023		0	0.53118E-03	439894.8	3765794.0	289.0
1.30	32.80	3.96	171.48	1.20	YES	HROFDY
A0000024		0	0.53118E-03	439862.4	3765789.1	289.0
1.30	32.80	3.96	171.48	1.20	YES	HROFDY
A0000025		0	0.53118E-03	439830.0	3765784.3	289.0
1.30	38.31	3.96	171.96	1.20	YES	HROFDY
A0000026		0	0.53118E-03	439792.0	3765778.9	289.0
1.30	38.31	3.96	171.96	1.20	YES	HROFDY
A0000027		0	0.53118E-03	439754.1	3765773.6	289.0
1.30	38.31	3.96	171.96	1.20	YES	HROFDY
A0000028		0	0.53118E-03	439716.2	3765768.2	289.0
1.30	38.31	3.96	171.96	1.20	YES	HROFDY
A0000029		0	0.53118E-03	439678.2	3765762.8	289.0
1.30	38.31	3.96	171.96	1.20	YES	HROFDY
A0000030		0	0.53118E-03	439640.3	3765757.5	289.0
1.30	38.31	3.96	171.96	1.20	YES	HROFDY
A0000031		0	0.53118E-03	439602.5	3765752.1	289.0
1.30	23.20	3.96	175.65	1.20	YES	HROFDY
A0000032		0	0.53118E-03	439579.4	3765750.4	289.0
1.30	23.20	3.96	175.65	1.20	YES	HROFDY
A0000033		0	0.53118E-03	439556.3	3765748.6	289.0
1.30	39.05	3.96	178.51	1.20	YES	HROFDY
A0000034		0	0.53118E-03	439517.3	3765747.6	289.0
1.30	39.05	3.96	178.51	1.20	YES	HROFDY
A0000035		0	0.53118E-03	439478.2	3765746.6	289.0
1.30	27.56	3.96	178.03	1.20	YES	HROFDY
A0000036		0	0.53118E-03	439450.7	3765745.6	289.0
1.30	27.56	3.96	178.03	1.20	YES	HROFDY
A0000037		0	0.30079E-03	439896.1	3765649.5	289.0
1.30	39.04	7.62	-169.43	1.20	YES	HROFDY
A0000038		0	0.30079E-03	439857.7	3765656.6	289.0
1.30	39.04	7.62	-169.43	1.20	YES	HROFDY
A0000039		0	0.30079E-03	439819.3	3765663.8	289.0
1.30	64.28	7.62	-169.30	1.20	YES	HROFDY
A0000040		0	0.30079E-03	439755.9	3765675.8	289.0

1.30	46.57	7.62	-174.26	1.20	YES	HROFDY
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\*\*\* MODELOPTs:        NonDEFAULT    CONC    FLAT    URBAN    ADJ\_U\*

\*\*\* AREA SOURCE

DATA \*\*\*

RELEASE RATE	X-DIM	NUMBER PART. OF AREA	EMISSION RATE (GRAMS/SEC OF AREA)	ORIENT. (DEG.)	COORD (SW CORNER) INIT. (METERS)	URBAN SOURCE (METERS)	BASE EMISSION SCALAR (METERS) BY
A0000041		0	0.30079E-03		439709.5	3765680.5	289.0
1.30	46.57		7.62	-174.26	1.20	YES	HROFDY
A0000042		0	0.30079E-03		439663.2	3765685.1	289.0
1.30	66.93		7.62	-174.23	1.20	YES	HROFDY
A0000043		0	0.30079E-03		439596.6	3765691.8	289.0
1.30	66.93		7.62	-174.23	1.20	YES	HROFDY
A0000044		0	0.30079E-03		439530.0	3765698.6	289.0
1.30	66.93		7.62	-174.23	1.20	YES	HROFDY
A0000045		0	0.49659E-03		439941.6	3765643.3	289.0
1.30	26.12		3.96	-8.23	1.20	YES	HROFDY
A0000046		0	0.49659E-03		439967.4	3765647.1	289.0
1.30	26.12		3.96	-8.23	1.20	YES	HROFDY
A0000047		0	0.49659E-03		439993.3	3765650.8	289.0
1.30	32.84		3.96	-7.40	1.20	YES	HROFDY
A0000048		0	0.49659E-03		440025.8	3765655.0	289.0
1.30	32.84		3.96	-7.40	1.20	YES	HROFDY
A0000049		0	0.49659E-03		440058.4	3765659.3	289.0
1.30	32.84		3.96	-7.40	1.20	YES	HROFDY
A0000050		0	0.49659E-03		440091.0	3765663.5	289.0
1.30	32.84		3.96	-7.40	1.20	YES	HROFDY
A0000051		0	0.49659E-03		440123.5	3765667.7	289.0
1.30	32.84		3.96	-7.40	1.20	YES	HROFDY
A0000052		0	0.49659E-03		440156.1	3765672.0	289.0
1.30	37.89		3.96	-7.15	1.20	YES	HROFDY
A0000053		0	0.49659E-03		440193.7	3765676.7	289.0
1.30	37.89		3.96	-7.15	1.20	YES	HROFDY
A0000054		0	0.49659E-03		440231.3	3765681.4	289.0

1.30	37.89	3.96	-7.15	1.20	YES	HROFDY
A0000055		0	0.49659E-03	440268.7	3765686.1	289.0
1.30	26.94	3.96	-3.79	1.20	YES	HROFDY
A0000056		0	0.49659E-03	440295.6	3765687.9	289.0
1.30	26.94	3.96	-3.79	1.20	YES	HROFDY
A0000057		0	0.49659E-03	440322.4	3765689.7	289.0
1.30	32.28	3.96	-1.87	1.20	YES	HROFDY
A0000058		0	0.49659E-03	440354.7	3765690.7	289.0
1.30	30.65	3.96	-1.70	1.20	YES	HROFDY
A0000059		0	0.49659E-03	440385.3	3765691.6	289.0
1.30	30.65	3.96	-1.70	1.20	YES	HROFDY
A0000060		0	0.49659E-03	440416.0	3765692.5	289.0
1.30	30.65	3.96	-1.70	1.20	YES	HROFDY
A0000061		0	0.18975E-03	440393.2	3765744.6	289.0
1.30	82.20	11.58	-174.12	1.20	YES	HROFDY
A0000062		0	0.18975E-03	440311.4	3765753.0	289.0
1.30	86.40	11.58	-174.17	1.20	YES	HROFDY
A0000063		0	0.18975E-03	440225.4	3765761.8	289.0
1.30	87.63	11.58	-175.26	1.20	YES	HROFDY
A0000064		0	0.18975E-03	440138.2	3765769.0	289.0
1.30	35.21	11.58	-173.24	1.20	YES	HROFDY
A0000065		0	0.18975E-03	440103.5	3765773.1	289.0
1.30	81.78	11.58	-171.16	1.20	YES	HROFDY
A0000066		0	0.18975E-03	440022.7	3765785.7	289.0
1.30	81.78	11.58	-171.16	1.20	YES	HROFDY
A0000067		0	0.30732E-04	440650.1	3765736.5	289.0
1.30	176.76	18.29	-179.52	1.20	YES	HROFDY
A0000068		0	0.30732E-04	440473.4	3765738.0	289.0
1.30	176.76	18.29	-179.52	1.20	YES	HROFDY
A0000069		0	0.30732E-04	440296.6	3765739.5	289.0
1.30	176.76	18.29	-179.52	1.20	YES	HROFDY
A0000070		0	0.30732E-04	440119.8	3765740.9	289.0
1.30	152.62	18.29	-179.86	1.20	YES	HROFDY
A0000071		0	0.30732E-04	439967.2	3765741.3	289.0
1.30	152.62	18.29	-179.86	1.20	YES	HROFDY
A0000072		0	0.30732E-04	439814.6	3765741.7	289.0
1.30	152.62	18.29	-179.86	1.20	YES	HROFDY
A0000073		0	0.30732E-04	439661.9	3765742.1	289.0
1.30	163.56	18.29	-179.87	1.20	YES	HROFDY
A0000074		0	0.30732E-04	439498.4	3765742.5	289.0
1.30	163.56	18.29	-179.87	1.20	YES	HROFDY
A0000075		0	0.30732E-04	439334.8	3765742.8	289.0
1.30	163.56	18.29	-179.87	1.20	YES	HROFDY
A0000076		0	0.30732E-04	439171.2	3765743.2	289.0
1.30	150.14	18.29	179.63	1.20	YES	HROFDY
A0000077		0	0.30732E-04	439021.1	3765742.2	289.0
1.30	150.14	18.29	179.63	1.20	YES	HROFDY
A0000078		0	0.30740E-04	438872.2	3765704.7	289.0
1.30	174.70	18.29	0.37	1.20	YES	HROFDY
A0000079		0	0.30740E-04	439046.9	3765703.5	289.0
1.30	174.70	18.29	0.37	1.20	YES	HROFDY
A0000080		0	0.30740E-04	439221.6	3765702.4	289.0

1.30	174.70	18.29	0.37	1.20	YES	HROFDY
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\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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 \*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* AREA SOURCE

DATA \*\*\*

RELEASE RATE	X-DIM	NUMBER PART. OF AREA	EMISSION RATE (GRAMS/SEC OF AREA)	COORD (SW CORNER) INIT. (METERS)	URBAN SOURCE (METERS)	BASE EMISSION ELEV. SCALAR (METERS) BY
A0000081		0	0.30740E-04	439396.3	3765701.3	289.0
1.30	174.70	18.29	0.37	1.20	YES	HROFDY
A0000082		0	0.30740E-04	439571.0	3765700.2	289.0
1.30	173.92	18.29	0.18	1.20	YES	HROFDY
A0000083		0	0.30740E-04	439744.9	3765699.6	289.0
1.30	172.78	18.29	0.07	1.20	YES	HROFDY
A0000084		0	0.30740E-04	439917.7	3765699.4	289.0
1.30	172.78	18.29	0.07	1.20	YES	HROFDY
A0000085		0	0.30740E-04	440090.5	3765699.2	289.0
1.30	157.43	18.29	0.00	1.20	YES	HROFDY
A0000086		0	0.30740E-04	440247.9	3765699.2	289.0
1.30	157.43	18.29	0.00	1.20	YES	HROFDY
A0000087		0	0.30740E-04	440405.5	3765699.2	289.0
1.30	122.75	18.29	-0.64	1.20	YES	HROFDY
A0000088		0	0.30740E-04	440528.2	3765700.6	289.0
1.30	122.75	18.29	-0.64	1.20	YES	HROFDY
A0000089		0	0.53150E-03	439894.8	3765794.0	289.0
1.30	32.80	3.96	171.47	1.20	YES	HROFDY
A0000090		0	0.53150E-03	439862.4	3765789.1	289.0
1.30	32.80	3.96	171.47	1.20	YES	HROFDY
A0000091		0	0.53150E-03	439830.0	3765784.3	289.0
1.30	38.31	3.96	171.96	1.20	YES	HROFDY
A0000092		0	0.53150E-03	439792.0	3765778.9	289.0
1.30	38.31	3.96	171.96	1.20	YES	HROFDY
A0000093		0	0.53150E-03	439754.1	3765773.6	289.0
1.30	38.31	3.96	171.96	1.20	YES	HROFDY
A0000094		0	0.53150E-03	439716.2	3765768.2	289.0

1.30	38.31	3.96	171.96	1.20	YES	HROFDY
A0000095		0	0.53150E-03	439678.2	3765762.8	289.0
1.30	38.31	3.96	171.96	1.20	YES	HROFDY
A0000096		0	0.53150E-03	439640.3	3765757.5	289.0
1.30	38.31	3.96	171.96	1.20	YES	HROFDY
A0000097		0	0.53150E-03	439602.5	3765752.1	289.0
1.30	23.20	3.96	175.64	1.20	YES	HROFDY
A0000098		0	0.53150E-03	439579.4	3765750.4	289.0
1.30	23.20	3.96	175.64	1.20	YES	HROFDY
A0000099		0	0.53150E-03	439556.3	3765748.6	289.0
1.30	39.06	3.96	178.51	1.20	YES	HROFDY
A0000100		0	0.53150E-03	439517.3	3765747.6	289.0
1.30	39.06	3.96	178.51	1.20	YES	HROFDY
A0000101		0	0.53150E-03	439478.2	3765746.6	289.0
1.30	27.56	3.96	178.02	1.20	YES	HROFDY
A0000102		0	0.53150E-03	439450.7	3765745.6	289.0
1.30	27.56	3.96	178.02	1.20	YES	HROFDY
A0000103		0	0.30079E-03	439896.1	3765649.5	289.0
1.30	39.04	7.62	-169.42	1.20	YES	HROFDY
A0000104		0	0.30079E-03	439857.7	3765656.6	289.0
1.30	39.04	7.62	-169.42	1.20	YES	HROFDY
A0000105		0	0.30079E-03	439819.3	3765663.8	289.0
1.30	64.29	7.62	-169.31	1.20	YES	HROFDY
A0000106		0	0.30079E-03	439755.9	3765675.8	289.0
1.30	46.56	7.62	-174.26	1.20	YES	HROFDY
A0000107		0	0.30079E-03	439709.5	3765680.5	289.0
1.30	46.56	7.62	-174.26	1.20	YES	HROFDY
A0000108		0	0.30079E-03	439663.2	3765685.1	289.0
1.30	66.94	7.62	-174.23	1.20	YES	HROFDY
A0000109		0	0.30079E-03	439596.6	3765691.8	289.0
1.30	66.94	7.62	-174.23	1.20	YES	HROFDY
A0000110		0	0.30079E-03	439530.0	3765698.6	289.0
1.30	66.94	7.62	-174.23	1.20	YES	HROFDY
A0000111		0	0.49690E-03	439941.6	3765643.3	289.0
1.30	26.12	3.96	-8.23	1.20	YES	HROFDY
A0000112		0	0.49690E-03	439967.4	3765647.1	289.0
1.30	26.12	3.96	-8.23	1.20	YES	HROFDY
A0000113		0	0.49690E-03	439993.3	3765650.8	289.0
1.30	32.84	3.96	-7.41	1.20	YES	HROFDY
A0000114		0	0.49690E-03	440025.8	3765655.0	289.0
1.30	32.84	3.96	-7.41	1.20	YES	HROFDY
A0000115		0	0.49690E-03	440058.4	3765659.3	289.0
1.30	32.84	3.96	-7.41	1.20	YES	HROFDY
A0000116		0	0.49690E-03	440091.0	3765663.5	289.0
1.30	32.84	3.96	-7.41	1.20	YES	HROFDY
A0000117		0	0.49690E-03	440123.5	3765667.7	289.0
1.30	32.84	3.96	-7.41	1.20	YES	HROFDY
A0000118		0	0.49690E-03	440156.1	3765672.0	289.0
1.30	37.89	3.96	-7.15	1.20	YES	HROFDY
A0000119		0	0.49690E-03	440193.7	3765676.7	289.0
1.30	37.89	3.96	-7.15	1.20	YES	HROFDY
A0000120		0	0.49690E-03	440231.3	3765681.4	289.0

1.30	37.89	3.96	-7.15	1.20	YES	HROFDY
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* SOURCE IDs

DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID	SOURCE
IDs	-----
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EXH           A0000012       , A0000013       , A0000014       ,	
A0000015       , A0000016       , A0000017       , A0000018       ,	
A0000019       ,	
A0000020       , A0000021       , A0000022       ,	
A0000001       , A0000002       , A0000003       , A0000004       ,	
A0000005       ,	
A0000006       , A0000007       , A0000008       ,	
A0000009       , A0000010       , A0000011       , A0000023       ,	
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A0000025       , A0000026       , A0000027       ,	
A0000028       , A0000029       , A0000030       , A0000031       ,	
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A0000033       , A0000034       , A0000035       ,	
A0000036       , A0000037       , A0000038       , A0000039       ,	
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A0000064       ,	
A0000065       , A0000066       ,	

EVAP	A0000067	,	A0000068	,	A0000069	,
A0000070	,	A0000071	,	A0000072	,	A0000073
A0000074	,					
	A0000075	,	A0000076	,	A0000077	,
A0000078	,	A0000079	,	A0000080	,	A0000081
A0000082	,					
	A0000083	,	A0000084	,	A0000085	,
A0000086	,	A0000087	,	A0000088	,	A0000089
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A0000098	,					
	A0000099	,	A0000100	,	A0000101	,
A0000102	,	A0000103	,	A0000104	,	A0000105
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	A0000012	,	A0000013	,	A0000014	,
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A0000015	,					
A0000019	,					
	A0000020	,	A0000021	,	A0000022	,
A0000001	,	A0000002	,	A0000003	,	A0000004
A0000005	,					

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* SOURCE IDs

DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID					SOURCE
IDs					-----
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A0000009	A0000006 , A0000010	A0000007 , A0000011	A0000008 , 		
ONOFFEXH A0000026 A0000030	A0000023 , A0000027	A0000024 , A0000028	A0000025 , A0000029		
A0000034 A0000038	A0000031 , A0000035	A0000032 , A0000036	A0000033 , A0000037		
A0000042 A0000046	A0000039 , A0000043	A0000040 , A0000044	A0000041 , A0000045		
A0000050 A0000054	A0000047 , A0000051	A0000048 , A0000052	A0000049 , A0000053		
A0000058 A0000062	A0000055 , A0000059	A0000056 , A0000060	A0000057 , A0000061		
A0000066	A0000063 ,	A0000064 ,	A0000065 ,		
FREEEVAP A0000070 A0000074	A0000067 , A0000071	A0000068 , A0000072	A0000069 , A0000073		
A0000078 A0000082	A0000075 , A0000079	A0000076 , A0000080	A0000077 , A0000081		

A0000086	A0000083 , A0000087	, A0000084 , A0000088	, A0000085 ,	,
ONOFFEVA A0000092 A0000096	A0000089 , A0000093 ,	, A0000090 , A0000094	, A0000091 , A0000095	,
A0000100 A0000104	A0000097 , A0000101 ,	, A0000098 , A0000102	, A0000099 , A0000103	,
A0000108 A0000112	A0000105 , A0000109 ,	, A0000106 , A0000110	, A0000107 , A0000111	,
A0000116 A0000120	A0000113 , A0000117 ,	, A0000114 , A0000118	, A0000115 , A0000119	,
A0000124 A0000128	A0000121 , A0000125 ,	, A0000122 , A0000126	, A0000123 , A0000127	,
A0000132	A0000129 ,	, A0000130	, A0000131	,
ALL A0000015 A0000019	A0000012 , A0000016 ,	, A0000013 , A0000017	, A0000014 , A0000018	,
A0000001 A0000005	A0000020 , A0000002 ,	, A0000021 , A0000003	, A0000022 , A0000004	,
A0000009 A0000024	A0000006 , A0000010 ,	, A0000007 , A0000011	, A0000008 , A0000023	,
A0000028 A0000032	A0000025 , A0000029 ,	, A0000026 , A0000030	, A0000027 , A0000031	,

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* SOURCE IDs

DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID IDs ----- ---	SOURCE -----
A0000036 A0000040	A0000033 , A0000034 , A0000035 , , A0000037 , A0000038 , A0000039 , ,
A0000044 A0000048	A0000041 , A0000042 , A0000043 , , A0000045 , A0000046 , A0000047 , ,
A0000052 A0000056	A0000049 , A0000050 , A0000051 , , A0000053 , A0000054 , A0000055 , ,
A0000060 A0000064	A0000057 , A0000058 , A0000059 , , A0000061 , A0000062 , A0000063 , ,
A0000068 A0000072	A0000065 , A0000066 , A0000067 , , A0000069 , A0000070 , A0000071 , ,
A0000076 A0000080	A0000073 , A0000074 , A0000075 , , A0000077 , A0000078 , A0000079 , ,
A0000084 A0000088	A0000081 , A0000082 , A0000083 , , A0000085 , A0000086 , A0000087 , ,
A0000092 A0000096	A0000089 , A0000090 , A0000091 , , A0000093 , A0000094 , A0000095 , ,
	A0000097 , A0000098 , A0000099 ,

A0000100 , A0000101 , A0000102 , A0000103 ,  
A0000104 ,  
  
A0000105 , A0000106 , A0000107 ,  
A0000108 , A0000109 , A0000110 , A0000111 ,  
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A0000124 , A0000125 , A0000126 , A0000127 ,  
A0000128 ,  
  
A0000129 , A0000130 , A0000131 ,  
A0000132 ,

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\*\*\* MODELOPTs:        NonDEFAULT    CONC    FLAT    URBAN    ADJ\_U\*

\*\*\* SOURCE IDs DEFINED

AS URBAN SOURCES \*\*\*

URBAN ID IDs ----- ---	URBAN POP ----- ---	SOURCE -----			
A0000014 A0000018 A0000019	2035210. , A0000015 , ,	A0000012 , A0000016	, A0000013 , A0000017	, , ,	
A0000001 A0000005	, A0000020 , A0000002 ,	, A0000021 , A0000003	, A0000022 , A0000004	, , ,	
A0000009 A0000024	, A0000006 , A0000010 ,	, A0000007 , A0000011	, A0000008 , A0000023	, , ,	
A0000028 A0000032	, A0000025 , A0000029 ,	, A0000026 , A0000030	, A0000027 , A0000031	, , ,	
A0000036 A0000040	, A0000033 , A0000037 ,	, A0000034 , A0000038	, A0000035 , A0000039	, , ,	
A0000044 A0000048	, A0000041 , A0000045 ,	, A0000042 , A0000046	, A0000043 , A0000047	, , ,	
A0000052 A0000056	, A0000049 , A0000053 ,	, A0000050 , A0000054	, A0000051 , A0000055	, , ,	
A0000060 A0000064	, A0000057 , A0000061 ,	, A0000058 , A0000062	, A0000059 , A0000063	, , ,	

A0000068	A0000065	,	A0000066	,	A0000067	,
A0000072	, A0000069	,	A0000070	,	A0000071	,
	,					
A0000076	A0000073	,	A0000074	,	A0000075	,
A0000080	, A0000077	,	A0000078	,	A0000079	,
	,					
A0000084	A0000081	,	A0000082	,	A0000083	,
A0000088	, A0000085	,	A0000086	,	A0000087	,
	,					
A0000092	A0000089	,	A0000090	,	A0000091	,
A0000096	, A0000093	,	A0000094	,	A0000095	,
	,					
A0000100	A0000097	,	A0000098	,	A0000099	,
A0000104	, A0000101	,	A0000102	,	A0000103	,
	,					
A0000108	A0000105	,	A0000106	,	A0000107	,
A0000112	, A0000109	,	A0000110	,	A0000111	,
	,					
A0000116	A0000113	,	A0000114	,	A0000115	,
A0000120	, A0000117	,	A0000118	,	A0000119	,
	,					
A0000124	A0000121	,	A0000122	,	A0000123	,
A0000128	, A0000125	,	A0000126	,	A0000127	,
	,					
A0000132	A0000129	,	A0000130	,	A0000131	,
	,					

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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---	---	---	---	---	---

SOURCE ID = A0000012 ; SOURCE TYPE = AREA :

1	.14400E-01	2	.19900E-01	3	.20300E-01
4	.31200E-01	5	.64700E-01	6	.74900E-01
	7 .84300E-01	8	.91500E-01	9	.90100E-01
10	.88900E-01	11	.90000E-01	12	.92300E-01
	13 .94300E-01	14	.96400E-01	15	.99800E-01
16	.10200E+00	17	.10300E+00	18	.10000E+00
	19 .88600E-01	20	.72900E-01	21	.62600E-01
22	.59300E-01	23	.49100E-01	24	.36100E-01

SOURCE ID = A0000013 ; SOURCE TYPE = AREA :

1	.14400E-01	2	.19900E-01	3	.20300E-01
4	.31200E-01	5	.64700E-01	6	.74900E-01
	7 .84300E-01	8	.91500E-01	9	.90100E-01
10	.88900E-01	11	.90000E-01	12	.92300E-01
	13 .94300E-01	14	.96400E-01	15	.99800E-01
16	.10200E+00	17	.10300E+00	18	.10000E+00
	19 .88600E-01	20	.72900E-01	21	.62600E-01
22	.59300E-01	23	.49100E-01	24	.36100E-01

SOURCE ID = A0000014 ; SOURCE TYPE = AREA :

1	.14400E-01	2	.19900E-01	3	.20300E-01
4	.31200E-01	5	.64700E-01	6	.74900E-01
	7 .84300E-01	8	.91500E-01	9	.90100E-01
10	.88900E-01	11	.90000E-01	12	.92300E-01
	13 .94300E-01	14	.96400E-01	15	.99800E-01
16	.10200E+00	17	.10300E+00	18	.10000E+00
	19 .88600E-01	20	.72900E-01	21	.62600E-01
22	.59300E-01	23	.49100E-01	24	.36100E-01

SOURCE ID = A0000015 ; SOURCE TYPE = AREA :

	1	.14400E-01	2	.19900E-01	3	.20300E-01
4	.31200E-01		5	.64700E-01	6	.74900E-01
	7	.84300E-01	8	.91500E-01	9	.90100E-01
10	.88900E-01		11	.90000E-01	12	.92300E-01
	13	.94300E-01	14	.96400E-01	15	.99800E-01
16	.10200E+00		17	.10300E+00	18	.10000E+00
	19	.88600E-01	20	.72900E-01	21	.62600E-01
22	.59300E-01		23	.49100E-01	24	.36100E-01

SOURCE ID = A0000016 ; SOURCE TYPE = AREA :

	1	.14400E-01	2	.19900E-01	3	.20300E-01
4	.31200E-01		5	.64700E-01	6	.74900E-01
	7	.84300E-01	8	.91500E-01	9	.90100E-01
10	.88900E-01		11	.90000E-01	12	.92300E-01
	13	.94300E-01	14	.96400E-01	15	.99800E-01
16	.10200E+00		17	.10300E+00	18	.10000E+00
	19	.88600E-01	20	.72900E-01	21	.62600E-01
22	.59300E-01		23	.49100E-01	24	.36100E-01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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---	---	---	---	---	---

SOURCE ID = A0000017 ; SOURCE TYPE = AREA :

1	.14400E-01	2	.19900E-01	3	.20300E-01	
4	.31200E-01	5	.64700E-01	6	.74900E-01	
	7	.84300E-01	8	.91500E-01	9	.90100E-01
10	.88900E-01	11	.90000E-01	12	.92300E-01	
	13	.94300E-01	14	.96400E-01	15	.99800E-01
16	.10200E+00	17	.10300E+00	18	.10000E+00	
	19	.88600E-01	20	.72900E-01	21	.62600E-01
22	.59300E-01	23	.49100E-01	24	.36100E-01	

SOURCE ID = A0000018 ; SOURCE TYPE = AREA :

1	.14400E-01	2	.19900E-01	3	.20300E-01	
4	.31200E-01	5	.64700E-01	6	.74900E-01	
	7	.84300E-01	8	.91500E-01	9	.90100E-01
10	.88900E-01	11	.90000E-01	12	.92300E-01	
	13	.94300E-01	14	.96400E-01	15	.99800E-01
16	.10200E+00	17	.10300E+00	18	.10000E+00	
	19	.88600E-01	20	.72900E-01	21	.62600E-01
22	.59300E-01	23	.49100E-01	24	.36100E-01	

SOURCE ID = A0000019 ; SOURCE TYPE = AREA :

1	.14400E-01	2	.19900E-01	3	.20300E-01	
4	.31200E-01	5	.64700E-01	6	.74900E-01	
	7	.84300E-01	8	.91500E-01	9	.90100E-01
10	.88900E-01	11	.90000E-01	12	.92300E-01	
	13	.94300E-01	14	.96400E-01	15	.99800E-01
16	.10200E+00	17	.10300E+00	18	.10000E+00	
	19	.88600E-01	20	.72900E-01	21	.62600E-01
22	.59300E-01	23	.49100E-01	24	.36100E-01	

SOURCE ID = A0000020 ; SOURCE TYPE = AREA :

	1	.14400E-01	2	.19900E-01	3	.20300E-01
4	.31200E-01		5	.64700E-01	6	.74900E-01
	7	.84300E-01	8	.91500E-01	9	.90100E-01
10	.88900E-01		11	.90000E-01	12	.92300E-01
	13	.94300E-01	14	.96400E-01	15	.99800E-01
16	.10200E+00		17	.10300E+00	18	.10000E+00
	19	.88600E-01	20	.72900E-01	21	.62600E-01
22	.59300E-01		23	.49100E-01	24	.36100E-01

SOURCE ID = A0000021 ; SOURCE TYPE = AREA :

	1	.14400E-01	2	.19900E-01	3	.20300E-01
4	.31200E-01		5	.64700E-01	6	.74900E-01
	7	.84300E-01	8	.91500E-01	9	.90100E-01
10	.88900E-01		11	.90000E-01	12	.92300E-01
	13	.94300E-01	14	.96400E-01	15	.99800E-01
16	.10200E+00		17	.10300E+00	18	.10000E+00
	19	.88600E-01	20	.72900E-01	21	.62600E-01
22	.59300E-01		23	.49100E-01	24	.36100E-01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000022 ; SOURCE TYPE = AREA :

1	.14400E-01	2	.19900E-01	3	.20300E-01	
4	.31200E-01	5	.64700E-01	6	.74900E-01	
	7	.84300E-01	8	.91500E-01	9	.90100E-01
10	.88900E-01	11	.90000E-01	12	.92300E-01	
	13	.94300E-01	14	.96400E-01	15	.99800E-01
16	.10200E+00	17	.10300E+00	18	.10000E+00	
	19	.88600E-01	20	.72900E-01	21	.62600E-01
22	.59300E-01	23	.49100E-01	24	.36100E-01	

SOURCE ID = A0000001 ; SOURCE TYPE = AREA :

1	.17200E-01	2	.12400E-01	3	.10800E-01	
4	.12600E-01	5	.20300E-01	6	.34000E-01	
	7	.43100E-01	8	.45700E-01	9	.43900E-01
10	.41400E-01	11	.42000E-01	12	.43900E-01	
	13	.46300E-01	14	.48300E-01	15	.50100E-01
16	.49100E-01	17	.50800E-01	18	.50600E-01	
	19	.47200E-01	20	.45900E-01	21	.41700E-01
22	.40800E-01	23	.33400E-01	24	.24800E-01	

SOURCE ID = A0000002 ; SOURCE TYPE = AREA :

1	.17200E-01	2	.12400E-01	3	.10800E-01	
4	.12600E-01	5	.20300E-01	6	.34000E-01	
	7	.43100E-01	8	.45700E-01	9	.43900E-01
10	.41400E-01	11	.42000E-01	12	.43900E-01	
	13	.46300E-01	14	.48300E-01	15	.50100E-01
16	.49100E-01	17	.50800E-01	18	.50600E-01	
	19	.47200E-01	20	.45900E-01	21	.41700E-01
22	.40800E-01	23	.33400E-01	24	.24800E-01	

SOURCE ID = A0000003 ; SOURCE TYPE = AREA :

	1	.17200E-01	2	.12400E-01	3	.10800E-01
4	.12600E-01	5	.20300E-01	6	.34000E-01	
	7	.43100E-01	8	.45700E-01	9	.43900E-01
10	.41400E-01	11	.42000E-01	12	.43900E-01	
	13	.46300E-01	14	.48300E-01	15	.50100E-01
16	.49100E-01	17	.50800E-01	18	.50600E-01	
	19	.47200E-01	20	.45900E-01	21	.41700E-01
22	.40800E-01	23	.33400E-01	24	.24800E-01	

SOURCE ID = A0000004 ; SOURCE TYPE = AREA :

	1	.17200E-01	2	.12400E-01	3	.10800E-01
4	.12600E-01	5	.20300E-01	6	.34000E-01	
	7	.43100E-01	8	.45700E-01	9	.43900E-01
10	.41400E-01	11	.42000E-01	12	.43900E-01	
	13	.46300E-01	14	.48300E-01	15	.50100E-01
16	.49100E-01	17	.50800E-01	18	.50600E-01	
	19	.47200E-01	20	.45900E-01	21	.41700E-01
22	.40800E-01	23	.33400E-01	24	.24800E-01	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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---	---	---	---	---	---

SOURCE ID = A0000005 ; SOURCE TYPE = AREA :

1	.17200E-01	2	.12400E-01	3	.10800E-01	
4	.12600E-01	5	.20300E-01	6	.34000E-01	
	7	.43100E-01	8	.45700E-01	9	.43900E-01
10	.41400E-01	11	.42000E-01	12	.43900E-01	
	13	.46300E-01	14	.48300E-01	15	.50100E-01
16	.49100E-01	17	.50800E-01	18	.50600E-01	
	19	.47200E-01	20	.45900E-01	21	.41700E-01
22	.40800E-01	23	.33400E-01	24	.24800E-01	

SOURCE ID = A0000006 ; SOURCE TYPE = AREA :

1	.17200E-01	2	.12400E-01	3	.10800E-01	
4	.12600E-01	5	.20300E-01	6	.34000E-01	
	7	.43100E-01	8	.45700E-01	9	.43900E-01
10	.41400E-01	11	.42000E-01	12	.43900E-01	
	13	.46300E-01	14	.48300E-01	15	.50100E-01
16	.49100E-01	17	.50800E-01	18	.50600E-01	
	19	.47200E-01	20	.45900E-01	21	.41700E-01
22	.40800E-01	23	.33400E-01	24	.24800E-01	

SOURCE ID = A0000007 ; SOURCE TYPE = AREA :

1	.17200E-01	2	.12400E-01	3	.10800E-01	
4	.12600E-01	5	.20300E-01	6	.34000E-01	
	7	.43100E-01	8	.45700E-01	9	.43900E-01
10	.41400E-01	11	.42000E-01	12	.43900E-01	
	13	.46300E-01	14	.48300E-01	15	.50100E-01
16	.49100E-01	17	.50800E-01	18	.50600E-01	
	19	.47200E-01	20	.45900E-01	21	.41700E-01
22	.40800E-01	23	.33400E-01	24	.24800E-01	

SOURCE ID = A0000008 ; SOURCE TYPE = AREA :

	1	.17200E-01	2	.12400E-01	3	.10800E-01
4	.12600E-01	5	.20300E-01	6	.34000E-01	
	7	.43100E-01	8	.45700E-01	9	.43900E-01
10	.41400E-01	11	.42000E-01	12	.43900E-01	
	13	.46300E-01	14	.48300E-01	15	.50100E-01
16	.49100E-01	17	.50800E-01	18	.50600E-01	
	19	.47200E-01	20	.45900E-01	21	.41700E-01
22	.40800E-01	23	.33400E-01	24	.24800E-01	

SOURCE ID = A0000009 ; SOURCE TYPE = AREA :

	1	.17200E-01	2	.12400E-01	3	.10800E-01
4	.12600E-01	5	.20300E-01	6	.34000E-01	
	7	.43100E-01	8	.45700E-01	9	.43900E-01
10	.41400E-01	11	.42000E-01	12	.43900E-01	
	13	.46300E-01	14	.48300E-01	15	.50100E-01
16	.49100E-01	17	.50800E-01	18	.50600E-01	
	19	.47200E-01	20	.45900E-01	21	.41700E-01
22	.40800E-01	23	.33400E-01	24	.24800E-01	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000010 ; SOURCE TYPE = AREA :

1	.17200E-01	2	.12400E-01	3	.10800E-01
4	.12600E-01	5	.20300E-01	6	.34000E-01
	7 .43100E-01	8	.45700E-01	9	.43900E-01
10	.41400E-01	11	.42000E-01	12	.43900E-01
	13 .46300E-01	14	.48300E-01	15	.50100E-01
16	.49100E-01	17	.50800E-01	18	.50600E-01
	19 .47200E-01	20	.45900E-01	21	.41700E-01
22	.40800E-01	23	.33400E-01	24	.24800E-01

SOURCE ID = A0000011 ; SOURCE TYPE = AREA :

1	.17200E-01	2	.12400E-01	3	.10800E-01
4	.12600E-01	5	.20300E-01	6	.34000E-01
	7 .43100E-01	8	.45700E-01	9	.43900E-01
10	.41400E-01	11	.42000E-01	12	.43900E-01
	13 .46300E-01	14	.48300E-01	15	.50100E-01
16	.49100E-01	17	.50800E-01	18	.50600E-01
	19 .47200E-01	20	.45900E-01	21	.41700E-01
22	.40800E-01	23	.33400E-01	24	.24800E-01

SOURCE ID = A0000023 ; SOURCE TYPE = AREA :

1	.25100E-02	2	.19700E-02	3	.20100E-02
4	.30900E-02	5	.64200E-02	6	.75800E-02
	7 .85400E-02	8	.91100E-02	9	.89600E-02
10	.88400E-02	11	.89600E-02	12	.91800E-02
	13 .93800E-02	14	.95900E-02	15	.99300E-02
16	.10100E-01	17	.10200E-01	18	.10100E-01
	19 .89700E-02	20	.72400E-02	21	.63400E-02
22	.58900E-02	23	.48700E-02	24	.35800E-02

SOURCE ID = A0000024 ; SOURCE TYPE = AREA :

	1	.25100E-02	2	.19700E-02	3	.20100E-02
4	.30900E-02	5	.64200E-02	6	.75800E-02	
	7	.85400E-02	8	.91100E-02	9	.89600E-02
10	.88400E-02	11	.89600E-02	12	.91800E-02	
	13	.93800E-02	14	.95900E-02	15	.99300E-02
16	.10100E-01	17	.10200E-01	18	.10100E-01	
	19	.89700E-02	20	.72400E-02	21	.63400E-02
22	.58900E-02	23	.48700E-02	24	.35800E-02	

SOURCE ID = A0000025 ; SOURCE TYPE = AREA :

	1	.25100E-02	2	.19700E-02	3	.20100E-02
4	.30900E-02	5	.64200E-02	6	.75800E-02	
	7	.85400E-02	8	.91100E-02	9	.89600E-02
10	.88400E-02	11	.89600E-02	12	.91800E-02	
	13	.93800E-02	14	.95900E-02	15	.99300E-02
16	.10100E-01	17	.10200E-01	18	.10100E-01	
	19	.89700E-02	20	.72400E-02	21	.63400E-02
22	.58900E-02	23	.48700E-02	24	.35800E-02	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000026 ; SOURCE TYPE = AREA :

1	.25100E-02	2	.19700E-02	3	.20100E-02	
4	.30900E-02	5	.64200E-02	6	.75800E-02	
	7	.85400E-02	8	.91100E-02	9	.89600E-02
10	.88400E-02	11	.89600E-02	12	.91800E-02	
	13	.93800E-02	14	.95900E-02	15	.99300E-02
16	.10100E-01	17	.10200E-01	18	.10100E-01	
	19	.89700E-02	20	.72400E-02	21	.63400E-02
22	.58900E-02	23	.48700E-02	24	.35800E-02	

SOURCE ID = A0000027 ; SOURCE TYPE = AREA :

1	.25100E-02	2	.19700E-02	3	.20100E-02	
4	.30900E-02	5	.64200E-02	6	.75800E-02	
	7	.85400E-02	8	.91100E-02	9	.89600E-02
10	.88400E-02	11	.89600E-02	12	.91800E-02	
	13	.93800E-02	14	.95900E-02	15	.99300E-02
16	.10100E-01	17	.10200E-01	18	.10100E-01	
	19	.89700E-02	20	.72400E-02	21	.63400E-02
22	.58900E-02	23	.48700E-02	24	.35800E-02	

SOURCE ID = A0000028 ; SOURCE TYPE = AREA :

1	.25100E-02	2	.19700E-02	3	.20100E-02	
4	.30900E-02	5	.64200E-02	6	.75800E-02	
	7	.85400E-02	8	.91100E-02	9	.89600E-02
10	.88400E-02	11	.89600E-02	12	.91800E-02	
	13	.93800E-02	14	.95900E-02	15	.99300E-02
16	.10100E-01	17	.10200E-01	18	.10100E-01	
	19	.89700E-02	20	.72400E-02	21	.63400E-02
22	.58900E-02	23	.48700E-02	24	.35800E-02	

SOURCE ID = A0000029 ; SOURCE TYPE = AREA :

	1	.25100E-02	2	.19700E-02	3	.20100E-02
4	.30900E-02	5	.64200E-02	6	.75800E-02	
	7	.85400E-02	8	.91100E-02	9	.89600E-02
10	.88400E-02	11	.89600E-02	12	.91800E-02	
	13	.93800E-02	14	.95900E-02	15	.99300E-02
16	.10100E-01	17	.10200E-01	18	.10100E-01	
	19	.89700E-02	20	.72400E-02	21	.63400E-02
22	.58900E-02	23	.48700E-02	24	.35800E-02	

SOURCE ID = A0000030 ; SOURCE TYPE = AREA :

	1	.25100E-02	2	.19700E-02	3	.20100E-02
4	.30900E-02	5	.64200E-02	6	.75800E-02	
	7	.85400E-02	8	.91100E-02	9	.89600E-02
10	.88400E-02	11	.89600E-02	12	.91800E-02	
	13	.93800E-02	14	.95900E-02	15	.99300E-02
16	.10100E-01	17	.10200E-01	18	.10100E-01	
	19	.89700E-02	20	.72400E-02	21	.63400E-02
22	.58900E-02	23	.48700E-02	24	.35800E-02	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000031 ; SOURCE TYPE = AREA :

1	.25100E-02	2	.19700E-02	3	.20100E-02	
4	.30900E-02	5	.64200E-02	6	.75800E-02	
	7	.85400E-02	8	.91100E-02	9	.89600E-02
10	.88400E-02	11	.89600E-02	12	.91800E-02	
	13	.93800E-02	14	.95900E-02	15	.99300E-02
16	.10100E-01	17	.10200E-01	18	.10100E-01	
	19	.89700E-02	20	.72400E-02	21	.63400E-02
22	.58900E-02	23	.48700E-02	24	.35800E-02	

SOURCE ID = A0000032 ; SOURCE TYPE = AREA :

1	.25100E-02	2	.19700E-02	3	.20100E-02	
4	.30900E-02	5	.64200E-02	6	.75800E-02	
	7	.85400E-02	8	.91100E-02	9	.89600E-02
10	.88400E-02	11	.89600E-02	12	.91800E-02	
	13	.93800E-02	14	.95900E-02	15	.99300E-02
16	.10100E-01	17	.10200E-01	18	.10100E-01	
	19	.89700E-02	20	.72400E-02	21	.63400E-02
22	.58900E-02	23	.48700E-02	24	.35800E-02	

SOURCE ID = A0000033 ; SOURCE TYPE = AREA :

1	.25100E-02	2	.19700E-02	3	.20100E-02	
4	.30900E-02	5	.64200E-02	6	.75800E-02	
	7	.85400E-02	8	.91100E-02	9	.89600E-02
10	.88400E-02	11	.89600E-02	12	.91800E-02	
	13	.93800E-02	14	.95900E-02	15	.99300E-02
16	.10100E-01	17	.10200E-01	18	.10100E-01	
	19	.89700E-02	20	.72400E-02	21	.63400E-02
22	.58900E-02	23	.48700E-02	24	.35800E-02	

SOURCE ID = A0000034 ; SOURCE TYPE = AREA :

	1	.25100E-02	2	.19700E-02	3	.20100E-02
4	.30900E-02	5	.64200E-02	6	.75800E-02	
	7	.85400E-02	8	.91100E-02	9	.89600E-02
10	.88400E-02	11	.89600E-02	12	.91800E-02	
	13	.93800E-02	14	.95900E-02	15	.99300E-02
16	.10100E-01	17	.10200E-01	18	.10100E-01	
	19	.89700E-02	20	.72400E-02	21	.63400E-02
22	.58900E-02	23	.48700E-02	24	.35800E-02	

SOURCE ID = A0000035 ; SOURCE TYPE = AREA :

	1	.25100E-02	2	.19700E-02	3	.20100E-02
4	.30900E-02	5	.64200E-02	6	.75800E-02	
	7	.85400E-02	8	.91100E-02	9	.89600E-02
10	.88400E-02	11	.89600E-02	12	.91800E-02	
	13	.93800E-02	14	.95900E-02	15	.99300E-02
16	.10100E-01	17	.10200E-01	18	.10100E-01	
	19	.89700E-02	20	.72400E-02	21	.63400E-02
22	.58900E-02	23	.48700E-02	24	.35800E-02	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000036 ; SOURCE TYPE = AREA :

1	.25100E-02	2	.19700E-02	3	.20100E-02	
4	.30900E-02	5	.64200E-02	6	.75800E-02	
	7	.85400E-02	8	.91100E-02	9	.89600E-02
10	.88400E-02	11	.89600E-02	12	.91800E-02	
	13	.93800E-02	14	.95900E-02	15	.99300E-02
16	.10100E-01	17	.10200E-01	18	.10100E-01	
	19	.89700E-02	20	.72400E-02	21	.63400E-02
22	.58900E-02	23	.48700E-02	24	.35800E-02	

SOURCE ID = A0000037 ; SOURCE TYPE = AREA :

1	.26100E-02	2	.18800E-02	3	.16500E-02	
4	.19200E-02	5	.30900E-02	6	.51800E-02	
	7	.72700E-02	8	.81100E-02	9	.78000E-02
10	.73400E-02	11	.74500E-02	12	.77900E-02	
	13	.82200E-02	14	.85700E-02	15	.88500E-02
16	.86800E-02	17	.85200E-02	18	.84900E-02	
	19	.83700E-02	20	.77500E-02	21	.70300E-02
22	.62100E-02	23	.50800E-02	24	.37800E-02	

SOURCE ID = A0000038 ; SOURCE TYPE = AREA :

1	.26100E-02	2	.18800E-02	3	.16500E-02	
4	.19200E-02	5	.30900E-02	6	.51800E-02	
	7	.72700E-02	8	.81100E-02	9	.78000E-02
10	.73400E-02	11	.74500E-02	12	.77900E-02	
	13	.82200E-02	14	.85700E-02	15	.88500E-02
16	.86800E-02	17	.85200E-02	18	.84900E-02	
	19	.83700E-02	20	.77500E-02	21	.70300E-02
22	.62100E-02	23	.50800E-02	24	.37800E-02	

SOURCE ID = A0000039 ; SOURCE TYPE = AREA :

	1	.26100E-02	2	.18800E-02	3	.16500E-02
4	.19200E-02	5	.30900E-02	6	.51800E-02	
	7	.72700E-02	8	.81100E-02	9	.78000E-02
10	.73400E-02	11	.74500E-02	12	.77900E-02	
	13	.82200E-02	14	.85700E-02	15	.88500E-02
16	.86800E-02	17	.85200E-02	18	.84900E-02	
	19	.83700E-02	20	.77500E-02	21	.70300E-02
22	.62100E-02	23	.50800E-02	24	.37800E-02	

SOURCE ID = A0000040 ; SOURCE TYPE = AREA :

	1	.26100E-02	2	.18800E-02	3	.16500E-02
4	.19200E-02	5	.30900E-02	6	.51800E-02	
	7	.72700E-02	8	.81100E-02	9	.78000E-02
10	.73400E-02	11	.74500E-02	12	.77900E-02	
	13	.82200E-02	14	.85700E-02	15	.88500E-02
16	.86800E-02	17	.85200E-02	18	.84900E-02	
	19	.83700E-02	20	.77500E-02	21	.70300E-02
22	.62100E-02	23	.50800E-02	24	.37800E-02	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000041 ; SOURCE TYPE = AREA :

1	.26100E-02	2	.18800E-02	3	.16500E-02	
4	.19200E-02	5	.30900E-02	6	.51800E-02	
	7	.72700E-02	8	.81100E-02	9	.78000E-02
10	.73400E-02	11	.74500E-02	12	.77900E-02	
	13	.82200E-02	14	.85700E-02	15	.88500E-02
16	.86800E-02	17	.85200E-02	18	.84900E-02	
	19	.83700E-02	20	.77500E-02	21	.70300E-02
22	.62100E-02	23	.50800E-02	24	.37800E-02	

SOURCE ID = A0000042 ; SOURCE TYPE = AREA :

1	.26100E-02	2	.18800E-02	3	.16500E-02	
4	.19200E-02	5	.30900E-02	6	.51800E-02	
	7	.72700E-02	8	.81100E-02	9	.78000E-02
10	.73400E-02	11	.74500E-02	12	.77900E-02	
	13	.82200E-02	14	.85700E-02	15	.88500E-02
16	.86800E-02	17	.85200E-02	18	.84900E-02	
	19	.83700E-02	20	.77500E-02	21	.70300E-02
22	.62100E-02	23	.50800E-02	24	.37800E-02	

SOURCE ID = A0000043 ; SOURCE TYPE = AREA :

1	.26100E-02	2	.18800E-02	3	.16500E-02	
4	.19200E-02	5	.30900E-02	6	.51800E-02	
	7	.72700E-02	8	.81100E-02	9	.78000E-02
10	.73400E-02	11	.74500E-02	12	.77900E-02	
	13	.82200E-02	14	.85700E-02	15	.88500E-02
16	.86800E-02	17	.85200E-02	18	.84900E-02	
	19	.83700E-02	20	.77500E-02	21	.70300E-02
22	.62100E-02	23	.50800E-02	24	.37800E-02	

SOURCE ID = A0000044 ; SOURCE TYPE = AREA :

	1	.26100E-02	2	.18800E-02	3	.16500E-02
4	.19200E-02	5	.30900E-02	6	.51800E-02	
	7	.72700E-02	8	.81100E-02	9	.78000E-02
10	.73400E-02	11	.74500E-02	12	.77900E-02	
	13	.82200E-02	14	.85700E-02	15	.88500E-02
16	.86800E-02	17	.85200E-02	18	.84900E-02	
	19	.83700E-02	20	.77500E-02	21	.70300E-02
22	.62100E-02	23	.50800E-02	24	.37800E-02	

SOURCE ID = A0000045 ; SOURCE TYPE = AREA :

	1	.40100E-02	2	.28800E-02	3	.25300E-02
4	.29400E-02	5	.47400E-02	6	.79400E-02	
	7	.11100E-01	8	.12400E-01	9	.12000E-01
10	.11300E-01	11	.11400E-01	12	.11900E-01	
	13	.12600E-01	14	.13100E-01	15	.13600E-01
16	.13300E-01	17	.13100E-01	18	.13000E-01	
	19	.12800E-01	20	.11900E-01	21	.10800E-01
22	.95100E-02	23	.77900E-02	24	.58000E-02	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000046 ; SOURCE TYPE = AREA :

1	.40100E-02	2	.28800E-02	3	.25300E-02	
4	.29400E-02	5	.47400E-02	6	.79400E-02	
	7	.11100E-01	8	.12400E-01	9	.12000E-01
10	.11300E-01	11	.11400E-01	12	.11900E-01	
	13	.12600E-01	14	.13100E-01	15	.13600E-01
16	.13300E-01	17	.13100E-01	18	.13000E-01	
	19	.12800E-01	20	.11900E-01	21	.10800E-01
22	.95100E-02	23	.77900E-02	24	.58000E-02	

SOURCE ID = A0000047 ; SOURCE TYPE = AREA :

1	.40100E-02	2	.28800E-02	3	.25300E-02	
4	.29400E-02	5	.47400E-02	6	.79400E-02	
	7	.11100E-01	8	.12400E-01	9	.12000E-01
10	.11300E-01	11	.11400E-01	12	.11900E-01	
	13	.12600E-01	14	.13100E-01	15	.13600E-01
16	.13300E-01	17	.13100E-01	18	.13000E-01	
	19	.12800E-01	20	.11900E-01	21	.10800E-01
22	.95100E-02	23	.77900E-02	24	.58000E-02	

SOURCE ID = A0000048 ; SOURCE TYPE = AREA :

1	.40100E-02	2	.28800E-02	3	.25300E-02	
4	.29400E-02	5	.47400E-02	6	.79400E-02	
	7	.11100E-01	8	.12400E-01	9	.12000E-01
10	.11300E-01	11	.11400E-01	12	.11900E-01	
	13	.12600E-01	14	.13100E-01	15	.13600E-01
16	.13300E-01	17	.13100E-01	18	.13000E-01	
	19	.12800E-01	20	.11900E-01	21	.10800E-01
22	.95100E-02	23	.77900E-02	24	.58000E-02	

SOURCE ID = A0000049 ; SOURCE TYPE = AREA :

	1	.40100E-02	2	.28800E-02	3	.25300E-02
4	.29400E-02	5	.47400E-02	6	.79400E-02	
	7	.11100E-01	8	.12400E-01	9	.12000E-01
10	.11300E-01	11	.11400E-01	12	.11900E-01	
	13	.12600E-01	14	.13100E-01	15	.13600E-01
16	.13300E-01	17	.13100E-01	18	.13000E-01	
	19	.12800E-01	20	.11900E-01	21	.10800E-01
22	.95100E-02	23	.77900E-02	24	.58000E-02	

SOURCE ID = A0000050 ; SOURCE TYPE = AREA :

	1	.40100E-02	2	.28800E-02	3	.25300E-02
4	.29400E-02	5	.47400E-02	6	.79400E-02	
	7	.11100E-01	8	.12400E-01	9	.12000E-01
10	.11300E-01	11	.11400E-01	12	.11900E-01	
	13	.12600E-01	14	.13100E-01	15	.13600E-01
16	.13300E-01	17	.13100E-01	18	.13000E-01	
	19	.12800E-01	20	.11900E-01	21	.10800E-01
22	.95100E-02	23	.77900E-02	24	.58000E-02	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000051 ; SOURCE TYPE = AREA :

1	.40100E-02	2	.28800E-02	3	.25300E-02	
4	.29400E-02	5	.47400E-02	6	.79400E-02	
	7	.11100E-01	8	.12400E-01	9	.12000E-01
10	.11300E-01	11	.11400E-01	12	.11900E-01	
	13	.12600E-01	14	.13100E-01	15	.13600E-01
16	.13300E-01	17	.13100E-01	18	.13000E-01	
	19	.12800E-01	20	.11900E-01	21	.10800E-01
22	.95100E-02	23	.77900E-02	24	.58000E-02	

SOURCE ID = A0000052 ; SOURCE TYPE = AREA :

1	.40100E-02	2	.28800E-02	3	.25300E-02	
4	.29400E-02	5	.47400E-02	6	.79400E-02	
	7	.11100E-01	8	.12400E-01	9	.12000E-01
10	.11300E-01	11	.11400E-01	12	.11900E-01	
	13	.12600E-01	14	.13100E-01	15	.13600E-01
16	.13300E-01	17	.13100E-01	18	.13000E-01	
	19	.12800E-01	20	.11900E-01	21	.10800E-01
22	.95100E-02	23	.77900E-02	24	.58000E-02	

SOURCE ID = A0000053 ; SOURCE TYPE = AREA :

1	.40100E-02	2	.28800E-02	3	.25300E-02	
4	.29400E-02	5	.47400E-02	6	.79400E-02	
	7	.11100E-01	8	.12400E-01	9	.12000E-01
10	.11300E-01	11	.11400E-01	12	.11900E-01	
	13	.12600E-01	14	.13100E-01	15	.13600E-01
16	.13300E-01	17	.13100E-01	18	.13000E-01	
	19	.12800E-01	20	.11900E-01	21	.10800E-01
22	.95100E-02	23	.77900E-02	24	.58000E-02	

SOURCE ID = A0000054 ; SOURCE TYPE = AREA :

	1	.40100E-02	2	.28800E-02	3	.25300E-02
4	.29400E-02	5	.47400E-02	6	.79400E-02	
	7	.11100E-01	8	.12400E-01	9	.12000E-01
10	.11300E-01	11	.11400E-01	12	.11900E-01	
	13	.12600E-01	14	.13100E-01	15	.13600E-01
16	.13300E-01	17	.13100E-01	18	.13000E-01	
	19	.12800E-01	20	.11900E-01	21	.10800E-01
22	.95100E-02	23	.77900E-02	24	.58000E-02	

SOURCE ID = A0000055 ; SOURCE TYPE = AREA :

	1	.40100E-02	2	.28800E-02	3	.25300E-02
4	.29400E-02	5	.47400E-02	6	.79400E-02	
	7	.11100E-01	8	.12400E-01	9	.12000E-01
10	.11300E-01	11	.11400E-01	12	.11900E-01	
	13	.12600E-01	14	.13100E-01	15	.13600E-01
16	.13300E-01	17	.13100E-01	18	.13000E-01	
	19	.12800E-01	20	.11900E-01	21	.10800E-01
22	.95100E-02	23	.77900E-02	24	.58000E-02	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000056 ; SOURCE TYPE = AREA :

1	.40100E-02	2	.28800E-02	3	.25300E-02	
4	.29400E-02	5	.47400E-02	6	.79400E-02	
	7	.11100E-01	8	.12400E-01	9	.12000E-01
10	.11300E-01	11	.11400E-01	12	.11900E-01	
	13	.12600E-01	14	.13100E-01	15	.13600E-01
16	.13300E-01	17	.13100E-01	18	.13000E-01	
	19	.12800E-01	20	.11900E-01	21	.10800E-01
22	.95100E-02	23	.77900E-02	24	.58000E-02	

SOURCE ID = A0000057 ; SOURCE TYPE = AREA :

1	.40100E-02	2	.28800E-02	3	.25300E-02	
4	.29400E-02	5	.47400E-02	6	.79400E-02	
	7	.11100E-01	8	.12400E-01	9	.12000E-01
10	.11300E-01	11	.11400E-01	12	.11900E-01	
	13	.12600E-01	14	.13100E-01	15	.13600E-01
16	.13300E-01	17	.13100E-01	18	.13000E-01	
	19	.12800E-01	20	.11900E-01	21	.10800E-01
22	.95100E-02	23	.77900E-02	24	.58000E-02	

SOURCE ID = A0000058 ; SOURCE TYPE = AREA :

1	.40100E-02	2	.28800E-02	3	.25300E-02	
4	.29400E-02	5	.47400E-02	6	.79400E-02	
	7	.11100E-01	8	.12400E-01	9	.12000E-01
10	.11300E-01	11	.11400E-01	12	.11900E-01	
	13	.12600E-01	14	.13100E-01	15	.13600E-01
16	.13300E-01	17	.13100E-01	18	.13000E-01	
	19	.12800E-01	20	.11900E-01	21	.10800E-01
22	.95100E-02	23	.77900E-02	24	.58000E-02	

SOURCE ID = A0000059 ; SOURCE TYPE = AREA :

	1	.40100E-02	2	.28800E-02	3	.25300E-02
4	.29400E-02	5	.47400E-02	6	.79400E-02	
	7	.11100E-01	8	.12400E-01	9	.12000E-01
10	.11300E-01	11	.11400E-01	12	.11900E-01	
	13	.12600E-01	14	.13100E-01	15	.13600E-01
16	.13300E-01	17	.13100E-01	18	.13000E-01	
	19	.12800E-01	20	.11900E-01	21	.10800E-01
22	.95100E-02	23	.77900E-02	24	.58000E-02	

SOURCE ID = A0000060 ; SOURCE TYPE = AREA :

	1	.40100E-02	2	.28800E-02	3	.25300E-02
4	.29400E-02	5	.47400E-02	6	.79400E-02	
	7	.11100E-01	8	.12400E-01	9	.12000E-01
10	.11300E-01	11	.11400E-01	12	.11900E-01	
	13	.12600E-01	14	.13100E-01	15	.13600E-01
16	.13300E-01	17	.13100E-01	18	.13000E-01	
	19	.12800E-01	20	.11900E-01	21	.10800E-01
22	.95100E-02	23	.77900E-02	24	.58000E-02	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000061 ; SOURCE TYPE = AREA :

1	.40200E-03	2	.31600E-03	3	.32200E-03	
4	.49500E-03	5	.10300E-02	6	.12100E-02	
	7	.13700E-02	8	.14600E-02	9	.14400E-02
10	.14200E-02	11	.14300E-02	12	.14700E-02	
	13	.15000E-02	14	.15400E-02	15	.15900E-02
16	.16200E-02	17	.16400E-02	18	.16200E-02	
	19	.14400E-02	20	.11600E-02	21	.10200E-02
22	.94200E-03	23	.78100E-03	24	.57400E-03	

SOURCE ID = A0000062 ; SOURCE TYPE = AREA :

1	.40200E-03	2	.31600E-03	3	.32200E-03	
4	.49500E-03	5	.10300E-02	6	.12100E-02	
	7	.13700E-02	8	.14600E-02	9	.14400E-02
10	.14200E-02	11	.14300E-02	12	.14700E-02	
	13	.15000E-02	14	.15400E-02	15	.15900E-02
16	.16200E-02	17	.16400E-02	18	.16200E-02	
	19	.14400E-02	20	.11600E-02	21	.10200E-02
22	.94200E-03	23	.78100E-03	24	.57400E-03	

SOURCE ID = A0000063 ; SOURCE TYPE = AREA :

1	.40200E-03	2	.31600E-03	3	.32200E-03	
4	.49500E-03	5	.10300E-02	6	.12100E-02	
	7	.13700E-02	8	.14600E-02	9	.14400E-02
10	.14200E-02	11	.14300E-02	12	.14700E-02	
	13	.15000E-02	14	.15400E-02	15	.15900E-02
16	.16200E-02	17	.16400E-02	18	.16200E-02	
	19	.14400E-02	20	.11600E-02	21	.10200E-02
22	.94200E-03	23	.78100E-03	24	.57400E-03	

SOURCE ID = A0000064 ; SOURCE TYPE = AREA :

	1	.40200E-03	2	.31600E-03	3	.32200E-03
4	.49500E-03		5	.10300E-02	6	.12100E-02
	7	.13700E-02	8	.14600E-02	9	.14400E-02
10	.14200E-02		11	.14300E-02	12	.14700E-02
	13	.15000E-02	14	.15400E-02	15	.15900E-02
16	.16200E-02		17	.16400E-02	18	.16200E-02
	19	.14400E-02	20	.11600E-02	21	.10200E-02
22	.94200E-03		23	.78100E-03	24	.57400E-03

SOURCE ID = A0000065 ; SOURCE TYPE = AREA :

	1	.40200E-03	2	.31600E-03	3	.32200E-03
4	.49500E-03		5	.10300E-02	6	.12100E-02
	7	.13700E-02	8	.14600E-02	9	.14400E-02
10	.14200E-02		11	.14300E-02	12	.14700E-02
	13	.15000E-02	14	.15400E-02	15	.15900E-02
16	.16200E-02		17	.16400E-02	18	.16200E-02
	19	.14400E-02	20	.11600E-02	21	.10200E-02
22	.94200E-03		23	.78100E-03	24	.57400E-03

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000066 ; SOURCE TYPE = AREA :

1	.40200E-03	2	.31600E-03	3	.32200E-03	
4	.49500E-03	5	.10300E-02	6	.12100E-02	
	7	.13700E-02	8	.14600E-02	9	.14400E-02
10	.14200E-02	11	.14300E-02	12	.14700E-02	
	13	.15000E-02	14	.15400E-02	15	.15900E-02
16	.16200E-02	17	.16400E-02	18	.16200E-02	
	19	.14400E-02	20	.11600E-02	21	.10200E-02
22	.94200E-03	23	.78100E-03	24	.57400E-03	

SOURCE ID = A0000067 ; SOURCE TYPE = AREA :

1	.10900E-01	2	.85500E-02	3	.87100E-02	
4	.13400E-01	5	.27800E-01	6	.35600E-01	
	7	.40100E-01	8	.46700E-01	9	.45900E-01
10	.45300E-01	11	.45900E-01	12	.47000E-01	
	13	.48100E-01	14	.49100E-01	15	.50900E-01
16	.51900E-01	17	.52400E-01	18	.47600E-01	
	19	.42100E-01	20	.31400E-01	21	.29800E-01
22	.25500E-01	23	.21100E-01	24	.15500E-01	

SOURCE ID = A0000068 ; SOURCE TYPE = AREA :

1	.10900E-01	2	.85500E-02	3	.87100E-02	
4	.13400E-01	5	.27800E-01	6	.35600E-01	
	7	.40100E-01	8	.46700E-01	9	.45900E-01
10	.45300E-01	11	.45900E-01	12	.47000E-01	
	13	.48100E-01	14	.49100E-01	15	.50900E-01
16	.51900E-01	17	.52400E-01	18	.47600E-01	
	19	.42100E-01	20	.31400E-01	21	.29800E-01
22	.25500E-01	23	.21100E-01	24	.15500E-01	

SOURCE ID = A0000069 ; SOURCE TYPE = AREA :

	1	.10900E-01	2	.85500E-02	3	.87100E-02
4	.13400E-01	5	.27800E-01	6	.35600E-01	
	7	.40100E-01	8	.46700E-01	9	.45900E-01
10	.45300E-01	11	.45900E-01	12	.47000E-01	
	13	.48100E-01	14	.49100E-01	15	.50900E-01
16	.51900E-01	17	.52400E-01	18	.47600E-01	
	19	.42100E-01	20	.31400E-01	21	.29800E-01
22	.25500E-01	23	.21100E-01	24	.15500E-01	

SOURCE ID = A0000070 ; SOURCE TYPE = AREA :

	1	.10900E-01	2	.85500E-02	3	.87100E-02
4	.13400E-01	5	.27800E-01	6	.35600E-01	
	7	.40100E-01	8	.46700E-01	9	.45900E-01
10	.45300E-01	11	.45900E-01	12	.47000E-01	
	13	.48100E-01	14	.49100E-01	15	.50900E-01
16	.51900E-01	17	.52400E-01	18	.47600E-01	
	19	.42100E-01	20	.31400E-01	21	.29800E-01
22	.25500E-01	23	.21100E-01	24	.15500E-01	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000071 ; SOURCE TYPE = AREA :

1	.10900E-01	2	.85500E-02	3	.87100E-02	
4	.13400E-01	5	.27800E-01	6	.35600E-01	
	7	.40100E-01	8	.46700E-01	9	.45900E-01
10	.45300E-01	11	.45900E-01	12	.47000E-01	
	13	.48100E-01	14	.49100E-01	15	.50900E-01
16	.51900E-01	17	.52400E-01	18	.47600E-01	
	19	.42100E-01	20	.31400E-01	21	.29800E-01
22	.25500E-01	23	.21100E-01	24	.15500E-01	

SOURCE ID = A0000072 ; SOURCE TYPE = AREA :

1	.10900E-01	2	.85500E-02	3	.87100E-02	
4	.13400E-01	5	.27800E-01	6	.35600E-01	
	7	.40100E-01	8	.46700E-01	9	.45900E-01
10	.45300E-01	11	.45900E-01	12	.47000E-01	
	13	.48100E-01	14	.49100E-01	15	.50900E-01
16	.51900E-01	17	.52400E-01	18	.47600E-01	
	19	.42100E-01	20	.31400E-01	21	.29800E-01
22	.25500E-01	23	.21100E-01	24	.15500E-01	

SOURCE ID = A0000073 ; SOURCE TYPE = AREA :

1	.10900E-01	2	.85500E-02	3	.87100E-02	
4	.13400E-01	5	.27800E-01	6	.35600E-01	
	7	.40100E-01	8	.46700E-01	9	.45900E-01
10	.45300E-01	11	.45900E-01	12	.47000E-01	
	13	.48100E-01	14	.49100E-01	15	.50900E-01
16	.51900E-01	17	.52400E-01	18	.47600E-01	
	19	.42100E-01	20	.31400E-01	21	.29800E-01
22	.25500E-01	23	.21100E-01	24	.15500E-01	

SOURCE ID = A0000074 ; SOURCE TYPE = AREA :

	1	.10900E-01	2	.85500E-02	3	.87100E-02
4	.13400E-01	5	.27800E-01	6	.35600E-01	
	7	.40100E-01	8	.46700E-01	9	.45900E-01
10	.45300E-01	11	.45900E-01	12	.47000E-01	
	13	.48100E-01	14	.49100E-01	15	.50900E-01
16	.51900E-01	17	.52400E-01	18	.47600E-01	
	19	.42100E-01	20	.31400E-01	21	.29800E-01
22	.25500E-01	23	.21100E-01	24	.15500E-01	

SOURCE ID = A0000075 ; SOURCE TYPE = AREA :

	1	.10900E-01	2	.85500E-02	3	.87100E-02
4	.13400E-01	5	.27800E-01	6	.35600E-01	
	7	.40100E-01	8	.46700E-01	9	.45900E-01
10	.45300E-01	11	.45900E-01	12	.47000E-01	
	13	.48100E-01	14	.49100E-01	15	.50900E-01
16	.51900E-01	17	.52400E-01	18	.47600E-01	
	19	.42100E-01	20	.31400E-01	21	.29800E-01
22	.25500E-01	23	.21100E-01	24	.15500E-01	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000076 ; SOURCE TYPE = AREA :

1	.10900E-01	2	.85500E-02	3	.87100E-02	
4	.13400E-01	5	.27800E-01	6	.35600E-01	
	7	.40100E-01	8	.46700E-01	9	.45900E-01
10	.45300E-01	11	.45900E-01	12	.47000E-01	
	13	.48100E-01	14	.49100E-01	15	.50900E-01
16	.51900E-01	17	.52400E-01	18	.47600E-01	
	19	.42100E-01	20	.31400E-01	21	.29800E-01
22	.25500E-01	23	.21100E-01	24	.15500E-01	

SOURCE ID = A0000077 ; SOURCE TYPE = AREA :

1	.10900E-01	2	.85500E-02	3	.87100E-02	
4	.13400E-01	5	.27800E-01	6	.35600E-01	
	7	.40100E-01	8	.46700E-01	9	.45900E-01
10	.45300E-01	11	.45900E-01	12	.47000E-01	
	13	.48100E-01	14	.49100E-01	15	.50900E-01
16	.51900E-01	17	.52400E-01	18	.47600E-01	
	19	.42100E-01	20	.31400E-01	21	.29800E-01
22	.25500E-01	23	.21100E-01	24	.15500E-01	

SOURCE ID = A0000078 ; SOURCE TYPE = AREA :

1	.13000E-01	2	.93200E-02	3	.81700E-02	
4	.95100E-02	5	.15300E-01	6	.25700E-01	
	7	.39000E-01	8	.47500E-01	9	.45600E-01
10	.43000E-01	11	.43600E-01	12	.45600E-01	
	13	.48100E-01	14	.50200E-01	15	.57000E-01
16	.55900E-01	17	.61000E-01	18	.60800E-01	
	19	.49000E-01	20	.41600E-01	21	.37700E-01
22	.30700E-01	23	.25200E-01	24	.18700E-01	

SOURCE ID = A0000079 ; SOURCE TYPE = AREA :

	1	.13000E-01	2	.93200E-02	3	.81700E-02
4	.95100E-02	5	.15300E-01	6	.25700E-01	
	7	.39000E-01	8	.47500E-01	9	.45600E-01
10	.43000E-01	11	.43600E-01	12	.45600E-01	
	13	.48100E-01	14	.50200E-01	15	.57000E-01
16	.55900E-01	17	.61000E-01	18	.60800E-01	
	19	.49000E-01	20	.41600E-01	21	.37700E-01
22	.30700E-01	23	.25200E-01	24	.18700E-01	

SOURCE ID = A0000080 ; SOURCE TYPE = AREA :

	1	.13000E-01	2	.93200E-02	3	.81700E-02
4	.95100E-02	5	.15300E-01	6	.25700E-01	
	7	.39000E-01	8	.47500E-01	9	.45600E-01
10	.43000E-01	11	.43600E-01	12	.45600E-01	
	13	.48100E-01	14	.50200E-01	15	.57000E-01
16	.55900E-01	17	.61000E-01	18	.60800E-01	
	19	.49000E-01	20	.41600E-01	21	.37700E-01
22	.30700E-01	23	.25200E-01	24	.18700E-01	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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---	---	---	---	---	---

SOURCE ID = A0000081 ; SOURCE TYPE = AREA :

1	.13000E-01	2	.93200E-02	3	.81700E-02	
4	.95100E-02	5	.15300E-01	6	.25700E-01	
	7	.39000E-01	8	.47500E-01	9	.45600E-01
10	.43000E-01	11	.43600E-01	12	.45600E-01	
	13	.48100E-01	14	.50200E-01	15	.57000E-01
16	.55900E-01	17	.61000E-01	18	.60800E-01	
	19	.49000E-01	20	.41600E-01	21	.37700E-01
22	.30700E-01	23	.25200E-01	24	.18700E-01	

SOURCE ID = A0000082 ; SOURCE TYPE = AREA :

1	.13000E-01	2	.93200E-02	3	.81700E-02	
4	.95100E-02	5	.15300E-01	6	.25700E-01	
	7	.39000E-01	8	.47500E-01	9	.45600E-01
10	.43000E-01	11	.43600E-01	12	.45600E-01	
	13	.48100E-01	14	.50200E-01	15	.57000E-01
16	.55900E-01	17	.61000E-01	18	.60800E-01	
	19	.49000E-01	20	.41600E-01	21	.37700E-01
22	.30700E-01	23	.25200E-01	24	.18700E-01	

SOURCE ID = A0000083 ; SOURCE TYPE = AREA :

1	.13000E-01	2	.93200E-02	3	.81700E-02	
4	.95100E-02	5	.15300E-01	6	.25700E-01	
	7	.39000E-01	8	.47500E-01	9	.45600E-01
10	.43000E-01	11	.43600E-01	12	.45600E-01	
	13	.48100E-01	14	.50200E-01	15	.57000E-01
16	.55900E-01	17	.61000E-01	18	.60800E-01	
	19	.49000E-01	20	.41600E-01	21	.37700E-01
22	.30700E-01	23	.25200E-01	24	.18700E-01	

SOURCE ID = A0000084 ; SOURCE TYPE = AREA :

	1	.13000E-01		2	.93200E-02		3	.81700E-02
4	.95100E-02		5	.15300E-01		6	.25700E-01	
	7	.39000E-01		8	.47500E-01		9	.45600E-01
10	.43000E-01		11	.43600E-01		12	.45600E-01	
	13	.48100E-01		14	.50200E-01		15	.57000E-01
16	.55900E-01		17	.61000E-01		18	.60800E-01	
	19	.49000E-01		20	.41600E-01		21	.37700E-01
22	.30700E-01		23	.25200E-01		24	.18700E-01	

SOURCE ID = A0000085 ; SOURCE TYPE = AREA :

	1	.13000E-01		2	.93200E-02		3	.81700E-02
4	.95100E-02		5	.15300E-01		6	.25700E-01	
	7	.39000E-01		8	.47500E-01		9	.45600E-01
10	.43000E-01		11	.43600E-01		12	.45600E-01	
	13	.48100E-01		14	.50200E-01		15	.57000E-01
16	.55900E-01		17	.61000E-01		18	.60800E-01	
	19	.49000E-01		20	.41600E-01		21	.37700E-01
22	.30700E-01		23	.25200E-01		24	.18700E-01	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
---	---	---	---	---	---
---	---	---	---	---	---

SOURCE ID = A0000086 ; SOURCE TYPE = AREA :

1	.13000E-01	2	.93200E-02	3	.81700E-02	
4	.95100E-02	5	.15300E-01	6	.25700E-01	
	7	.39000E-01	8	.47500E-01	9	.45600E-01
10	.43000E-01	11	.43600E-01	12	.45600E-01	
	13	.48100E-01	14	.50200E-01	15	.57000E-01
16	.55900E-01	17	.61000E-01	18	.60800E-01	
	19	.49000E-01	20	.41600E-01	21	.37700E-01
22	.30700E-01	23	.25200E-01	24	.18700E-01	

SOURCE ID = A0000087 ; SOURCE TYPE = AREA :

1	.13000E-01	2	.93200E-02	3	.81700E-02	
4	.95100E-02	5	.15300E-01	6	.25700E-01	
	7	.39000E-01	8	.47500E-01	9	.45600E-01
10	.43000E-01	11	.43600E-01	12	.45600E-01	
	13	.48100E-01	14	.50200E-01	15	.57000E-01
16	.55900E-01	17	.61000E-01	18	.60800E-01	
	19	.49000E-01	20	.41600E-01	21	.37700E-01
22	.30700E-01	23	.25200E-01	24	.18700E-01	

SOURCE ID = A0000088 ; SOURCE TYPE = AREA :

1	.13000E-01	2	.93200E-02	3	.81700E-02	
4	.95100E-02	5	.15300E-01	6	.25700E-01	
	7	.39000E-01	8	.47500E-01	9	.45600E-01
10	.43000E-01	11	.43600E-01	12	.45600E-01	
	13	.48100E-01	14	.50200E-01	15	.57000E-01
16	.55900E-01	17	.61000E-01	18	.60800E-01	
	19	.49000E-01	20	.41600E-01	21	.37700E-01
22	.30700E-01	23	.25200E-01	24	.18700E-01	

SOURCE ID = A0000089 ; SOURCE TYPE = AREA :

	1	.34100E-02	2	.26800E-02	3	.27300E-02
4	.42000E-02	5	.87200E-02	6	.11400E-02	
	7	.11600E-01	8	.12400E-01	9	.12200E-01
10	.12000E-01	11	.12200E-01	12	.12500E-01	
	13	.12700E-01	14	.13000E-01	15	.13500E-01
16	.13800E-01	17	.13900E-01	18	.13800E-01	
	19	.12200E-01	20	.98300E-02	21	.86100E-02
22	.80000E-02	23	.66200E-02	24	.48700E-02	

SOURCE ID = A0000090 ; SOURCE TYPE = AREA :

	1	.34100E-02	2	.26800E-02	3	.27300E-02
4	.42000E-02	5	.87200E-02	6	.11400E-02	
	7	.11600E-01	8	.12400E-01	9	.12200E-01
10	.12000E-01	11	.12200E-01	12	.12500E-01	
	13	.12700E-01	14	.13000E-01	15	.13500E-01
16	.13800E-01	17	.13900E-01	18	.13800E-01	
	19	.12200E-01	20	.98300E-02	21	.86100E-02
22	.80000E-02	23	.66200E-02	24	.48700E-02	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.34100E-02	2	.26800E-02	3	.27300E-02
4	.42000E-02	5	.87200E-02	6	.11400E-02
7	.11600E-01	8	.12400E-01	9	.12200E-01
10	.12000E-01	11	.12200E-01	12	.12500E-01
13	.12700E-01	14	.13000E-01	15	.13500E-01
16	.13800E-01	17	.13900E-01	18	.13800E-01
19	.12200E-01	20	.98300E-02	21	.86100E-02
22	.80000E-02	23	.66200E-02	24	.48700E-02

SOURCE ID = A0000091 ; SOURCE TYPE = AREA :

1	.34100E-02	2	.26800E-02	3	.27300E-02
4	.42000E-02	5	.87200E-02	6	.11400E-02
7	.11600E-01	8	.12400E-01	9	.12200E-01
10	.12000E-01	11	.12200E-01	12	.12500E-01
13	.12700E-01	14	.13000E-01	15	.13500E-01
16	.13800E-01	17	.13900E-01	18	.13800E-01
19	.12200E-01	20	.98300E-02	21	.86100E-02
22	.80000E-02	23	.66200E-02	24	.48700E-02

SOURCE ID = A0000092 ; SOURCE TYPE = AREA :

1	.34100E-02	2	.26800E-02	3	.27300E-02
4	.42000E-02	5	.87200E-02	6	.11400E-02
7	.11600E-01	8	.12400E-01	9	.12200E-01
10	.12000E-01	11	.12200E-01	12	.12500E-01
13	.12700E-01	14	.13000E-01	15	.13500E-01
16	.13800E-01	17	.13900E-01	18	.13800E-01
19	.12200E-01	20	.98300E-02	21	.86100E-02
22	.80000E-02	23	.66200E-02	24	.48700E-02

SOURCE ID = A0000093 ; SOURCE TYPE = AREA :

1	.34100E-02	2	.26800E-02	3	.27300E-02
4	.42000E-02	5	.87200E-02	6	.11400E-02
7	.11600E-01	8	.12400E-01	9	.12200E-01
10	.12000E-01	11	.12200E-01	12	.12500E-01
13	.12700E-01	14	.13000E-01	15	.13500E-01
16	.13800E-01	17	.13900E-01	18	.13800E-01
19	.12200E-01	20	.98300E-02	21	.86100E-02
22	.80000E-02	23	.66200E-02	24	.48700E-02

SOURCE ID = A0000094 ; SOURCE TYPE = AREA :

	1	.34100E-02	2	.26800E-02	3	.27300E-02
4	.42000E-02	5	.87200E-02	6	.11400E-02	
	7	.11600E-01	8	.12400E-01	9	.12200E-01
10	.12000E-01	11	.12200E-01	12	.12500E-01	
	13	.12700E-01	14	.13000E-01	15	.13500E-01
16	.13800E-01	17	.13900E-01	18	.13800E-01	
	19	.12200E-01	20	.98300E-02	21	.86100E-02
22	.80000E-02	23	.66200E-02	24	.48700E-02	

SOURCE ID = A0000095 ; SOURCE TYPE = AREA :

	1	.34100E-02	2	.26800E-02	3	.27300E-02
4	.42000E-02	5	.87200E-02	6	.11400E-02	
	7	.11600E-01	8	.12400E-01	9	.12200E-01
10	.12000E-01	11	.12200E-01	12	.12500E-01	
	13	.12700E-01	14	.13000E-01	15	.13500E-01
16	.13800E-01	17	.13900E-01	18	.13800E-01	
	19	.12200E-01	20	.98300E-02	21	.86100E-02
22	.80000E-02	23	.66200E-02	24	.48700E-02	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000096 ; SOURCE TYPE = AREA :

1	.34100E-02	2	.26800E-02	3	.27300E-02	
4	.42000E-02	5	.87200E-02	6	.11400E-02	
	7	.11600E-01	8	.12400E-01	9	.12200E-01
10	.12000E-01	11	.12200E-01	12	.12500E-01	
	13	.12700E-01	14	.13000E-01	15	.13500E-01
16	.13800E-01	17	.13900E-01	18	.13800E-01	
	19	.12200E-01	20	.98300E-02	21	.86100E-02
22	.80000E-02	23	.66200E-02	24	.48700E-02	

SOURCE ID = A0000097 ; SOURCE TYPE = AREA :

1	.34100E-02	2	.26800E-02	3	.27300E-02	
4	.42000E-02	5	.87200E-02	6	.11400E-02	
	7	.11600E-01	8	.12400E-01	9	.12200E-01
10	.12000E-01	11	.12200E-01	12	.12500E-01	
	13	.12700E-01	14	.13000E-01	15	.13500E-01
16	.13800E-01	17	.13900E-01	18	.13800E-01	
	19	.12200E-01	20	.98300E-02	21	.86100E-02
22	.80000E-02	23	.66200E-02	24	.48700E-02	

SOURCE ID = A0000098 ; SOURCE TYPE = AREA :

1	.34100E-02	2	.26800E-02	3	.27300E-02	
4	.42000E-02	5	.87200E-02	6	.11400E-02	
	7	.11600E-01	8	.12400E-01	9	.12200E-01
10	.12000E-01	11	.12200E-01	12	.12500E-01	
	13	.12700E-01	14	.13000E-01	15	.13500E-01
16	.13800E-01	17	.13900E-01	18	.13800E-01	
	19	.12200E-01	20	.98300E-02	21	.86100E-02
22	.80000E-02	23	.66200E-02	24	.48700E-02	

SOURCE ID = A0000099 ; SOURCE TYPE = AREA :

	1	.34100E-02	2	.26800E-02	3	.27300E-02
4	.42000E-02	5	.87200E-02	6	.11400E-02	
	7	.11600E-01	8	.12400E-01	9	.12200E-01
10	.12000E-01	11	.12200E-01	12	.12500E-01	
	13	.12700E-01	14	.13000E-01	15	.13500E-01
16	.13800E-01	17	.13900E-01	18	.13800E-01	
	19	.12200E-01	20	.98300E-02	21	.86100E-02
22	.80000E-02	23	.66200E-02	24	.48700E-02	

SOURCE ID = A0000100 ; SOURCE TYPE = AREA :

	1	.34100E-02	2	.26800E-02	3	.27300E-02
4	.42000E-02	5	.87200E-02	6	.11400E-02	
	7	.11600E-01	8	.12400E-01	9	.12200E-01
10	.12000E-01	11	.12200E-01	12	.12500E-01	
	13	.12700E-01	14	.13000E-01	15	.13500E-01
16	.13800E-01	17	.13900E-01	18	.13800E-01	
	19	.12200E-01	20	.98300E-02	21	.86100E-02
22	.80000E-02	23	.66200E-02	24	.48700E-02	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000101 ; SOURCE TYPE = AREA :

1	.34100E-02	2	.26800E-02	3	.27300E-02	
4	.42000E-02	5	.87200E-02	6	.11400E-02	
	7	.11600E-01	8	.12400E-01	9	.12200E-01
10	.12000E-01	11	.12200E-01	12	.12500E-01	
	13	.12700E-01	14	.13000E-01	15	.13500E-01
16	.13800E-01	17	.13900E-01	18	.13800E-01	
	19	.12200E-01	20	.98300E-02	21	.86100E-02
22	.80000E-02	23	.66200E-02	24	.48700E-02	

SOURCE ID = A0000102 ; SOURCE TYPE = AREA :

1	.34100E-02	2	.26800E-02	3	.27300E-02	
4	.42000E-02	5	.87200E-02	6	.11400E-02	
	7	.11600E-01	8	.12400E-01	9	.12200E-01
10	.12000E-01	11	.12200E-01	12	.12500E-01	
	13	.12700E-01	14	.13000E-01	15	.13500E-01
16	.13800E-01	17	.13900E-01	18	.13800E-01	
	19	.12200E-01	20	.98300E-02	21	.86100E-02
22	.80000E-02	23	.66200E-02	24	.48700E-02	

SOURCE ID = A0000103 ; SOURCE TYPE = AREA :

1	.39500E-03	2	.28400E-03	3	.24900E-03	
4	.29000E-03	5	.46600E-03	6	.78200E-03	
	7	.11000E-02	8	.12200E-02	9	.11800E-02
10	.11100E-02	11	.11200E-02	12	.11800E-02	
	13	.12400E-02	14	.12900E-02	15	.13400E-02
16	.13100E-02	17	.12900E-02	18	.12800E-02	
	19	.12600E-02	20	.11700E-02	21	.10600E-02
22	.93700E-03	23	.76700E-03	24	.57100E-03	

SOURCE ID = A0000104 ; SOURCE TYPE = AREA :

	1	.39500E-03	2	.28400E-03	3	.24900E-03
4	.29000E-03		5	.46600E-03	6	.78200E-03
	7	.11000E-02	8	.12200E-02	9	.11800E-02
10	.11100E-02		11	.11200E-02	12	.11800E-02
	13	.12400E-02	14	.12900E-02	15	.13400E-02
16	.13100E-02		17	.12900E-02	18	.12800E-02
	19	.12600E-02	20	.11700E-02	21	.10600E-02
22	.93700E-03		23	.76700E-03	24	.57100E-03

SOURCE ID = A0000105 ; SOURCE TYPE = AREA :

	1	.39500E-03	2	.28400E-03	3	.24900E-03
4	.29000E-03		5	.46600E-03	6	.78200E-03
	7	.11000E-02	8	.12200E-02	9	.11800E-02
10	.11100E-02		11	.11200E-02	12	.11800E-02
	13	.12400E-02	14	.12900E-02	15	.13400E-02
16	.13100E-02		17	.12900E-02	18	.12800E-02
	19	.12600E-02	20	.11700E-02	21	.10600E-02
22	.93700E-03		23	.76700E-03	24	.57100E-03

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000106 ; SOURCE TYPE = AREA :

1	.39500E-03	2	.28400E-03	3	.24900E-03	
4	.29000E-03	5	.46600E-03	6	.78200E-03	
	7	.11000E-02	8	.12200E-02	9	.11800E-02
10	.11100E-02	11	.11200E-02	12	.11800E-02	
	13	.12400E-02	14	.12900E-02	15	.13400E-02
16	.13100E-02	17	.12900E-02	18	.12800E-02	
	19	.12600E-02	20	.11700E-02	21	.10600E-02
22	.93700E-03	23	.76700E-03	24	.57100E-03	

SOURCE ID = A0000107 ; SOURCE TYPE = AREA :

1	.39500E-03	2	.28400E-03	3	.24900E-03	
4	.29000E-03	5	.46600E-03	6	.78200E-03	
	7	.11000E-02	8	.12200E-02	9	.11800E-02
10	.11100E-02	11	.11200E-02	12	.11800E-02	
	13	.12400E-02	14	.12900E-02	15	.13400E-02
16	.13100E-02	17	.12900E-02	18	.12800E-02	
	19	.12600E-02	20	.11700E-02	21	.10600E-02
22	.93700E-03	23	.76700E-03	24	.57100E-03	

SOURCE ID = A0000108 ; SOURCE TYPE = AREA :

1	.39500E-03	2	.28400E-03	3	.24900E-03	
4	.29000E-03	5	.46600E-03	6	.78200E-03	
	7	.11000E-02	8	.12200E-02	9	.11800E-02
10	.11100E-02	11	.11200E-02	12	.11800E-02	
	13	.12400E-02	14	.12900E-02	15	.13400E-02
16	.13100E-02	17	.12900E-02	18	.12800E-02	
	19	.12600E-02	20	.11700E-02	21	.10600E-02
22	.93700E-03	23	.76700E-03	24	.57100E-03	

SOURCE ID = A0000109 ; SOURCE TYPE = AREA :

	1	.39500E-03	2	.28400E-03	3	.24900E-03
4	.29000E-03	5	.46600E-03	6	.78200E-03	
	7	.11000E-02	8	.12200E-02	9	.11800E-02
10	.11100E-02	11	.11200E-02	12	.11800E-02	
	13	.12400E-02	14	.12900E-02	15	.13400E-02
16	.13100E-02	17	.12900E-02	18	.12800E-02	
	19	.12600E-02	20	.11700E-02	21	.10600E-02
22	.93700E-03	23	.76700E-03	24	.57100E-03	

SOURCE ID = A0000110 ; SOURCE TYPE = AREA :

	1	.39500E-03	2	.28400E-03	3	.24900E-03
4	.29000E-03	5	.46600E-03	6	.78200E-03	
	7	.11000E-02	8	.12200E-02	9	.11800E-02
10	.11100E-02	11	.11200E-02	12	.11800E-02	
	13	.12400E-02	14	.12900E-02	15	.13400E-02
16	.13100E-02	17	.12900E-02	18	.12800E-02	
	19	.12600E-02	20	.11700E-02	21	.10600E-02
22	.93700E-03	23	.76700E-03	24	.57100E-03	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000111 ; SOURCE TYPE = AREA :

1	.54500E-02	2	.39200E-02	3	.34300E-02	
4	.40000E-02	5	.64400E-02	6	.12000E-02	
	7	.15100E-01	8	.16900E-01	9	.16200E-01
10	.15300E-01	11	.15500E-01	12	.16200E-01	
	13	.17100E-01	14	.17800E-01	15	.18400E-01
16	.18100E-01	17	.17700E-01	18	.17700E-01	
	19	.17400E-01	20	.16100E-01	21	.14600E-01
22	.12900E-01	23	.10600E-01	24	.78800E-02	

SOURCE ID = A0000112 ; SOURCE TYPE = AREA :

1	.54500E-02	2	.39200E-02	3	.34300E-02	
4	.40000E-02	5	.64400E-02	6	.12000E-02	
	7	.15100E-01	8	.16900E-01	9	.16200E-01
10	.15300E-01	11	.15500E-01	12	.16200E-01	
	13	.17100E-01	14	.17800E-01	15	.18400E-01
16	.18100E-01	17	.17700E-01	18	.17700E-01	
	19	.17400E-01	20	.16100E-01	21	.14600E-01
22	.12900E-01	23	.10600E-01	24	.78800E-02	

SOURCE ID = A0000113 ; SOURCE TYPE = AREA :

1	.54500E-02	2	.39200E-02	3	.34300E-02	
4	.40000E-02	5	.64400E-02	6	.12000E-02	
	7	.15100E-01	8	.16900E-01	9	.16200E-01
10	.15300E-01	11	.15500E-01	12	.16200E-01	
	13	.17100E-01	14	.17800E-01	15	.18400E-01
16	.18100E-01	17	.17700E-01	18	.17700E-01	
	19	.17400E-01	20	.16100E-01	21	.14600E-01
22	.12900E-01	23	.10600E-01	24	.78800E-02	

SOURCE ID = A0000114 ; SOURCE TYPE = AREA :

	1	.54500E-02		2	.39200E-02		3	.34300E-02
4	.40000E-02		5	.64400E-02		6	.12000E-02	
	7	.15100E-01		8	.16900E-01		9	.16200E-01
10	.15300E-01		11	.15500E-01		12	.16200E-01	
	13	.17100E-01		14	.17800E-01		15	.18400E-01
16	.18100E-01		17	.17700E-01		18	.17700E-01	
	19	.17400E-01		20	.16100E-01		21	.14600E-01
22	.12900E-01		23	.10600E-01		24	.78800E-02	

SOURCE ID = A0000115 ; SOURCE TYPE = AREA :

	1	.54500E-02		2	.39200E-02		3	.34300E-02
4	.40000E-02		5	.64400E-02		6	.12000E-02	
	7	.15100E-01		8	.16900E-01		9	.16200E-01
10	.15300E-01		11	.15500E-01		12	.16200E-01	
	13	.17100E-01		14	.17800E-01		15	.18400E-01
16	.18100E-01		17	.17700E-01		18	.17700E-01	
	19	.17400E-01		20	.16100E-01		21	.14600E-01
22	.12900E-01		23	.10600E-01		24	.78800E-02	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000116 ; SOURCE TYPE = AREA :

1	.54500E-02	2	.39200E-02	3	.34300E-02	
4	.40000E-02	5	.64400E-02	6	.12000E-02	
	7	.15100E-01	8	.16900E-01	9	.16200E-01
10	.15300E-01	11	.15500E-01	12	.16200E-01	
	13	.17100E-01	14	.17800E-01	15	.18400E-01
16	.18100E-01	17	.17700E-01	18	.17700E-01	
	19	.17400E-01	20	.16100E-01	21	.14600E-01
22	.12900E-01	23	.10600E-01	24	.78800E-02	

SOURCE ID = A0000117 ; SOURCE TYPE = AREA :

1	.54500E-02	2	.39200E-02	3	.34300E-02	
4	.40000E-02	5	.64400E-02	6	.12000E-02	
	7	.15100E-01	8	.16900E-01	9	.16200E-01
10	.15300E-01	11	.15500E-01	12	.16200E-01	
	13	.17100E-01	14	.17800E-01	15	.18400E-01
16	.18100E-01	17	.17700E-01	18	.17700E-01	
	19	.17400E-01	20	.16100E-01	21	.14600E-01
22	.12900E-01	23	.10600E-01	24	.78800E-02	

SOURCE ID = A0000118 ; SOURCE TYPE = AREA :

1	.54500E-02	2	.39200E-02	3	.34300E-02	
4	.40000E-02	5	.64400E-02	6	.12000E-02	
	7	.15100E-01	8	.16900E-01	9	.16200E-01
10	.15300E-01	11	.15500E-01	12	.16200E-01	
	13	.17100E-01	14	.17800E-01	15	.18400E-01
16	.18100E-01	17	.17700E-01	18	.17700E-01	
	19	.17400E-01	20	.16100E-01	21	.14600E-01
22	.12900E-01	23	.10600E-01	24	.78800E-02	

SOURCE ID = A0000119 ; SOURCE TYPE = AREA :

	1	.54500E-02	2	.39200E-02	3	.34300E-02
4	.40000E-02	5	.64400E-02	6	.12000E-02	
	7	.15100E-01	8	.16900E-01	9	.16200E-01
10	.15300E-01	11	.15500E-01	12	.16200E-01	
	13	.17100E-01	14	.17800E-01	15	.18400E-01
16	.18100E-01	17	.17700E-01	18	.17700E-01	
	19	.17400E-01	20	.16100E-01	21	.14600E-01
22	.12900E-01	23	.10600E-01	24	.78800E-02	

SOURCE ID = A0000120 ; SOURCE TYPE = AREA :

	1	.54500E-02	2	.39200E-02	3	.34300E-02
4	.40000E-02	5	.64400E-02	6	.12000E-02	
	7	.15100E-01	8	.16900E-01	9	.16200E-01
10	.15300E-01	11	.15500E-01	12	.16200E-01	
	13	.17100E-01	14	.17800E-01	15	.18400E-01
16	.18100E-01	17	.17700E-01	18	.17700E-01	
	19	.17400E-01	20	.16100E-01	21	.14600E-01
22	.12900E-01	23	.10600E-01	24	.78800E-02	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000121 ; SOURCE TYPE = AREA :

1	.54500E-02	2	.39200E-02	3	.34300E-02	
4	.40000E-02	5	.64400E-02	6	.12000E-02	
	7	.15100E-01	8	.16900E-01	9	.16200E-01
10	.15300E-01	11	.15500E-01	12	.16200E-01	
	13	.17100E-01	14	.17800E-01	15	.18400E-01
16	.18100E-01	17	.17700E-01	18	.17700E-01	
	19	.17400E-01	20	.16100E-01	21	.14600E-01
22	.12900E-01	23	.10600E-01	24	.78800E-02	

SOURCE ID = A0000122 ; SOURCE TYPE = AREA :

1	.54500E-02	2	.39200E-02	3	.34300E-02	
4	.40000E-02	5	.64400E-02	6	.12000E-02	
	7	.15100E-01	8	.16900E-01	9	.16200E-01
10	.15300E-01	11	.15500E-01	12	.16200E-01	
	13	.17100E-01	14	.17800E-01	15	.18400E-01
16	.18100E-01	17	.17700E-01	18	.17700E-01	
	19	.17400E-01	20	.16100E-01	21	.14600E-01
22	.12900E-01	23	.10600E-01	24	.78800E-02	

SOURCE ID = A0000123 ; SOURCE TYPE = AREA :

1	.54500E-02	2	.39200E-02	3	.34300E-02	
4	.40000E-02	5	.64400E-02	6	.12000E-02	
	7	.15100E-01	8	.16900E-01	9	.16200E-01
10	.15300E-01	11	.15500E-01	12	.16200E-01	
	13	.17100E-01	14	.17800E-01	15	.18400E-01
16	.18100E-01	17	.17700E-01	18	.17700E-01	
	19	.17400E-01	20	.16100E-01	21	.14600E-01
22	.12900E-01	23	.10600E-01	24	.78800E-02	

SOURCE ID = A0000124 ; SOURCE TYPE = AREA :

	1	.54500E-02	2	.39200E-02	3	.34300E-02
4	.40000E-02	5	.64400E-02	6	.12000E-02	
	7	.15100E-01	8	.16900E-01	9	.16200E-01
10	.15300E-01	11	.15500E-01	12	.16200E-01	
	13	.17100E-01	14	.17800E-01	15	.18400E-01
16	.18100E-01	17	.17700E-01	18	.17700E-01	
	19	.17400E-01	20	.16100E-01	21	.14600E-01
22	.12900E-01	23	.10600E-01	24	.78800E-02	

SOURCE ID = A0000125 ; SOURCE TYPE = AREA :

	1	.54500E-02	2	.39200E-02	3	.34300E-02
4	.40000E-02	5	.64400E-02	6	.12000E-02	
	7	.15100E-01	8	.16900E-01	9	.16200E-01
10	.15300E-01	11	.15500E-01	12	.16200E-01	
	13	.17100E-01	14	.17800E-01	15	.18400E-01
16	.18100E-01	17	.17700E-01	18	.17700E-01	
	19	.17400E-01	20	.16100E-01	21	.14600E-01
22	.12900E-01	23	.10600E-01	24	.78800E-02	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000126 ; SOURCE TYPE = AREA :

1	.54500E-02	2	.39200E-02	3	.34300E-02	
4	.40000E-02	5	.64400E-02	6	.12000E-02	
	7	.15100E-01	8	.16900E-01	9	.16200E-01
10	.15300E-01	11	.15500E-01	12	.16200E-01	
	13	.17100E-01	14	.17800E-01	15	.18400E-01
16	.18100E-01	17	.17700E-01	18	.17700E-01	
	19	.17400E-01	20	.16100E-01	21	.14600E-01
22	.12900E-01	23	.10600E-01	24	.78800E-02	

SOURCE ID = A0000127 ; SOURCE TYPE = AREA :

1	.48200E-03	2	.37900E-03	3	.38600E-03	
4	.59400E-03	5	.12300E-02	6	.14600E-02	
	7	.16400E-02	8	.17500E-02	9	.17200E-02
10	.17000E-02	11	.17200E-02	12	.17600E-02	
	13	.18000E-02	14	.18400E-02	15	.19100E-02
16	.19400E-02	17	.19600E-02	18	.19500E-02	
	19	.17200E-02	20	.13900E-02	21	.12200E-02
22	.11300E-02	23	.93700E-03	24	.68900E-03	

SOURCE ID = A0000128 ; SOURCE TYPE = AREA :

1	.48200E-03	2	.37900E-03	3	.38600E-03	
4	.59400E-03	5	.12300E-02	6	.14600E-02	
	7	.16400E-02	8	.17500E-02	9	.17200E-02
10	.17000E-02	11	.17200E-02	12	.17600E-02	
	13	.18000E-02	14	.18400E-02	15	.19100E-02
16	.19400E-02	17	.19600E-02	18	.19500E-02	
	19	.17200E-02	20	.13900E-02	21	.12200E-02
22	.11300E-02	23	.93700E-03	24	.68900E-03	

SOURCE ID = A0000129 ; SOURCE TYPE = AREA :

	1	.48200E-03	2	.37900E-03	3	.38600E-03
4	.59400E-03		5	.12300E-02	6	.14600E-02
	7	.16400E-02	8	.17500E-02	9	.17200E-02
10	.17000E-02		11	.17200E-02	12	.17600E-02
	13	.18000E-02	14	.18400E-02	15	.19100E-02
16	.19400E-02		17	.19600E-02	18	.19500E-02
	19	.17200E-02	20	.13900E-02	21	.12200E-02
22	.11300E-02		23	.93700E-03	24	.68900E-03

SOURCE ID = A0000130 ; SOURCE TYPE = AREA :

	1	.48200E-03	2	.37900E-03	3	.38600E-03
4	.59400E-03		5	.12300E-02	6	.14600E-02
	7	.16400E-02	8	.17500E-02	9	.17200E-02
10	.17000E-02		11	.17200E-02	12	.17600E-02
	13	.18000E-02	14	.18400E-02	15	.19100E-02
16	.19400E-02		17	.19600E-02	18	.19500E-02
	19	.17200E-02	20	.13900E-02	21	.12200E-02
22	.11300E-02		23	.93700E-03	24	.68900E-03

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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---	---	---	---	---	---

SOURCE ID = A0000131		; SOURCE TYPE = AREA		:	
1	.48200E-03	2	.37900E-03	3	.38600E-03
4	.59400E-03	5	.12300E-02	6	.14600E-02
	7 .16400E-02	8	.17500E-02	9	.17200E-02
10	.17000E-02	11	.17200E-02	12	.17600E-02
	13 .18000E-02	14	.18400E-02	15	.19100E-02
16	.19400E-02	17	.19600E-02	18	.19500E-02
	19 .17200E-02	20	.13900E-02	21	.12200E-02
22	.11300E-02	23	.93700E-03	24	.68900E-03

SOURCE ID = A0000132		; SOURCE TYPE = AREA		:	
1	.48200E-03	2	.37900E-03	3	.38600E-03
4	.59400E-03	5	.12300E-02	6	.14600E-02
	7 .16400E-02	8	.17500E-02	9	.17200E-02
10	.17000E-02	11	.17200E-02	12	.17600E-02
	13 .18000E-02	14	.18400E-02	15	.19100E-02
16	.19400E-02	17	.19600E-02	18	.19500E-02
	19 .17200E-02	20	.13900E-02	21	.12200E-02
22	.11300E-02	23	.93700E-03	24	.68900E-03

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

(METERS)

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\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

(METERS)

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\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

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\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

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\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

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\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

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\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

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\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

(METERS)

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

(METERS)

( 439669.0, 3765400.0, 289.0, 289.0, 0.0);  
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( 439889.0, 3765370.0, 289.0, 289.0, 0.0);  
( 439649.0, 3765400.0, 289.0, 289.0, 0.0);

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

(METERS)

( 439679.0, 3765400.0, 289.0, 289.0, 0.0);  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* METEOROLOGICAL

DAYS SELECTED FOR PROCESSING \*\*\*

(1

=YES; 0=NO)

1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED  
 WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

\*\*\* UPPER BOUND OF FIRST  
 THROUGH FIFTH WIND SPEED CATEGORIES \*\*\*

(METERS/SEC)

5.14, 8.23, 10.80, 1.54, 3.09,

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* UP TO THE FIRST 24 HOURS

OF METEOROLOGICAL DATA \*\*\*

Surface file: C:\Users\sjremote\Desktop\Ontario\_PUD-Legacy  
 \OntarioIntlAirportADJU (1)\KONT\_V9\_ Met Version: 16216  
 Profile file: C:\Users\sjremote\Desktop\Ontario\_PUD-Legacy  
 \OntarioIntlAirportADJU (1)\KONT\_V9\_  
 Surface format: FREE  
 Profile format: FREE  
 Surface station no.: 3102 Upper air  
 station no.: 3190  
 Name: ONTARIO\_APT  
 Name: UNKNOWN  
 Year: 2012  
 Year: 2012

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN
Z0	BOWEN	ALBEDO	REF	WS	WD	HT	REF	TA	HT			
12	01	01	1	01	-16.4	0.171	-9.000	-9.000	-999.	170.		32.3
0.09	1.12	1.00		2.03	43.	7.9	285.9		2.0			
12	01	01	1	02	-18.8	0.194	-9.000	-9.000	-999.	205.		41.3
0.09	1.12	1.00		2.28	34.	7.9	285.4		2.0			
12	01	01	1	03	-17.8	0.182	-9.000	-9.000	-999.	187.		36.5
0.09	1.12	1.00		2.15	24.	7.9	282.0		2.0			
12	01	01	1	04	-9.4	0.128	-9.000	-9.000	-999.	110.		19.6
0.09	1.12	1.00		1.55	41.	7.9	283.1		2.0			
12	01	01	1	05	-16.9	0.173	-9.000	-9.000	-999.	173.		33.0
0.09	1.12	1.00		2.05	39.	7.9	280.4		2.0			
12	01	01	1	06	-8.0	0.117	-9.000	-9.000	-999.	97.		17.8
0.09	1.12	1.00		1.43	21.	7.9	282.0		2.0			
12	01	01	1	07	-7.6	0.115	-9.000	-9.000	-999.	93.		17.4
0.09	1.12	1.00		1.40	31.	7.9	282.5		2.0			
12	01	01	1	08	-13.6	0.184	-9.000	-9.000	-999.	190.		40.5
0.09	1.12	0.54		2.16	34.	7.9	284.2		2.0			
12	01	01	1	09	28.4	0.126	0.300	0.011	33.	108.		-6.2
0.09	1.12	0.32		1.03	29.	7.9	289.2		2.0			
12	01	01	1	10	79.8	0.133	0.607	0.010	99.	116.		-2.6
0.09	1.12	0.25		0.94	173.	7.9	292.5		2.0			
12	01	01	1	11	115.8	0.137	0.932	0.006	246.	121.		-2.0
0.09	1.12	0.22		0.92	172.	7.9	295.4		2.0			

12	01	01	1	12	133.7	0.139	1.197	0.005	453.	125.	-1.8
0.09	1.12	0.21	0.92	146.	7.9	297.5	2.0				
12	01	01	1	13	133.2	0.160	1.354	0.005	657.	153.	-2.7
0.09	1.12	0.21	1.14	117.	7.9	299.9	2.0				
12	01	01	1	14	113.5	0.159	1.454	0.005	955.	151.	-3.1
0.09	1.12	0.23	1.16	285.	7.9	300.9	2.0				
12	01	01	1	15	76.2	0.166	1.350	0.005	1138.	163.	-5.3
0.09	1.12	0.26	1.33	72.	7.9	302.0	2.0				
12	01	01	1	16	23.5	0.175	0.925	0.005	1183.	175.	-19.9
0.09	1.12	0.35	1.65	107.	7.9	301.4	2.0				
12	01	01	1	17	-6.1	0.107	-9.000	-9.000	-999.	86.	18.0
0.09	1.12	0.63	1.31	107.	7.9	298.1	2.0				
12	01	01	1	18	-11.1	0.141	-9.000	-9.000	-999.	127.	22.1
0.09	1.12	1.00	1.69	86.	7.9	293.1	2.0				
12	01	01	1	19	-3.2	0.076	-9.000	-9.000	-999.	51.	11.8
0.09	1.12	1.00	0.91	64.	7.9	292.0	2.0				
12	01	01	1	20	-2.3	0.066	-9.000	-9.000	-999.	41.	11.2
0.09	1.12	1.00	0.74	73.	7.9	288.8	2.0				
12	01	01	1	21	-10.0	0.133	-9.000	-9.000	-999.	116.	20.5
0.09	1.12	1.00	1.60	14.	7.9	288.1	2.0				
12	01	01	1	22	-19.4	0.201	-9.000	-9.000	-999.	216.	44.5
0.09	1.12	1.00	2.36	22.	7.9	287.5	2.0				
12	01	01	1	23	-23.7	0.246	-9.000	-9.000	-999.	293.	66.5
0.09	1.12	1.00	2.86	40.	7.9	287.0	2.0				
12	01	01	1	24	-12.3	0.147	-9.000	-9.000	-999.	139.	23.8
0.09	1.12	1.00	1.76	40.	7.9	283.8	2.0				

First hour of profile data  
 YR MO DY HR HEIGHT F WDIR WSPD AMB\_TMP sigmaA sigmaW  
 sigmaV  
 12 01 01 01 7.9 1 43. 2.03 286.0  
 99.0 -99.00 -99.00

F indicates top of profile (=1) or below (=0)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439674.00	3765310.00	0.32467
439679.00	3765310.00	0.32467
439684.00	3765310.00	0.32466
439689.00	3765310.00	0.32464
439694.00	3765310.00	0.32462
439699.00	3765310.00	0.32458
439704.00	3765310.00	0.32455
439709.00	3765310.00	0.32450
439714.00	3765310.00	0.32445
439719.00	3765310.00	0.32439
439729.00	3765310.00	0.32425
439734.00	3765310.00	0.32417
439739.00	3765310.00	0.32409
439744.00	3765310.00	0.32399
439749.00	3765310.00	0.32389
439764.00	3765310.00	0.32355
439769.00	3765310.00	0.32341
439774.00	3765310.00	0.32327

	439779.00	3765310.00	0.32313
439784.00	3765310.00	0.32297	
	439789.00	3765310.00	0.32281
439794.00	3765310.00	0.32263	
	439799.00	3765310.00	0.32245
439804.00	3765310.00	0.32226	
	439809.00	3765310.00	0.32206
439814.00	3765310.00	0.32184	
	439819.00	3765310.00	0.32162
439824.00	3765310.00	0.32139	
	439829.00	3765310.00	0.32115
439839.00	3765310.00	0.32064	
	439844.00	3765310.00	0.32036
439849.00	3765310.00	0.32008	
	439854.00	3765310.00	0.31978
439859.00	3765310.00	0.31948	
	439864.00	3765310.00	0.31916
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	439874.00	3765310.00	0.31848
439879.00	3765310.00	0.31813	
	439884.00	3765310.00	0.31777
439674.00	3765315.00	0.32908	
	439679.00	3765315.00	0.32908
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	439689.00	3765315.00	0.32906
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	439709.00	3765315.00	0.32894
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439789.00	3765315.00	0.32733	
	439794.00	3765315.00	0.32716
439799.00	3765315.00	0.32699	
	439804.00	3765315.00	0.32680
439809.00	3765315.00	0.32661	
	439814.00	3765315.00	0.32640
439819.00	3765315.00	0.32618	
	439824.00	3765315.00	0.32596
439829.00	3765315.00	0.32572	
	439839.00	3765315.00	0.32522
439844.00	3765315.00	0.32495	

	439849.00	3765315.00	0.32468
439854.00	3765315.00	0.32438	
	439859.00	3765315.00	0.32408
439864.00	3765315.00	0.32377	
	439869.00	3765315.00	0.32344
439874.00	3765315.00	0.32311	
	439879.00	3765315.00	0.32276
439884.00	3765315.00	0.32240	
	439674.00	3765320.00	0.33359
439679.00	3765320.00	0.33360	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439684.00	3765320.00	0.33360
439689.00	3765320.00	0.33359
439694.00	3765320.00	0.33357
439699.00	3765320.00	0.33355
439704.00	3765320.00	0.33352
439709.00	3765320.00	0.33349
439714.00	3765320.00	0.33345
439719.00	3765320.00	0.33340
439729.00	3765320.00	0.33328
439734.00	3765320.00	0.33321
439739.00	3765320.00	0.33313
439744.00	3765320.00	0.33305
439749.00	3765320.00	0.33296
439764.00	3765320.00	0.33264
439769.00	3765320.00	0.33253
439774.00	3765320.00	0.33239
439779.00	3765320.00	0.33226
439784.00	3765320.00	0.33212

	439789.00	3765320.00	0.33196
439794.00	3765320.00	0.33180	
	439799.00	3765320.00	0.33163
439804.00	3765320.00	0.33145	
	439809.00	3765320.00	0.33126
439814.00	3765320.00	0.33106	
	439819.00	3765320.00	0.33085
439824.00	3765320.00	0.33063	
	439829.00	3765320.00	0.33040
439839.00	3765320.00	0.32991	
	439844.00	3765320.00	0.32965
439849.00	3765320.00	0.32938	
	439854.00	3765320.00	0.32909
439859.00	3765320.00	0.32879	
	439864.00	3765320.00	0.32849
439869.00	3765320.00	0.32817	
	439874.00	3765320.00	0.32784
439879.00	3765320.00	0.32750	
	439884.00	3765320.00	0.32714
439674.00	3765325.00	0.33821	
	439679.00	3765325.00	0.33822
439684.00	3765325.00	0.33822	
	439689.00	3765325.00	0.33822
439694.00	3765325.00	0.33821	
	439699.00	3765325.00	0.33819
439704.00	3765325.00	0.33817	
	439709.00	3765325.00	0.33814
439714.00	3765325.00	0.33810	
	439719.00	3765325.00	0.33806
439729.00	3765325.00	0.33795	
	439734.00	3765325.00	0.33789
439739.00	3765325.00	0.33781	
	439744.00	3765325.00	0.33774
439749.00	3765325.00	0.33765	
	439754.00	3765325.00	0.33756
439769.00	3765325.00	0.33724	
	439774.00	3765325.00	0.33712
439779.00	3765325.00	0.33699	
	439784.00	3765325.00	0.33685
439789.00	3765325.00	0.33670	
	439794.00	3765325.00	0.33655
439799.00	3765325.00	0.33638	
	439804.00	3765325.00	0.33621
439809.00	3765325.00	0.33603	
	439814.00	3765325.00	0.33583
439819.00	3765325.00	0.33563	
	439824.00	3765325.00	0.33541
439829.00	3765325.00	0.33519	
	439839.00	3765325.00	0.33472
439844.00	3765325.00	0.33446	
	439849.00	3765325.00	0.33419
439854.00	3765325.00	0.33391	

	439859.00	3765325.00	0.33362
439864.00	3765325.00	0.33332	
	439869.00	3765325.00	0.33301
439874.00	3765325.00	0.33268	
	439879.00	3765325.00	0.33235
439884.00	3765325.00	0.33199	
	439674.00	3765330.00	0.34294
439679.00	3765330.00	0.34295	
	439684.00	3765330.00	0.34296
439689.00	3765330.00	0.34296	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439694.00	3765330.00	0.34296
439699.00	3765330.00	0.34294
439704.00	3765330.00	0.34293
439709.00	3765330.00	0.34290
439714.00	3765330.00	0.34287
439719.00	3765330.00	0.34283
439729.00	3765330.00	0.34273
439734.00	3765330.00	0.34267
439739.00	3765330.00	0.34261
439744.00	3765330.00	0.34253
439749.00	3765330.00	0.34246
439754.00	3765330.00	0.34237
439774.00	3765330.00	0.34195
439779.00	3765330.00	0.34183
439784.00	3765330.00	0.34169
439789.00	3765330.00	0.34156
439794.00	3765330.00	0.34141
439799.00	3765330.00	0.34124

	439804.00	3765330.00	0.34108
439809.00	3765330.00	0.34090	
	439814.00	3765330.00	0.34072
439819.00	3765330.00	0.34052	
	439824.00	3765330.00	0.34031
439829.00	3765330.00	0.34009	
	439839.00	3765330.00	0.33963
439844.00	3765330.00	0.33938	
	439849.00	3765330.00	0.33912
439854.00	3765330.00	0.33885	
	439859.00	3765330.00	0.33857
439864.00	3765330.00	0.33827	
	439869.00	3765330.00	0.33796
439874.00	3765330.00	0.33764	
	439879.00	3765330.00	0.33731
439884.00	3765330.00	0.33697	
	439674.00	3765335.00	0.34778
439679.00	3765335.00	0.34780	
	439684.00	3765335.00	0.34781
439689.00	3765335.00	0.34783	
	439694.00	3765335.00	0.34782
439699.00	3765335.00	0.34782	
	439704.00	3765335.00	0.34780
439709.00	3765335.00	0.34778	
	439714.00	3765335.00	0.34775
439719.00	3765335.00	0.34772	
	439729.00	3765335.00	0.34764
439734.00	3765335.00	0.34758	
	439739.00	3765335.00	0.34752
439744.00	3765335.00	0.34745	
	439749.00	3765335.00	0.34738
439774.00	3765335.00	0.34690	
	439779.00	3765335.00	0.34678
439784.00	3765335.00	0.34666	
	439789.00	3765335.00	0.34652
439794.00	3765335.00	0.34638	
	439839.00	3765335.00	0.34467
439844.00	3765335.00	0.34443	
	439849.00	3765335.00	0.34417
439854.00	3765335.00	0.34391	
	439859.00	3765335.00	0.34363
439864.00	3765335.00	0.34334	
	439869.00	3765335.00	0.34304
439874.00	3765335.00	0.34273	
	439879.00	3765335.00	0.34240
439884.00	3765335.00	0.34206	
	439674.00	3765340.00	0.35274
439679.00	3765340.00	0.35277	
	439684.00	3765340.00	0.35279
439689.00	3765340.00	0.35280	
	439694.00	3765340.00	0.35281
439699.00	3765340.00	0.35280	

	439704.00	3765340.00	0.35280
439709.00	3765340.00	0.35278	
	439714.00	3765340.00	0.35275
439719.00	3765340.00	0.35273	
	439729.00	3765340.00	0.35265
439734.00	3765340.00	0.35260	
	439739.00	3765340.00	0.35255
439744.00	3765340.00	0.35249	
	439749.00	3765340.00	0.35242
439774.00	3765340.00	0.35197	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439779.00	3765340.00	0.35186
439784.00	3765340.00	0.35174
439789.00	3765340.00	0.35162
439794.00	3765340.00	0.35148
439839.00	3765340.00	0.34983
439844.00	3765340.00	0.34960
439849.00	3765340.00	0.34935
439854.00	3765340.00	0.34909
439859.00	3765340.00	0.34882
439864.00	3765340.00	0.34854
439869.00	3765340.00	0.34824
439874.00	3765340.00	0.34794
439879.00	3765340.00	0.34762
439884.00	3765340.00	0.34728
439674.00	3765345.00	0.35783
439679.00	3765345.00	0.35786
439684.00	3765345.00	0.35789
439689.00	3765345.00	0.35790

	439694.00	3765345.00	0.35791
439699.00	3765345.00	0.35792	
	439704.00	3765345.00	0.35791
439709.00	3765345.00	0.35790	
	439714.00	3765345.00	0.35788
439719.00	3765345.00	0.35786	
	439729.00	3765345.00	0.35779
439734.00	3765345.00	0.35775	
	439739.00	3765345.00	0.35770
439744.00	3765345.00	0.35764	
	439749.00	3765345.00	0.35759
439774.00	3765345.00	0.35717	
	439779.00	3765345.00	0.35706
439784.00	3765345.00	0.35695	
	439789.00	3765345.00	0.35683
439794.00	3765345.00	0.35670	
	439839.00	3765345.00	0.35512
439844.00	3765345.00	0.35489	
	439849.00	3765345.00	0.35465
439854.00	3765345.00	0.35440	
	439859.00	3765345.00	0.35414
439864.00	3765345.00	0.35386	
	439869.00	3765345.00	0.35357
439874.00	3765345.00	0.35328	
	439879.00	3765345.00	0.35296
439884.00	3765345.00	0.35264	
	439674.00	3765350.00	0.36305
439679.00	3765350.00	0.36309	
	439684.00	3765350.00	0.36311
439689.00	3765350.00	0.36314	
	439694.00	3765350.00	0.36315
439699.00	3765350.00	0.36316	
	439704.00	3765350.00	0.36316
439709.00	3765350.00	0.36315	
	439714.00	3765350.00	0.36314
439719.00	3765350.00	0.36312	
	439729.00	3765350.00	0.36307
439734.00	3765350.00	0.36303	
	439739.00	3765350.00	0.36299
439744.00	3765350.00	0.36294	
	439749.00	3765350.00	0.36288
439774.00	3765350.00	0.36250	
	439779.00	3765350.00	0.36240
439784.00	3765350.00	0.36229	
	439789.00	3765350.00	0.36218
439794.00	3765350.00	0.36205	
	439839.00	3765350.00	0.36055
439844.00	3765350.00	0.36032	
	439849.00	3765350.00	0.36009
439854.00	3765350.00	0.35985	
	439859.00	3765350.00	0.35959
439864.00	3765350.00	0.35932	

	439869.00	3765350.00	0.35905
439874.00	3765350.00	0.35875	
	439879.00	3765350.00	0.35845
439884.00	3765350.00	0.35813	
	439674.00	3765355.00	0.36841
439679.00	3765355.00	0.36844	
	439684.00	3765355.00	0.36848
439689.00	3765355.00	0.36850	
	439694.00	3765355.00	0.36853
439699.00	3765355.00	0.36854	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439704.00	3765355.00	0.36854
439709.00	3765355.00	0.36854
439714.00	3765355.00	0.36853
439719.00	3765355.00	0.36853
439729.00	3765355.00	0.36848
439734.00	3765355.00	0.36844
439739.00	3765355.00	0.36841
439744.00	3765355.00	0.36836
439749.00	3765355.00	0.36832
439774.00	3765355.00	0.36796
439779.00	3765355.00	0.36787
439784.00	3765355.00	0.36777
439789.00	3765355.00	0.36766
439794.00	3765355.00	0.36755
439839.00	3765355.00	0.36610
439844.00	3765355.00	0.36590
439849.00	3765355.00	0.36566
439854.00	3765355.00	0.36544

	439859.00	3765355.00	0.36518
439864.00	3765355.00	0.36493	
	439869.00	3765355.00	0.36465
439874.00	3765355.00	0.36437	
	439879.00	3765355.00	0.36407
439884.00	3765355.00	0.36376	
	439674.00	3765360.00	0.37389
439679.00	3765360.00	0.37394	
	439684.00	3765360.00	0.37398
439689.00	3765360.00	0.37401	
	439694.00	3765360.00	0.37404
439699.00	3765360.00	0.37405	
	439704.00	3765360.00	0.37407
439709.00	3765360.00	0.37407	
	439714.00	3765360.00	0.37407
439719.00	3765360.00	0.37406	
	439729.00	3765360.00	0.37402
439734.00	3765360.00	0.37400	
	439739.00	3765360.00	0.37396
439744.00	3765360.00	0.37393	
	439749.00	3765360.00	0.37388
439774.00	3765360.00	0.37356	
	439779.00	3765360.00	0.37347
439784.00	3765360.00	0.37338	
	439789.00	3765360.00	0.37329
439794.00	3765360.00	0.37318	
	439799.00	3765360.00	0.37306
439804.00	3765360.00	0.37293	
	439809.00	3765360.00	0.37281
439814.00	3765360.00	0.37266	
	439839.00	3765360.00	0.37182
439844.00	3765360.00	0.37160	
	439849.00	3765360.00	0.37139
439854.00	3765360.00	0.37116	
	439859.00	3765360.00	0.37093
439864.00	3765360.00	0.37067	
	439869.00	3765360.00	0.37041
439874.00	3765360.00	0.37013	
	439879.00	3765360.00	0.36984
439884.00	3765360.00	0.36954	
	439674.00	3765365.00	0.37953
439679.00	3765365.00	0.37958	
	439684.00	3765365.00	0.37963
439689.00	3765365.00	0.37967	
	439694.00	3765365.00	0.37969
439699.00	3765365.00	0.37972	
	439704.00	3765365.00	0.37973
439709.00	3765365.00	0.37975	
	439714.00	3765365.00	0.37975
439719.00	3765365.00	0.37975	
	439729.00	3765365.00	0.37972
439734.00	3765365.00	0.37970	

	439739.00	3765365.00	0.37968
439744.00	3765365.00	0.37964	
	439749.00	3765365.00	0.37960
439774.00	3765365.00	0.37931	
	439779.00	3765365.00	0.37923
439784.00	3765365.00	0.37915	
	439789.00	3765365.00	0.37905
439794.00	3765365.00	0.37896	
	439799.00	3765365.00	0.37885
439804.00	3765365.00	0.37874	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439809.00	3765365.00	0.37861
439814.00	3765365.00	0.37848
439839.00	3765365.00	0.37766
439844.00	3765365.00	0.37747
439849.00	3765365.00	0.37727
439854.00	3765365.00	0.37705
439859.00	3765365.00	0.37682
439864.00	3765365.00	0.37657
439869.00	3765365.00	0.37632
439874.00	3765365.00	0.37605
439879.00	3765365.00	0.37577
439884.00	3765365.00	0.37547
439674.00	3765370.00	0.38533
439679.00	3765370.00	0.38538
439684.00	3765370.00	0.38544
439689.00	3765370.00	0.38547
439694.00	3765370.00	0.38551
439699.00	3765370.00	0.38553

	439704.00	3765370.00	0.38556
439709.00	3765370.00	0.38557	
	439714.00	3765370.00	0.38558
439719.00	3765370.00	0.38558	
	439729.00	3765370.00	0.38557
439734.00	3765370.00	0.38555	
	439739.00	3765370.00	0.38553
439744.00	3765370.00	0.38550	
	439749.00	3765370.00	0.38547
439774.00	3765370.00	0.38521	
	439779.00	3765370.00	0.38514
439784.00	3765370.00	0.38506	
	439789.00	3765370.00	0.38498
439794.00	3765370.00	0.38489	
	439799.00	3765370.00	0.38479
439804.00	3765370.00	0.38468	
	439809.00	3765370.00	0.38457
439814.00	3765370.00	0.38444	
	439839.00	3765370.00	0.38368
439844.00	3765370.00	0.38350	
	439849.00	3765370.00	0.38329
439854.00	3765370.00	0.38309	
	439859.00	3765370.00	0.38287
439864.00	3765370.00	0.38263	
	439869.00	3765370.00	0.38238
439874.00	3765370.00	0.38213	
	439879.00	3765370.00	0.38185
439884.00	3765370.00	0.38157	
	439674.00	3765375.00	0.39127
439679.00	3765375.00	0.39134	
	439684.00	3765375.00	0.39139
439689.00	3765375.00	0.39145	
	439694.00	3765375.00	0.39147
439699.00	3765375.00	0.39151	
	439704.00	3765375.00	0.39154
439709.00	3765375.00	0.39156	
	439714.00	3765375.00	0.39157
439719.00	3765375.00	0.39157	
	439729.00	3765375.00	0.39157
439734.00	3765375.00	0.39157	
	439739.00	3765375.00	0.39154
439744.00	3765375.00	0.39153	
	439749.00	3765375.00	0.39149
439754.00	3765375.00	0.39147	
	439774.00	3765375.00	0.39128
439779.00	3765375.00	0.39121	
	439784.00	3765375.00	0.39114
439789.00	3765375.00	0.39106	
	439794.00	3765375.00	0.39098
439799.00	3765375.00	0.39089	
	439804.00	3765375.00	0.39079
439809.00	3765375.00	0.39069	

	439814.00	3765375.00	0.39056
439839.00	3765375.00	0.38986	
	439844.00	3765375.00	0.38967
439849.00	3765375.00	0.38950	
	439854.00	3765375.00	0.38929
439859.00	3765375.00	0.38908	
	439864.00	3765375.00	0.38885
439869.00	3765375.00	0.38862	
	439874.00	3765375.00	0.38837
439879.00	3765375.00	0.38810	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439884.00	3765375.00	0.38782
439774.00	3765380.00	0.39750
439779.00	3765380.00	0.39745
439784.00	3765380.00	0.39738
439789.00	3765380.00	0.39730
439794.00	3765380.00	0.39724
439799.00	3765380.00	0.39715
439804.00	3765380.00	0.39707
439809.00	3765380.00	0.39696
439814.00	3765380.00	0.39687
439769.00	3765385.00	0.40394
439819.00	3765385.00	0.40324
439769.00	3765400.00	0.42424
439844.00	3765400.00	0.42330
439849.00	3765400.00	0.42317
439674.00	3765405.00	0.43074
439714.00	3765405.00	0.43128
439719.00	3765405.00	0.43132

	439734.00	3765405.00	0.43139
439749.00	3765405.00	0.43143	
	439754.00	3765405.00	0.43142
439774.00	3765405.00	0.43138	
	439779.00	3765405.00	0.43138
439784.00	3765405.00	0.43135	
	439789.00	3765405.00	0.43132
439794.00	3765405.00	0.43128	
	439799.00	3765405.00	0.43126
439804.00	3765405.00	0.43121	
	439809.00	3765405.00	0.43116
439814.00	3765405.00	0.43112	
	439819.00	3765405.00	0.43104
439824.00	3765405.00	0.43098	
	439829.00	3765405.00	0.43090
439834.00	3765405.00	0.43083	
	439839.00	3765405.00	0.43072
439844.00	3765405.00	0.43063	
	439849.00	3765405.00	0.43051
439854.00	3765405.00	0.43038	
	439859.00	3765405.00	0.43024
439674.00	3765410.00	0.43802	
	439679.00	3765410.00	0.43813
439684.00	3765410.00	0.43822	
	439689.00	3765410.00	0.43830
439694.00	3765410.00	0.43838	
	439699.00	3765410.00	0.43844
439704.00	3765410.00	0.43850	
	439709.00	3765410.00	0.43856
439714.00	3765410.00	0.43861	
	439719.00	3765410.00	0.43864
439729.00	3765410.00	0.43871	
	439734.00	3765410.00	0.43874
439739.00	3765410.00	0.43875	
	439744.00	3765410.00	0.43878
439749.00	3765410.00	0.43878	
	439774.00	3765410.00	0.43879
439779.00	3765410.00	0.43877	
	439784.00	3765410.00	0.43875
439789.00	3765410.00	0.43874	
	439794.00	3765410.00	0.43871
439799.00	3765410.00	0.43869	
	439804.00	3765410.00	0.43865
439809.00	3765410.00	0.43863	
	439814.00	3765410.00	0.43856
439819.00	3765410.00	0.43853	
	439824.00	3765410.00	0.43847
439829.00	3765410.00	0.43841	
	439834.00	3765410.00	0.43832
439839.00	3765410.00	0.43826	
	439844.00	3765410.00	0.43816
439849.00	3765410.00	0.43807	

	439854.00	3765410.00	0.43795
439859.00	3765410.00	0.43783	
	439674.00	3765415.00	0.44553
439679.00	3765415.00	0.44564	
	439684.00	3765415.00	0.44574
439689.00	3765415.00	0.44583	
	439694.00	3765415.00	0.44590
439699.00	3765415.00	0.44599	
	439704.00	3765415.00	0.44605
439709.00	3765415.00	0.44611	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439714.00	3765415.00	0.44615
439719.00	3765415.00	0.44621
439729.00	3765415.00	0.44629
439734.00	3765415.00	0.44630
439739.00	3765415.00	0.44634
439744.00	3765415.00	0.44635
439749.00	3765415.00	0.44637
439774.00	3765415.00	0.44639
439779.00	3765415.00	0.44639
439784.00	3765415.00	0.44639
439789.00	3765415.00	0.44638
439794.00	3765415.00	0.44636
439799.00	3765415.00	0.44634
439804.00	3765415.00	0.44633
439809.00	3765415.00	0.44629
439814.00	3765415.00	0.44628
439819.00	3765415.00	0.44622
439824.00	3765415.00	0.44619

	439829.00	3765415.00	0.44613
439834.00	3765415.00	0.44609	
	439839.00	3765415.00	0.44600
439844.00	3765415.00	0.44594	
	439849.00	3765415.00	0.44585
439854.00	3765415.00	0.44576	
	439859.00	3765415.00	0.44565
439674.00	3765420.00	0.45329	
	439679.00	3765420.00	0.45340
439684.00	3765420.00	0.45351	
	439689.00	3765420.00	0.45359
439694.00	3765420.00	0.45369	
	439699.00	3765420.00	0.45376
439704.00	3765420.00	0.45383	
	439709.00	3765420.00	0.45389
439714.00	3765420.00	0.45396	
	439719.00	3765420.00	0.45400
439729.00	3765420.00	0.45408	
	439734.00	3765420.00	0.45413
439739.00	3765420.00	0.45415	
	439744.00	3765420.00	0.45418
439749.00	3765420.00	0.45419	
	439774.00	3765420.00	0.45426
439779.00	3765420.00	0.45426	
	439784.00	3765420.00	0.45425
439789.00	3765420.00	0.45426	
	439794.00	3765420.00	0.45425
439799.00	3765420.00	0.45425	
	439804.00	3765420.00	0.45423
439809.00	3765420.00	0.45423	
	439814.00	3765420.00	0.45419
439819.00	3765420.00	0.45418	
	439824.00	3765420.00	0.45414
439829.00	3765420.00	0.45412	
	439834.00	3765420.00	0.45406
439839.00	3765420.00	0.45403	
	439844.00	3765420.00	0.45395
439849.00	3765420.00	0.45389	
	439854.00	3765420.00	0.45380
439859.00	3765420.00	0.45372	
	439674.00	3765425.00	0.46128
439679.00	3765425.00	0.46141	
	439684.00	3765425.00	0.46151
439689.00	3765425.00	0.46162	
	439694.00	3765425.00	0.46170
439699.00	3765425.00	0.46180	
	439704.00	3765425.00	0.46187
439709.00	3765425.00	0.46195	
	439714.00	3765425.00	0.46199
439719.00	3765425.00	0.46206	
	439729.00	3765425.00	0.46215
439734.00	3765425.00	0.46218	

	439739.00	3765425.00	0.46222
439744.00	3765425.00	0.46225	
	439749.00	3765425.00	0.46228
439774.00	3765425.00	0.46236	
	439779.00	3765425.00	0.46237
439784.00	3765425.00	0.46239	
	439789.00	3765425.00	0.46238
439794.00	3765425.00	0.46239	
	439799.00	3765425.00	0.46239
439804.00	3765425.00	0.46240	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439809.00	3765425.00	0.46238
439814.00	3765425.00	0.46239
439819.00	3765425.00	0.46236
439824.00	3765425.00	0.46237
439829.00	3765425.00	0.46232
439834.00	3765425.00	0.46231
439839.00	3765425.00	0.46226
439844.00	3765425.00	0.46223
439849.00	3765425.00	0.46217
439854.00	3765425.00	0.46211
439859.00	3765425.00	0.46203
439674.00	3765430.00	0.46956
439679.00	3765430.00	0.46968
439684.00	3765430.00	0.46980
439689.00	3765430.00	0.46990
439694.00	3765430.00	0.47001
439699.00	3765430.00	0.47008
439704.00	3765430.00	0.47017

	439709.00	3765430.00	0.47024
439714.00	3765430.00	0.47032	
	439719.00	3765430.00	0.47036
439729.00	3765430.00	0.47047	
	439734.00	3765430.00	0.47051
439739.00	3765430.00	0.47055	
	439744.00	3765430.00	0.47059
439749.00	3765430.00	0.47062	
	439774.00	3765430.00	0.47073
439779.00	3765430.00	0.47075	
	439784.00	3765430.00	0.47076
439789.00	3765430.00	0.47079	
	439794.00	3765430.00	0.47079
439799.00	3765430.00	0.47081	
	439804.00	3765430.00	0.47081
439809.00	3765430.00	0.47084	
	439814.00	3765430.00	0.47082
439819.00	3765430.00	0.47084	
	439824.00	3765430.00	0.47082
439829.00	3765430.00	0.47083	
	439834.00	3765430.00	0.47080
439839.00	3765430.00	0.47080	
	439844.00	3765430.00	0.47076
439849.00	3765430.00	0.47073	
	439854.00	3765430.00	0.47068
439859.00	3765430.00	0.47063	
	439674.00	3765435.00	0.47810
439679.00	3765435.00	0.47824	
	439684.00	3765435.00	0.47835
439689.00	3765435.00	0.47847	
	439694.00	3765435.00	0.47856
439699.00	3765435.00	0.47867	
	439704.00	3765435.00	0.47875
439709.00	3765435.00	0.47883	
	439714.00	3765435.00	0.47890
439719.00	3765435.00	0.47897	
	439729.00	3765435.00	0.47908
439734.00	3765435.00	0.47912	
	439739.00	3765435.00	0.47917
439744.00	3765435.00	0.47921	
	439749.00	3765435.00	0.47924
439774.00	3765435.00	0.47938	
	439779.00	3765435.00	0.47941
439784.00	3765435.00	0.47943	
	439789.00	3765435.00	0.47945
439794.00	3765435.00	0.47948	
	439799.00	3765435.00	0.47950
439804.00	3765435.00	0.47952	
	439809.00	3765435.00	0.47953
439814.00	3765435.00	0.47956	
	439819.00	3765435.00	0.47956
439824.00	3765435.00	0.47959	

	439829.00	3765435.00	0.47958
439834.00	3765435.00	0.47960	
	439839.00	3765435.00	0.47958
439844.00	3765435.00	0.47959	
	439849.00	3765435.00	0.47956
439854.00	3765435.00	0.47954	
	439859.00	3765435.00	0.47950
439674.00	3765440.00	0.48694	
	439679.00	3765440.00	0.48708
439684.00	3765440.00	0.48721	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439689.00	3765440.00	0.48732
439694.00	3765440.00	0.48744
439699.00	3765440.00	0.48753
439704.00	3765440.00	0.48763
439709.00	3765440.00	0.48771
439714.00	3765440.00	0.48779
439719.00	3765440.00	0.48785
439729.00	3765440.00	0.48797
439734.00	3765440.00	0.48802
439739.00	3765440.00	0.48807
439744.00	3765440.00	0.48812
439749.00	3765440.00	0.48816
439774.00	3765440.00	0.48832
439779.00	3765440.00	0.48836
439784.00	3765440.00	0.48838
439789.00	3765440.00	0.48842
439794.00	3765440.00	0.48845
439799.00	3765440.00	0.48848

	439804.00	3765440.00	0.48851
439809.00	3765440.00		0.48855
	439814.00	3765440.00	0.48856
439819.00	3765440.00		0.48861
	439824.00	3765440.00	0.48862
439829.00	3765440.00		0.48866
	439834.00	3765440.00	0.48866
439839.00	3765440.00		0.48869
	439844.00	3765440.00	0.48869
439849.00	3765440.00		0.48870
	439854.00	3765440.00	0.48869
439859.00	3765440.00		0.48868
	439674.00	3765445.00	0.49609
439679.00	3765445.00		0.49624
	439684.00	3765445.00	0.49637
439689.00	3765445.00		0.49650
	439694.00	3765445.00	0.49661
439699.00	3765445.00		0.49672
	439704.00	3765445.00	0.49681
439709.00	3765445.00		0.49690
	439714.00	3765445.00	0.49698
439719.00	3765445.00		0.49706
	439729.00	3765445.00	0.49718
439734.00	3765445.00		0.49724
	439739.00	3765445.00	0.49729
439744.00	3765445.00		0.49734
	439749.00	3765445.00	0.49738
439774.00	3765445.00		0.49758
	439779.00	3765445.00	0.49761
439784.00	3765445.00		0.49766
	439789.00	3765445.00	0.49769
439794.00	3765445.00		0.49773
	439799.00	3765445.00	0.49777
439804.00	3765445.00		0.49781
	439809.00	3765445.00	0.49785
439814.00	3765445.00		0.49790
	439819.00	3765445.00	0.49793
439824.00	3765445.00		0.49798
	439829.00	3765445.00	0.49801
439834.00	3765445.00		0.49806
	439839.00	3765445.00	0.49809
439844.00	3765445.00		0.49812
	439849.00	3765445.00	0.49814
439854.00	3765445.00		0.49816
	439859.00	3765445.00	0.49817
439674.00	3765450.00		0.50556
	439679.00	3765450.00	0.50571
439684.00	3765450.00		0.50586
	439689.00	3765450.00	0.50599
439694.00	3765450.00		0.50611
	439699.00	3765450.00	0.50622
439704.00	3765450.00		0.50633

	439709.00	3765450.00	0.50642
439714.00	3765450.00	0.50651	
	439719.00	3765450.00	0.50658
439729.00	3765450.00	0.50672	
	439734.00	3765450.00	0.50678
439739.00	3765450.00	0.50684	
	439744.00	3765450.00	0.50689
439749.00	3765450.00	0.50694	
	439774.00	3765450.00	0.50715
439844.00	3765450.00	0.50787	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439849.00	3765450.00	0.50792
439854.00	3765450.00	0.50795
439859.00	3765450.00	0.50799
439674.00	3765455.00	0.51538
439679.00	3765455.00	0.51554
439684.00	3765455.00	0.51569
439689.00	3765455.00	0.51583
439694.00	3765455.00	0.51596
439699.00	3765455.00	0.51608
439704.00	3765455.00	0.51618
439709.00	3765455.00	0.51628
439714.00	3765455.00	0.51638
439719.00	3765455.00	0.51646
439729.00	3765455.00	0.51661
439734.00	3765455.00	0.51667
439739.00	3765455.00	0.51673
439744.00	3765455.00	0.51679
439749.00	3765455.00	0.51684

	439844.00	3765455.00	0.51797
439849.00	3765455.00	0.51804	
	439854.00	3765455.00	0.51810
439859.00	3765455.00	0.51816	
	439674.00	3765460.00	0.52556
439679.00	3765460.00	0.52573	
	439684.00	3765460.00	0.52589
439689.00	3765460.00	0.52603	
	439694.00	3765460.00	0.52617
439699.00	3765460.00	0.52629	
	439704.00	3765460.00	0.52641
439709.00	3765460.00	0.52651	
	439714.00	3765460.00	0.52661
439719.00	3765460.00	0.52670	
	439729.00	3765460.00	0.52686
439734.00	3765460.00	0.52693	
	439739.00	3765460.00	0.52700
439744.00	3765460.00	0.52705	
	439749.00	3765460.00	0.52712
439789.00	3765460.00	0.52754	
	439794.00	3765460.00	0.52761
439799.00	3765460.00	0.52767	
	439804.00	3765460.00	0.52774
439809.00	3765460.00	0.52782	
	439814.00	3765460.00	0.52789
439819.00	3765460.00	0.52798	
	439824.00	3765460.00	0.52807
439829.00	3765460.00	0.52816	
	439844.00	3765460.00	0.52844
439849.00	3765460.00	0.52853	
	439854.00	3765460.00	0.52862
439859.00	3765460.00	0.52870	
	439674.00	3765465.00	0.53612
439679.00	3765465.00	0.53631	
	439684.00	3765465.00	0.53647
439689.00	3765465.00	0.53663	
	439694.00	3765465.00	0.53676
439699.00	3765465.00	0.53690	
	439704.00	3765465.00	0.53702
439709.00	3765465.00	0.53714	
	439714.00	3765465.00	0.53724
439719.00	3765465.00	0.53733	
	439729.00	3765465.00	0.53750
439734.00	3765465.00	0.53758	
	439739.00	3765465.00	0.53764
439744.00	3765465.00	0.53771	
	439749.00	3765465.00	0.53777
439789.00	3765465.00	0.53824	
	439794.00	3765465.00	0.53831
439799.00	3765465.00	0.53839	
	439804.00	3765465.00	0.53846
439809.00	3765465.00	0.53855	

	439814.00	3765465.00	0.53864
439819.00	3765465.00	0.53874	
	439824.00	3765465.00	0.53884
439829.00	3765465.00	0.53895	
	439844.00	3765465.00	0.53929
439849.00	3765465.00	0.53941	
	439854.00	3765465.00	0.53952
439859.00	3765465.00	0.53963	
	439674.00	3765470.00	0.54710
439679.00	3765470.00	0.54728	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439684.00	3765470.00	0.54747
439689.00	3765470.00	0.54762
439694.00	3765470.00	0.54778
439699.00	3765470.00	0.54792
439704.00	3765470.00	0.54805
439709.00	3765470.00	0.54816
439714.00	3765470.00	0.54828
439719.00	3765470.00	0.54838
439729.00	3765470.00	0.54856
439734.00	3765470.00	0.54863
439739.00	3765470.00	0.54871
439744.00	3765470.00	0.54878
439749.00	3765470.00	0.54885
439789.00	3765470.00	0.54935
439794.00	3765470.00	0.54943
439799.00	3765470.00	0.54951
439804.00	3765470.00	0.54960
439809.00	3765470.00	0.54969

	439814.00	3765470.00	0.54979
439819.00	3765470.00	0.54990	
	439824.00	3765470.00	0.55002
439829.00	3765470.00	0.55014	
	439844.00	3765470.00	0.55055
439849.00	3765470.00	0.55069	
	439854.00	3765470.00	0.55084
439859.00	3765470.00	0.55097	
	439674.00	3765475.00	0.55849
439679.00	3765475.00	0.55870	
	439684.00	3765475.00	0.55888
439689.00	3765475.00	0.55907	
	439694.00	3765475.00	0.55922
439699.00	3765475.00	0.55938	
	439704.00	3765475.00	0.55951
439709.00	3765475.00	0.55964	
	439714.00	3765475.00	0.55975
439719.00	3765475.00	0.55987	
	439729.00	3765475.00	0.56005
439734.00	3765475.00	0.56014	
	439739.00	3765475.00	0.56022
439744.00	3765475.00	0.56030	
	439749.00	3765475.00	0.56036
439754.00	3765475.00	0.56043	
	439789.00	3765475.00	0.56090
439794.00	3765475.00	0.56098	
	439799.00	3765475.00	0.56107
439804.00	3765475.00	0.56116	
	439809.00	3765475.00	0.56127
439814.00	3765475.00	0.56138	
	439819.00	3765475.00	0.56150
439824.00	3765475.00	0.56164	
	439829.00	3765475.00	0.56178
439269.00	3764900.00	0.14143	
	439369.00	3764900.00	0.14292
439469.00	3764900.00	0.14294	
	439569.00	3764900.00	0.14145
439669.00	3764900.00	0.13844	
	439769.00	3764900.00	0.13393
439869.00	3764900.00	0.12797	
	439969.00	3764900.00	0.12069
440069.00	3764900.00	0.11232	
	440169.00	3764900.00	0.10323
440269.00	3764900.00	0.09391	
	439269.00	3765000.00	0.16487
439369.00	3765000.00	0.16769	
	439469.00	3765000.00	0.16870
439569.00	3765000.00	0.16791	
	439669.00	3765000.00	0.16532
439769.00	3765000.00	0.16086	
	439869.00	3765000.00	0.15443
439969.00	3765000.00	0.14608	

	440069.00	3765000.00	0.13604
440169.00	3765000.00	0.12473	
	440269.00	3765000.00	0.11281
439269.00	3765100.00	0.19480	
	439369.00	3765100.00	0.19950
439469.00	3765100.00	0.20196	
	439569.00	3765100.00	0.20224
439669.00	3765100.00	0.20044	
	439769.00	3765100.00	0.19641
439869.00	3765100.00	0.18982	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439969.00	3765100.00	0.18055
440069.00	3765100.00	0.16871
440169.00	3765100.00	0.15470
440269.00	3765100.00	0.13931
439269.00	3765200.00	0.23442
439369.00	3765200.00	0.24200
439469.00	3765200.00	0.24665
439569.00	3765200.00	0.24855
439669.00	3765200.00	0.24799
439769.00	3765200.00	0.24492
439869.00	3765200.00	0.23875
439969.00	3765200.00	0.22902
440069.00	3765200.00	0.21550
440169.00	3765200.00	0.19836
440269.00	3765200.00	0.17837
439269.00	3765300.00	0.28944
439369.00	3765300.00	0.30196
439469.00	3765300.00	0.31037

	439569.00	3765300.00	0.31486
439669.00	3765300.00	0.31616	
	439769.00	3765300.00	0.31471
439869.00	3765300.00	0.30991	
	439969.00	3765300.00	0.30060
440069.00	3765300.00	0.28597	
	440169.00	3765300.00	0.26562
440269.00	3765300.00	0.23971	
	439269.00	3765400.00	0.37150
439369.00	3765400.00	0.39359	
	439469.00	3765400.00	0.40980
439569.00	3765400.00	0.41937	
	439669.00	3765400.00	0.42358
439769.00	3765400.00	0.42424	
	439869.00	3765400.00	0.42254
439969.00	3765400.00	0.41548	
	440069.00	3765400.00	0.40085
440169.00	3765400.00	0.37773	
	440269.00	3765400.00	0.34468
439269.00	3765500.00	0.51072	
	439369.00	3765500.00	0.55371
439469.00	3765500.00	0.59006	
	439569.00	3765500.00	0.61236
439669.00	3765500.00	0.62273	
	439769.00	3765500.00	0.62602
439869.00	3765500.00	0.63005	
	439969.00	3765500.00	0.63278
440069.00	3765500.00	0.61996	
	440169.00	3765500.00	0.59357
440269.00	3765500.00	0.55185	
	439269.00	3765600.00	0.83497
439369.00	3765600.00	0.92480	
	439469.00	3765600.00	1.03675
439569.00	3765600.00	1.10543	
	439669.00	3765600.00	1.14335
439769.00	3765600.00	1.17649	
	439869.00	3765600.00	1.19283
439969.00	3765600.00	1.29155	
	440069.00	3765600.00	1.25952
440169.00	3765600.00	1.19682	
	440269.00	3765600.00	1.12370
439269.00	3765700.00	4.20940	
	439369.00	3765700.00	4.51295
439469.00	3765700.00	7.08246	
	439569.00	3765700.00	7.56523
439669.00	3765700.00	6.67604	
	439769.00	3765700.00	6.28150
439869.00	3765700.00	5.91312	
	439969.00	3765700.00	5.76266
440069.00	3765700.00	6.15807	
	440169.00	3765700.00	6.77010
440269.00	3765700.00	8.02168	

	439269.00	3765800.00	1.85507
439369.00	3765800.00	1.97273	
	439469.00	3765800.00	2.18051
439569.00	3765800.00	2.50815	
	439669.00	3765800.00	2.80305
439769.00	3765800.00	3.24441	
	439869.00	3765800.00	4.19210
439969.00	3765800.00	2.84239	
	440069.00	3765800.00	2.53678
440169.00	3765800.00	2.45150	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
440269.00	3765800.00	2.43137
439269.00	3765900.00	0.60419
439369.00	3765900.00	0.70341
439469.00	3765900.00	0.78957
439569.00	3765900.00	0.87542
439669.00	3765900.00	0.96396
439769.00	3765900.00	1.04849
439869.00	3765900.00	1.11889
439969.00	3765900.00	1.15396
440069.00	3765900.00	1.14186
440169.00	3765900.00	1.11763
440269.00	3765900.00	1.10044
439649.00	3765310.00	0.32459
439679.00	3765310.00	0.32467
439709.00	3765310.00	0.32450
439739.00	3765310.00	0.32409
439769.00	3765310.00	0.32341
439799.00	3765310.00	0.32245

	439829.00	3765310.00	0.32115
439859.00	3765310.00	0.31948	
	439889.00	3765310.00	0.31739
439649.00	3765340.00	0.35251	
	439679.00	3765340.00	0.35277
439709.00	3765340.00	0.35278	
	439739.00	3765340.00	0.35255
439769.00	3765340.00	0.35208	
	439799.00	3765340.00	0.35133
439829.00	3765340.00	0.35027	
	439859.00	3765340.00	0.34882
439889.00	3765340.00	0.34694	
	439649.00	3765370.00	0.38492
439679.00	3765370.00	0.38538	
	439709.00	3765370.00	0.38557
439739.00	3765370.00	0.38553	
	439769.00	3765370.00	0.38528
439799.00	3765370.00	0.38479	
	439829.00	3765370.00	0.38401
439859.00	3765370.00	0.38287	
	439889.00	3765370.00	0.38126
439649.00	3765400.00	0.42310	
	439679.00	3765400.00	0.42377
439709.00	3765400.00	0.42414	
	439739.00	3765400.00	0.42428
439769.00	3765400.00	0.42424	
	439799.00	3765400.00	0.42403
439829.00	3765400.00	0.42362	
	439859.00	3765400.00	0.42288
439889.00	3765400.00	0.42168	
	439649.00	3765430.00	0.46877
439679.00	3765430.00	0.46968	
	439709.00	3765430.00	0.47024
439739.00	3765430.00	0.47055	
	439769.00	3765430.00	0.47072
439799.00	3765430.00	0.47081	
	439829.00	3765430.00	0.47083
439859.00	3765430.00	0.47063	
	439889.00	3765430.00	0.47000
439649.00	3765460.00	0.52450	
	439679.00	3765460.00	0.52573
439709.00	3765460.00	0.52651	
	439739.00	3765460.00	0.52700
439769.00	3765460.00	0.52732	
	439799.00	3765460.00	0.52767
439829.00	3765460.00	0.52816	
	439859.00	3765460.00	0.52870
439889.00	3765460.00	0.52896	
	439649.00	3765490.00	0.59415
439679.00	3765490.00	0.59583	
	439709.00	3765490.00	0.59695
439739.00	3765490.00	0.59767	

	439769.00	3765490.00	0.59817
439799.00	3765490.00	0.59870	
	439829.00	3765490.00	0.59959
439859.00	3765490.00	0.60104	
	439889.00	3765490.00	0.60267

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439674.00	3765310.00	0.21343
439679.00	3765310.00	0.21367
439684.00	3765310.00	0.21390
439689.00	3765310.00	0.21414
439694.00	3765310.00	0.21438
439699.00	3765310.00	0.21461
439704.00	3765310.00	0.21484
439709.00	3765310.00	0.21506
439714.00	3765310.00	0.21529
439719.00	3765310.00	0.21551
439729.00	3765310.00	0.21594
439734.00	3765310.00	0.21615
439739.00	3765310.00	0.21636
439744.00	3765310.00	0.21656
439749.00	3765310.00	0.21676
439764.00	3765310.00	0.21732
439769.00	3765310.00	0.21749
439774.00	3765310.00	0.21766

	439779.00	3765310.00	0.21782
439784.00	3765310.00	0.21797	
	439789.00	3765310.00	0.21811
439794.00	3765310.00	0.21825	
	439799.00	3765310.00	0.21838
439804.00	3765310.00	0.21849	
	439809.00	3765310.00	0.21860
439814.00	3765310.00	0.21870	
	439819.00	3765310.00	0.21879
439824.00	3765310.00	0.21886	
	439829.00	3765310.00	0.21894
439839.00	3765310.00	0.21904	
	439844.00	3765310.00	0.21907
439849.00	3765310.00	0.21909	
	439854.00	3765310.00	0.21910
439859.00	3765310.00	0.21910	
	439864.00	3765310.00	0.21908
439869.00	3765310.00	0.21906	
	439874.00	3765310.00	0.21901
439879.00	3765310.00	0.21896	
	439884.00	3765310.00	0.21890
439674.00	3765315.00	0.21617	
	439679.00	3765315.00	0.21642
439684.00	3765315.00	0.21667	
	439689.00	3765315.00	0.21691
439694.00	3765315.00	0.21715	
	439699.00	3765315.00	0.21740
439704.00	3765315.00	0.21764	
	439709.00	3765315.00	0.21788
439714.00	3765315.00	0.21811	
	439719.00	3765315.00	0.21835
439729.00	3765315.00	0.21880	
	439734.00	3765315.00	0.21902
439739.00	3765315.00	0.21924	
	439744.00	3765315.00	0.21946
439749.00	3765315.00	0.21967	
	439764.00	3765315.00	0.22026
439769.00	3765315.00	0.22045	
	439774.00	3765315.00	0.22063
439779.00	3765315.00	0.22080	
	439784.00	3765315.00	0.22097
439789.00	3765315.00	0.22113	
	439794.00	3765315.00	0.22127
439799.00	3765315.00	0.22141	
	439804.00	3765315.00	0.22155
439809.00	3765315.00	0.22167	
	439814.00	3765315.00	0.22178
439819.00	3765315.00	0.22188	
	439824.00	3765315.00	0.22198
439829.00	3765315.00	0.22206	
	439839.00	3765315.00	0.22218
439844.00	3765315.00	0.22223	

	439849.00	3765315.00	0.22227
439854.00	3765315.00	0.22229	
	439859.00	3765315.00	0.22230
439864.00	3765315.00	0.22230	
	439869.00	3765315.00	0.22228
439874.00	3765315.00	0.22225	
	439879.00	3765315.00	0.22221
439884.00	3765315.00	0.22216	
	439674.00	3765320.00	0.21897
439679.00	3765320.00	0.21923	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439684.00	3765320.00	0.21949
439689.00	3765320.00	0.21974
439694.00	3765320.00	0.22000
439699.00	3765320.00	0.22025
439704.00	3765320.00	0.22050
439709.00	3765320.00	0.22075
439714.00	3765320.00	0.22099
439719.00	3765320.00	0.22124
439729.00	3765320.00	0.22172
439734.00	3765320.00	0.22195
439739.00	3765320.00	0.22218
439744.00	3765320.00	0.22241
439749.00	3765320.00	0.22263
439764.00	3765320.00	0.22327
439769.00	3765320.00	0.22347
439774.00	3765320.00	0.22366
439779.00	3765320.00	0.22385
439784.00	3765320.00	0.22403

	439789.00	3765320.00	0.22420
439794.00	3765320.00	0.22436	
	439799.00	3765320.00	0.22452
439804.00	3765320.00	0.22467	
	439809.00	3765320.00	0.22480
439814.00	3765320.00	0.22493	
	439819.00	3765320.00	0.22505
439824.00	3765320.00	0.22516	
	439829.00	3765320.00	0.22525
439839.00	3765320.00	0.22541	
	439844.00	3765320.00	0.22547
439849.00	3765320.00	0.22552	
	439854.00	3765320.00	0.22555
439859.00	3765320.00	0.22557	
	439864.00	3765320.00	0.22559
439869.00	3765320.00	0.22558	
	439874.00	3765320.00	0.22557
439879.00	3765320.00	0.22554	
	439884.00	3765320.00	0.22549
439674.00	3765325.00	0.22183	
	439679.00	3765325.00	0.22210
439684.00	3765325.00	0.22236	
	439689.00	3765325.00	0.22263
439694.00	3765325.00	0.22289	
	439699.00	3765325.00	0.22316
439704.00	3765325.00	0.22342	
	439709.00	3765325.00	0.22368
439714.00	3765325.00	0.22394	
	439719.00	3765325.00	0.22419
439729.00	3765325.00	0.22469	
	439734.00	3765325.00	0.22494
439739.00	3765325.00	0.22518	
	439744.00	3765325.00	0.22543
439749.00	3765325.00	0.22566	
	439754.00	3765325.00	0.22589
439769.00	3765325.00	0.22655	
	439774.00	3765325.00	0.22676
439779.00	3765325.00	0.22697	
	439784.00	3765325.00	0.22716
439789.00	3765325.00	0.22735	
	439794.00	3765325.00	0.22753
439799.00	3765325.00	0.22770	
	439804.00	3765325.00	0.22785
439809.00	3765325.00	0.22801	
	439814.00	3765325.00	0.22815
439819.00	3765325.00	0.22828	
	439824.00	3765325.00	0.22840
439829.00	3765325.00	0.22851	
	439839.00	3765325.00	0.22870
439844.00	3765325.00	0.22878	
	439849.00	3765325.00	0.22884
439854.00	3765325.00	0.22889	

	439859.00	3765325.00	0.22893
439864.00	3765325.00	0.22895	
	439869.00	3765325.00	0.22896
439874.00	3765325.00	0.22896	
	439879.00	3765325.00	0.22894
439884.00	3765325.00	0.22891	
	439674.00	3765330.00	0.22476
439679.00	3765330.00	0.22503	
	439684.00	3765330.00	0.22531
439689.00	3765330.00	0.22558	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439694.00	3765330.00	0.22586
439699.00	3765330.00	0.22613
439704.00	3765330.00	0.22640
439709.00	3765330.00	0.22667
439714.00	3765330.00	0.22694
439719.00	3765330.00	0.22721
439729.00	3765330.00	0.22774
439734.00	3765330.00	0.22800
439739.00	3765330.00	0.22825
439744.00	3765330.00	0.22851
439749.00	3765330.00	0.22876
439754.00	3765330.00	0.22900
439774.00	3765330.00	0.22993
439779.00	3765330.00	0.23014
439784.00	3765330.00	0.23036
439789.00	3765330.00	0.23056
439794.00	3765330.00	0.23075
439799.00	3765330.00	0.23094

	439804.00	3765330.00	0.23112
439809.00	3765330.00	0.23129	
	439814.00	3765330.00	0.23144
439819.00	3765330.00	0.23159	
	439824.00	3765330.00	0.23173
439829.00	3765330.00	0.23185	
	439839.00	3765330.00	0.23207
439844.00	3765330.00	0.23216	
	439849.00	3765330.00	0.23224
439854.00	3765330.00	0.23230	
	439859.00	3765330.00	0.23236
439864.00	3765330.00	0.23240	
	439869.00	3765330.00	0.23242
439874.00	3765330.00	0.23243	
	439879.00	3765330.00	0.23243
439884.00	3765330.00	0.23241	
	439674.00	3765335.00	0.22774
439679.00	3765335.00	0.22803	
	439684.00	3765335.00	0.22831
439689.00	3765335.00	0.22860	
	439694.00	3765335.00	0.22888
439699.00	3765335.00	0.22917	
	439704.00	3765335.00	0.22945
439709.00	3765335.00	0.22973	
	439714.00	3765335.00	0.23001
439719.00	3765335.00	0.23029	
	439729.00	3765335.00	0.23084
439734.00	3765335.00	0.23112	
	439739.00	3765335.00	0.23139
439744.00	3765335.00	0.23165	
	439749.00	3765335.00	0.23192
439774.00	3765335.00	0.23316	
	439779.00	3765335.00	0.23340
439784.00	3765335.00	0.23363	
	439789.00	3765335.00	0.23384
439794.00	3765335.00	0.23405	
	439839.00	3765335.00	0.23552
439844.00	3765335.00	0.23563	
	439849.00	3765335.00	0.23572
439854.00	3765335.00	0.23580	
	439859.00	3765335.00	0.23587
439864.00	3765335.00	0.23592	
	439869.00	3765335.00	0.23596
439874.00	3765335.00	0.23599	
	439879.00	3765335.00	0.23600
439884.00	3765335.00	0.23599	
	439674.00	3765340.00	0.23080
439679.00	3765340.00	0.23109	
	439684.00	3765340.00	0.23139
439689.00	3765340.00	0.23168	
	439694.00	3765340.00	0.23198
439699.00	3765340.00	0.23227	

	439704.00	3765340.00	0.23257
439709.00	3765340.00	0.23286	
	439714.00	3765340.00	0.23315
439719.00	3765340.00	0.23344	
	439729.00	3765340.00	0.23402
439734.00	3765340.00	0.23430	
	439739.00	3765340.00	0.23459
439744.00	3765340.00	0.23487	
	439749.00	3765340.00	0.23515
439774.00	3765340.00	0.23648	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439779.00	3765340.00	0.23672
439784.00	3765340.00	0.23696
439789.00	3765340.00	0.23720
439794.00	3765340.00	0.23743
439839.00	3765340.00	0.23905
439844.00	3765340.00	0.23917
439849.00	3765340.00	0.23928
439854.00	3765340.00	0.23938
439859.00	3765340.00	0.23946
439864.00	3765340.00	0.23954
439869.00	3765340.00	0.23959
439874.00	3765340.00	0.23963
439879.00	3765340.00	0.23966
439884.00	3765340.00	0.23966
439674.00	3765345.00	0.23392
439679.00	3765345.00	0.23423
439684.00	3765345.00	0.23453
439689.00	3765345.00	0.23483

	439694.00	3765345.00	0.23514
439699.00	3765345.00	0.23544	
	439704.00	3765345.00	0.23575
439709.00	3765345.00	0.23605	
	439714.00	3765345.00	0.23636
439719.00	3765345.00	0.23666	
	439729.00	3765345.00	0.23726
439734.00	3765345.00	0.23757	
	439739.00	3765345.00	0.23786
439744.00	3765345.00	0.23816	
	439749.00	3765345.00	0.23845
439774.00	3765345.00	0.23986	
	439779.00	3765345.00	0.24012
439784.00	3765345.00	0.24038	
	439789.00	3765345.00	0.24063
439794.00	3765345.00	0.24088	
	439839.00	3765345.00	0.24266
439844.00	3765345.00	0.24281	
	439849.00	3765345.00	0.24293
439854.00	3765345.00	0.24305	
	439859.00	3765345.00	0.24315
439864.00	3765345.00	0.24323	
	439869.00	3765345.00	0.24330
439874.00	3765345.00	0.24336	
	439879.00	3765345.00	0.24340
439884.00	3765345.00	0.24343	
	439674.00	3765350.00	0.23712
439679.00	3765350.00	0.23743	
	439684.00	3765350.00	0.23774
439689.00	3765350.00	0.23806	
	439694.00	3765350.00	0.23837
439699.00	3765350.00	0.23869	
	439704.00	3765350.00	0.23900
439709.00	3765350.00	0.23932	
	439714.00	3765350.00	0.23964
439719.00	3765350.00	0.23995	
	439729.00	3765350.00	0.24058
439734.00	3765350.00	0.24090	
	439739.00	3765350.00	0.24121
439744.00	3765350.00	0.24152	
	439749.00	3765350.00	0.24183
439774.00	3765350.00	0.24332	
	439779.00	3765350.00	0.24360
439784.00	3765350.00	0.24388	
	439789.00	3765350.00	0.24415
439794.00	3765350.00	0.24441	
	439839.00	3765350.00	0.24637
439844.00	3765350.00	0.24652	
	439849.00	3765350.00	0.24667
439854.00	3765350.00	0.24680	
	439859.00	3765350.00	0.24692
439864.00	3765350.00	0.24702	

	439869.00	3765350.00	0.24712
439874.00	3765350.00	0.24719	
	439879.00	3765350.00	0.24725
439884.00	3765350.00	0.24729	
	439674.00	3765355.00	0.24039
439679.00	3765355.00	0.24071	
	439684.00	3765355.00	0.24104
439689.00	3765355.00	0.24135	
	439694.00	3765355.00	0.24169
439699.00	3765355.00	0.24201	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*

INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439704.00	3765355.00	0.24234
439709.00	3765355.00	0.24266
439714.00	3765355.00	0.24299
439719.00	3765355.00	0.24332
439729.00	3765355.00	0.24398
439734.00	3765355.00	0.24430
439739.00	3765355.00	0.24464
439744.00	3765355.00	0.24495
439749.00	3765355.00	0.24528
439774.00	3765355.00	0.24685
439779.00	3765355.00	0.24715
439784.00	3765355.00	0.24745
439789.00	3765355.00	0.24774
439794.00	3765355.00	0.24802
439839.00	3765355.00	0.25015
439844.00	3765355.00	0.25034
439849.00	3765355.00	0.25050
439854.00	3765355.00	0.25065

	439859.00	3765355.00	0.25079
439864.00	3765355.00	0.25091	
	439869.00	3765355.00	0.25102
439874.00	3765355.00	0.25111	
	439879.00	3765355.00	0.25119
439884.00	3765355.00	0.25125	
	439674.00	3765360.00	0.24374
439679.00	3765360.00	0.24407	
	439684.00	3765360.00	0.24440
439689.00	3765360.00	0.24474	
	439694.00	3765360.00	0.24507
439699.00	3765360.00	0.24541	
	439704.00	3765360.00	0.24575
439709.00	3765360.00	0.24608	
	439714.00	3765360.00	0.24643
439719.00	3765360.00	0.24677	
	439729.00	3765360.00	0.24745
439734.00	3765360.00	0.24779	
	439739.00	3765360.00	0.24813
439744.00	3765360.00	0.24848	
	439749.00	3765360.00	0.24881
439774.00	3765360.00	0.25047	
	439779.00	3765360.00	0.25079
439784.00	3765360.00	0.25111	
	439789.00	3765360.00	0.25142
439794.00	3765360.00	0.25172	
	439799.00	3765360.00	0.25202
439804.00	3765360.00	0.25230	
	439809.00	3765360.00	0.25258
439814.00	3765360.00	0.25285	
	439839.00	3765360.00	0.25404
439844.00	3765360.00	0.25423	
	439849.00	3765360.00	0.25443
439854.00	3765360.00	0.25460	
	439859.00	3765360.00	0.25476
439864.00	3765360.00	0.25490	
	439869.00	3765360.00	0.25503
439874.00	3765360.00	0.25514	
	439879.00	3765360.00	0.25523
439884.00	3765360.00	0.25531	
	439674.00	3765365.00	0.24717
439679.00	3765365.00	0.24751	
	439684.00	3765365.00	0.24785
439689.00	3765365.00	0.24820	
	439694.00	3765365.00	0.24854
439699.00	3765365.00	0.24889	
	439704.00	3765365.00	0.24923
439709.00	3765365.00	0.24959	
	439714.00	3765365.00	0.24994
439719.00	3765365.00	0.25029	
	439729.00	3765365.00	0.25100
439734.00	3765365.00	0.25136	

	439739.00	3765365.00	0.25172
439744.00	3765365.00	0.25207	
	439749.00	3765365.00	0.25243
439774.00	3765365.00	0.25418	
	439779.00	3765365.00	0.25452
439784.00	3765365.00	0.25486	
	439789.00	3765365.00	0.25518
439794.00	3765365.00	0.25551	
	439799.00	3765365.00	0.25582
439804.00	3765365.00	0.25613	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439809.00	3765365.00	0.25643
439814.00	3765365.00	0.25673
439839.00	3765365.00	0.25802
439844.00	3765365.00	0.25824
439849.00	3765365.00	0.25845
439854.00	3765365.00	0.25864
439859.00	3765365.00	0.25882
439864.00	3765365.00	0.25899
439869.00	3765365.00	0.25914
439874.00	3765365.00	0.25926
439879.00	3765365.00	0.25939
439884.00	3765365.00	0.25948
439674.00	3765370.00	0.25068
439679.00	3765370.00	0.25103
439684.00	3765370.00	0.25138
439689.00	3765370.00	0.25173
439694.00	3765370.00	0.25209
439699.00	3765370.00	0.25245

	439704.00	3765370.00	0.25281
439709.00	3765370.00	0.25317	
	439714.00	3765370.00	0.25354
439719.00	3765370.00	0.25390	
	439729.00	3765370.00	0.25465
439734.00	3765370.00	0.25501	
	439739.00	3765370.00	0.25539
439744.00	3765370.00	0.25576	
	439749.00	3765370.00	0.25613
439774.00	3765370.00	0.25797	
	439779.00	3765370.00	0.25833
439784.00	3765370.00	0.25869	
	439789.00	3765370.00	0.25904
439794.00	3765370.00	0.25938	
	439799.00	3765370.00	0.25972
439804.00	3765370.00	0.26005	
	439809.00	3765370.00	0.26038
439814.00	3765370.00	0.26069	
	439839.00	3765370.00	0.26210
439844.00	3765370.00	0.26235	
	439849.00	3765370.00	0.26257
439854.00	3765370.00	0.26280	
	439859.00	3765370.00	0.26299
439864.00	3765370.00	0.26318	
	439869.00	3765370.00	0.26335
439874.00	3765370.00	0.26351	
	439879.00	3765370.00	0.26364
439884.00	3765370.00	0.26376	
	439674.00	3765375.00	0.25428
439679.00	3765375.00	0.25464	
	439684.00	3765375.00	0.25500
439689.00	3765375.00	0.25537	
	439694.00	3765375.00	0.25573
439699.00	3765375.00	0.25610	
	439704.00	3765375.00	0.25647
439709.00	3765375.00	0.25685	
	439714.00	3765375.00	0.25722
439719.00	3765375.00	0.25760	
	439729.00	3765375.00	0.25837
439734.00	3765375.00	0.25876	
	439739.00	3765375.00	0.25914
439744.00	3765375.00	0.25953	
	439749.00	3765375.00	0.25992
439754.00	3765375.00	0.26032	
	439774.00	3765375.00	0.26186
439779.00	3765375.00	0.26224	
	439784.00	3765375.00	0.26262
439789.00	3765375.00	0.26299	
	439794.00	3765375.00	0.26335
439799.00	3765375.00	0.26372	
	439804.00	3765375.00	0.26407
439809.00	3765375.00	0.26442	

	439814.00	3765375.00	0.26475
439839.00	3765375.00	0.26629	
	439844.00	3765375.00	0.26655
439849.00	3765375.00	0.26682	
	439854.00	3765375.00	0.26705
439859.00	3765375.00	0.26728	
	439864.00	3765375.00	0.26748
439869.00	3765375.00	0.26768	
	439874.00	3765375.00	0.26786
439879.00	3765375.00	0.26801	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439884.00	3765375.00	0.26815
439774.00	3765380.00	0.26584
439779.00	3765380.00	0.26624
439784.00	3765380.00	0.26664
439789.00	3765380.00	0.26703
439794.00	3765380.00	0.26743
439799.00	3765380.00	0.26781
439804.00	3765380.00	0.26819
439809.00	3765380.00	0.26855
439814.00	3765380.00	0.26893
439769.00	3765385.00	0.26949
439819.00	3765385.00	0.27358
439769.00	3765400.00	0.28228
439844.00	3765400.00	0.28933
439849.00	3765400.00	0.28974
439674.00	3765405.00	0.27798
439714.00	3765405.00	0.28138
439719.00	3765405.00	0.28184

	439734.00	3765405.00	0.28326
439749.00	3765405.00	0.28473	
	439754.00	3765405.00	0.28523
439774.00	3765405.00	0.28728	
	439779.00	3765405.00	0.28781
439784.00	3765405.00	0.28832	
	439789.00	3765405.00	0.28884
439794.00	3765405.00	0.28937	
	439799.00	3765405.00	0.28989
439804.00	3765405.00	0.29040	
	439809.00	3765405.00	0.29091
439814.00	3765405.00	0.29142	
	439819.00	3765405.00	0.29192
439824.00	3765405.00	0.29241	
	439829.00	3765405.00	0.29289
439834.00	3765405.00	0.29337	
	439839.00	3765405.00	0.29382
439844.00	3765405.00	0.29427	
	439849.00	3765405.00	0.29471
439854.00	3765405.00	0.29512	
	439859.00	3765405.00	0.29552
439674.00	3765410.00	0.28232	
	439679.00	3765410.00	0.28273
439684.00	3765410.00	0.28314	
	439689.00	3765410.00	0.28356
439694.00	3765410.00	0.28400	
	439699.00	3765410.00	0.28443
439704.00	3765410.00	0.28488	
	439709.00	3765410.00	0.28533
439714.00	3765410.00	0.28580	
	439719.00	3765410.00	0.28626
439729.00	3765410.00	0.28723	
	439734.00	3765410.00	0.28772
439739.00	3765410.00	0.28822	
	439744.00	3765410.00	0.28874
439749.00	3765410.00	0.28925	
	439774.00	3765410.00	0.29192
439779.00	3765410.00	0.29246	
	439784.00	3765410.00	0.29300
439789.00	3765410.00	0.29356	
	439794.00	3765410.00	0.29411
439799.00	3765410.00	0.29465	
	439804.00	3765410.00	0.29520
439809.00	3765410.00	0.29575	
	439814.00	3765410.00	0.29628
439819.00	3765410.00	0.29682	
	439824.00	3765410.00	0.29734
439829.00	3765410.00	0.29786	
	439834.00	3765410.00	0.29836
439839.00	3765410.00	0.29887	
	439844.00	3765410.00	0.29934
439849.00	3765410.00	0.29982	

	439854.00	3765410.00	0.30027
439859.00	3765410.00	0.30071	
	439674.00	3765415.00	0.28678
439679.00	3765415.00	0.28720	
	439684.00	3765415.00	0.28762
439689.00	3765415.00	0.28806	
	439694.00	3765415.00	0.28848
439699.00	3765415.00	0.28894	
	439704.00	3765415.00	0.28939
439709.00	3765415.00	0.28985	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439714.00	3765415.00	0.29032
439719.00	3765415.00	0.29081
439729.00	3765415.00	0.29180
439734.00	3765415.00	0.29231
439739.00	3765415.00	0.29283
439744.00	3765415.00	0.29335
439749.00	3765415.00	0.29389
439774.00	3765415.00	0.29666
439779.00	3765415.00	0.29724
439784.00	3765415.00	0.29782
439789.00	3765415.00	0.29839
439794.00	3765415.00	0.29897
439799.00	3765415.00	0.29955
439804.00	3765415.00	0.30014
439809.00	3765415.00	0.30071
439814.00	3765415.00	0.30129
439819.00	3765415.00	0.30185
439824.00	3765415.00	0.30241

	439829.00	3765415.00	0.30296
439834.00	3765415.00	0.30352	
	439839.00	3765415.00	0.30404
439844.00	3765415.00	0.30457	
	439849.00	3765415.00	0.30507
439854.00	3765415.00	0.30556	
	439859.00	3765415.00	0.30604
439674.00	3765420.00	0.29139	
	439679.00	3765420.00	0.29180
439684.00	3765420.00	0.29224	
	439689.00	3765420.00	0.29266
439694.00	3765420.00	0.29312	
	439699.00	3765420.00	0.29357
439704.00	3765420.00	0.29403	
	439709.00	3765420.00	0.29450
439714.00	3765420.00	0.29499	
	439719.00	3765420.00	0.29548
439729.00	3765420.00	0.29650	
	439734.00	3765420.00	0.29703
439739.00	3765420.00	0.29756	
	439744.00	3765420.00	0.29810
439749.00	3765420.00	0.29865	
	439774.00	3765420.00	0.30155
439779.00	3765420.00	0.30215	
	439784.00	3765420.00	0.30275
439789.00	3765420.00	0.30336	
	439794.00	3765420.00	0.30397
439799.00	3765420.00	0.30459	
	439804.00	3765420.00	0.30519
439809.00	3765420.00	0.30582	
	439814.00	3765420.00	0.30641
439819.00	3765420.00	0.30703	
	439824.00	3765420.00	0.30762
439829.00	3765420.00	0.30822	
	439834.00	3765420.00	0.30879
439839.00	3765420.00	0.30938	
	439844.00	3765420.00	0.30993
439849.00	3765420.00	0.31048	
	439854.00	3765420.00	0.31101
439859.00	3765420.00	0.31153	
	439674.00	3765425.00	0.29612
439679.00	3765425.00	0.29655	
	439684.00	3765425.00	0.29698
439689.00	3765425.00	0.29743	
	439694.00	3765425.00	0.29787
439699.00	3765425.00	0.29834	
	439704.00	3765425.00	0.29881
439709.00	3765425.00	0.29930	
	439714.00	3765425.00	0.29978
439719.00	3765425.00	0.30030	
	439729.00	3765425.00	0.30134
439734.00	3765425.00	0.30188	

	439739.00	3765425.00	0.30243
439744.00	3765425.00	0.30299	
	439749.00	3765425.00	0.30356
439774.00	3765425.00	0.30657	
	439779.00	3765425.00	0.30719
439784.00	3765425.00	0.30783	
	439789.00	3765425.00	0.30846
439794.00	3765425.00	0.30911	
	439799.00	3765425.00	0.30976
439804.00	3765425.00	0.31041	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439809.00	3765425.00	0.31105
439814.00	3765425.00	0.31171
439819.00	3765425.00	0.31234
439824.00	3765425.00	0.31299
439829.00	3765425.00	0.31361
439834.00	3765425.00	0.31425
439839.00	3765425.00	0.31485
439844.00	3765425.00	0.31547
439849.00	3765425.00	0.31605
439854.00	3765425.00	0.31663
439859.00	3765425.00	0.31718
439674.00	3765430.00	0.30101
439679.00	3765430.00	0.30144
439684.00	3765430.00	0.30188
439689.00	3765430.00	0.30232
439694.00	3765430.00	0.30279
439699.00	3765430.00	0.30325
439704.00	3765430.00	0.30374

	439709.00	3765430.00	0.30422
439714.00	3765430.00	0.30473	
	439719.00	3765430.00	0.30524
439729.00	3765430.00	0.30631	
	439734.00	3765430.00	0.30687
439739.00	3765430.00	0.30743	
	439744.00	3765430.00	0.30801
439749.00	3765430.00	0.30860	
	439774.00	3765430.00	0.31173
439779.00	3765430.00	0.31238	
	439784.00	3765430.00	0.31304
439789.00	3765430.00	0.31372	
	439794.00	3765430.00	0.31439
439799.00	3765430.00	0.31507	
	439804.00	3765430.00	0.31576
439809.00	3765430.00	0.31645	
	439814.00	3765430.00	0.31713
439819.00	3765430.00	0.31782	
	439824.00	3765430.00	0.31850
439829.00	3765430.00	0.31918	
	439834.00	3765430.00	0.31984
439839.00	3765430.00	0.32051	
	439844.00	3765430.00	0.32115
439849.00	3765430.00	0.32179	
	439854.00	3765430.00	0.32241
439859.00	3765430.00	0.32302	
	439674.00	3765435.00	0.30605
439679.00	3765435.00	0.30648	
	439684.00	3765435.00	0.30693
439689.00	3765435.00	0.30738	
	439694.00	3765435.00	0.30784
439699.00	3765435.00	0.30832	
	439704.00	3765435.00	0.30880
439709.00	3765435.00	0.30931	
	439714.00	3765435.00	0.30982
439719.00	3765435.00	0.31035	
	439729.00	3765435.00	0.31144
439734.00	3765435.00	0.31201	
	439739.00	3765435.00	0.31259
439744.00	3765435.00	0.31319	
	439749.00	3765435.00	0.31379
439774.00	3765435.00	0.31704	
	439779.00	3765435.00	0.31772
439784.00	3765435.00	0.31842	
	439789.00	3765435.00	0.31912
439794.00	3765435.00	0.31983	
	439799.00	3765435.00	0.32055
439804.00	3765435.00	0.32127	
	439809.00	3765435.00	0.32199
439814.00	3765435.00	0.32273	
	439819.00	3765435.00	0.32345
439824.00	3765435.00	0.32418	

	439829.00	3765435.00	0.32489
439834.00	3765435.00	0.32562	
	439839.00	3765435.00	0.32631
439844.00	3765435.00	0.32702	
	439849.00	3765435.00	0.32770
439854.00	3765435.00	0.32837	
	439859.00	3765435.00	0.32902
439674.00	3765440.00	0.31125	
	439679.00	3765440.00	0.31169
439684.00	3765440.00	0.31214	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439689.00	3765440.00	0.31259
439694.00	3765440.00	0.31307
439699.00	3765440.00	0.31354
439704.00	3765440.00	0.31405
439709.00	3765440.00	0.31455
439714.00	3765440.00	0.31507
439719.00	3765440.00	0.31561
439729.00	3765440.00	0.31672
439734.00	3765440.00	0.31730
439739.00	3765440.00	0.31790
439744.00	3765440.00	0.31851
439749.00	3765440.00	0.31914
439774.00	3765440.00	0.32250
439779.00	3765440.00	0.32321
439784.00	3765440.00	0.32394
439789.00	3765440.00	0.32468
439794.00	3765440.00	0.32542
439799.00	3765440.00	0.32618

	439804.00	3765440.00	0.32694
439809.00	3765440.00	0.32771	
	439814.00	3765440.00	0.32847
439819.00	3765440.00	0.32925	
	439824.00	3765440.00	0.33002
439829.00	3765440.00	0.33079	
	439834.00	3765440.00	0.33155
439839.00	3765440.00	0.33231	
	439844.00	3765440.00	0.33306
439849.00	3765440.00	0.33380	
	439854.00	3765440.00	0.33452
439859.00	3765440.00	0.33522	
	439674.00	3765445.00	0.31663
439679.00	3765445.00	0.31707	
	439684.00	3765445.00	0.31752
439689.00	3765445.00	0.31799	
	439694.00	3765445.00	0.31846
439699.00	3765445.00	0.31895	
	439704.00	3765445.00	0.31944
439709.00	3765445.00	0.31996	
	439714.00	3765445.00	0.32049
439719.00	3765445.00	0.32103	
	439729.00	3765445.00	0.32217
439734.00	3765445.00	0.32276	
	439739.00	3765445.00	0.32338
439744.00	3765445.00	0.32400	
	439749.00	3765445.00	0.32465
439774.00	3765445.00	0.32813	
	439779.00	3765445.00	0.32887
439784.00	3765445.00	0.32963	
	439789.00	3765445.00	0.33040
439794.00	3765445.00	0.33118	
	439799.00	3765445.00	0.33197
439804.00	3765445.00	0.33278	
	439809.00	3765445.00	0.33358
439814.00	3765445.00	0.33441	
	439819.00	3765445.00	0.33522
439824.00	3765445.00	0.33604	
	439829.00	3765445.00	0.33685
439834.00	3765445.00	0.33768	
	439839.00	3765445.00	0.33848
439844.00	3765445.00	0.33929	
	439849.00	3765445.00	0.34007
439854.00	3765445.00	0.34086	
	439859.00	3765445.00	0.34162
439674.00	3765450.00	0.32219	
	439679.00	3765450.00	0.32263
439684.00	3765450.00	0.32308	
	439689.00	3765450.00	0.32355
439694.00	3765450.00	0.32403	
	439699.00	3765450.00	0.32452
439704.00	3765450.00	0.32503	

	439709.00	3765450.00	0.32554
439714.00	3765450.00	0.32608	
	439719.00	3765450.00	0.32664
439729.00	3765450.00	0.32779	
	439734.00	3765450.00	0.32840
439739.00	3765450.00	0.32902	
	439744.00	3765450.00	0.32967
439749.00	3765450.00	0.33033	
	439774.00	3765450.00	0.33392
439844.00	3765450.00	0.34571	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439849.00	3765450.00	0.34656
439854.00	3765450.00	0.34740
439859.00	3765450.00	0.34823
439674.00	3765455.00	0.32794
439679.00	3765455.00	0.32838
439684.00	3765455.00	0.32884
439689.00	3765455.00	0.32931
439694.00	3765455.00	0.32979
439699.00	3765455.00	0.33028
439704.00	3765455.00	0.33079
439709.00	3765455.00	0.33132
439714.00	3765455.00	0.33186
439719.00	3765455.00	0.33242
439729.00	3765455.00	0.33360
439734.00	3765455.00	0.33422
439739.00	3765455.00	0.33485
439744.00	3765455.00	0.33551
439749.00	3765455.00	0.33619

	439844.00	3765455.00	0.35234
439849.00	3765455.00	0.35325	
	439854.00	3765455.00	0.35416
439859.00	3765455.00	0.35505	
	439674.00	3765460.00	0.33390
439679.00	3765460.00	0.33434	
	439684.00	3765460.00	0.33480
439689.00	3765460.00	0.33526	
	439694.00	3765460.00	0.33575
439699.00	3765460.00	0.33624	
	439704.00	3765460.00	0.33676
439709.00	3765460.00	0.33729	
	439714.00	3765460.00	0.33784
439719.00	3765460.00	0.33840	
	439729.00	3765460.00	0.33960
439734.00	3765460.00	0.34023	
	439739.00	3765460.00	0.34088
439744.00	3765460.00	0.34155	
	439749.00	3765460.00	0.34225
439789.00	3765460.00	0.34863	
	439794.00	3765460.00	0.34953
439799.00	3765460.00	0.35045	
	439804.00	3765460.00	0.35138
439809.00	3765460.00	0.35233	
	439814.00	3765460.00	0.35328
439819.00	3765460.00	0.35426	
	439824.00	3765460.00	0.35524
439829.00	3765460.00	0.35623	
	439844.00	3765460.00	0.35919
439849.00	3765460.00	0.36017	
	439854.00	3765460.00	0.36114
439859.00	3765460.00	0.36210	
	439674.00	3765465.00	0.34007
439679.00	3765465.00	0.34051	
	439684.00	3765465.00	0.34096
439689.00	3765465.00	0.34144	
	439694.00	3765465.00	0.34192
439699.00	3765465.00	0.34242	
	439704.00	3765465.00	0.34294
439709.00	3765465.00	0.34347	
	439714.00	3765465.00	0.34402
439719.00	3765465.00	0.34460	
	439729.00	3765465.00	0.34580
439734.00	3765465.00	0.34645	
	439739.00	3765465.00	0.34710
439744.00	3765465.00	0.34779	
	439749.00	3765465.00	0.34850
439789.00	3765465.00	0.35510	
	439794.00	3765465.00	0.35604
439799.00	3765465.00	0.35700	
	439804.00	3765465.00	0.35797
439809.00	3765465.00	0.35897	

	439814.00	3765465.00	0.35998
439819.00	3765465.00	0.36101	
	439824.00	3765465.00	0.36205
439829.00	3765465.00	0.36309	
	439844.00	3765465.00	0.36626
439849.00	3765465.00	0.36731	
	439854.00	3765465.00	0.36835
439859.00	3765465.00	0.36938	
	439674.00	3765470.00	0.34647
439679.00	3765470.00	0.34691	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439684.00	3765470.00	0.34737
439689.00	3765470.00	0.34783
439694.00	3765470.00	0.34832
439699.00	3765470.00	0.34882
439704.00	3765470.00	0.34934
439709.00	3765470.00	0.34987
439714.00	3765470.00	0.35043
439719.00	3765470.00	0.35101
439729.00	3765470.00	0.35224
439734.00	3765470.00	0.35288
439739.00	3765470.00	0.35355
439744.00	3765470.00	0.35425
439749.00	3765470.00	0.35498
439789.00	3765470.00	0.36178
439794.00	3765470.00	0.36276
439799.00	3765470.00	0.36375
439804.00	3765470.00	0.36478
439809.00	3765470.00	0.36583

	439814.00	3765470.00	0.36689
439819.00	3765470.00	0.36798	
	439824.00	3765470.00	0.36908
439829.00	3765470.00	0.37019	
	439844.00	3765470.00	0.37356
439849.00	3765470.00	0.37469	
	439854.00	3765470.00	0.37581
439859.00	3765470.00	0.37692	
	439674.00	3765475.00	0.35311
439679.00	3765475.00	0.35356	
	439684.00	3765475.00	0.35400
439689.00	3765475.00	0.35448	
	439694.00	3765475.00	0.35496
439699.00	3765475.00	0.35546	
	439704.00	3765475.00	0.35598
439709.00	3765475.00	0.35652	
	439714.00	3765475.00	0.35708
439719.00	3765475.00	0.35766	
	439729.00	3765475.00	0.35889
439734.00	3765475.00	0.35955	
	439739.00	3765475.00	0.36023
439744.00	3765475.00	0.36094	
	439749.00	3765475.00	0.36167
439754.00	3765475.00	0.36244	
	439789.00	3765475.00	0.36868
439794.00	3765475.00	0.36969	
	439799.00	3765475.00	0.37074
439804.00	3765475.00	0.37181	
	439809.00	3765475.00	0.37291
439814.00	3765475.00	0.37403	
	439819.00	3765475.00	0.37518
439824.00	3765475.00	0.37634	
	439829.00	3765475.00	0.37752
439269.00	3764900.00	0.09144	
	439369.00	3764900.00	0.09303
439469.00	3764900.00	0.09372	
	439569.00	3764900.00	0.09342
439669.00	3764900.00	0.09205	
	439769.00	3764900.00	0.08956
439869.00	3764900.00	0.08595	
	439969.00	3764900.00	0.08132
440069.00	3764900.00	0.07586	
	440169.00	3764900.00	0.06989
440269.00	3764900.00	0.06376	
	439269.00	3765000.00	0.10608
439369.00	3765000.00	0.10868	
	439469.00	3765000.00	0.11028
439569.00	3765000.00	0.11078	
	439669.00	3765000.00	0.11006
439769.00	3765000.00	0.10792	
	439869.00	3765000.00	0.10420
439969.00	3765000.00	0.09894	

	440069.00	3765000.00	0.09235
440169.00	3765000.00	0.08483	
	440269.00	3765000.00	0.07690
439269.00	3765100.00	0.12459	
	439369.00	3765100.00	0.12850
439469.00	3765100.00	0.13130	
	439569.00	3765100.00	0.13298
439669.00	3765100.00	0.13341	
	439769.00	3765100.00	0.13217
439869.00	3765100.00	0.12879	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439969.00	3765100.00	0.12312
440069.00	3765100.00	0.11531
440169.00	3765100.00	0.10585
440269.00	3765100.00	0.09541
439269.00	3765200.00	0.14902
439369.00	3765200.00	0.15468
439469.00	3765200.00	0.15903
439569.00	3765200.00	0.16230
439669.00	3765200.00	0.16454
439769.00	3765200.00	0.16512
439869.00	3765200.00	0.16299
439969.00	3765200.00	0.15753
440069.00	3765200.00	0.14869
440169.00	3765200.00	0.13688
440269.00	3765200.00	0.12290
439269.00	3765300.00	0.18311
439369.00	3765300.00	0.19157
439469.00	3765300.00	0.19801

	439569.00	3765300.00	0.20318
439669.00	3765300.00	0.20788	
	439769.00	3765300.00	0.21176
439869.00	3765300.00	0.21282	
	439969.00	3765300.00	0.20910
440069.00	3765300.00	0.19997	
	440169.00	3765300.00	0.18556
440269.00	3765300.00	0.16653	
	439269.00	3765400.00	0.23447
439369.00	3765400.00	0.24842	
	439469.00	3765400.00	0.25874
439569.00	3765400.00	0.26628	
	439669.00	3765400.00	0.27337
439769.00	3765400.00	0.28228	
	439869.00	3765400.00	0.29117
439969.00	3765400.00	0.29317	
	440069.00	3765400.00	0.28575
440169.00	3765400.00	0.26880	
	440269.00	3765400.00	0.24269
439269.00	3765500.00	0.32255	
	439369.00	3765500.00	0.34940
439469.00	3765500.00	0.36983	
	439569.00	3765500.00	0.38223
439669.00	3765500.00	0.39015	
	439769.00	3765500.00	0.40272
439869.00	3765500.00	0.43167	
	439969.00	3765500.00	0.45599
440069.00	3765500.00	0.45477	
	440169.00	3765500.00	0.43473
440269.00	3765500.00	0.39902	
	439269.00	3765600.00	0.53003
439369.00	3765600.00	0.59110	
	439469.00	3765600.00	0.64757
439569.00	3765600.00	0.67619	
	439669.00	3765600.00	0.68610
439769.00	3765600.00	0.69464	
	439869.00	3765600.00	0.75013
439969.00	3765600.00	0.99152	
	440069.00	3765600.00	0.99187
440169.00	3765600.00	0.93788	
	440269.00	3765600.00	0.86769
439269.00	3765700.00	3.04476	
	439369.00	3765700.00	3.30958
439469.00	3765700.00	4.07275	
	439569.00	3765700.00	4.33857
439669.00	3765700.00	4.26516	
	439769.00	3765700.00	4.22817
439869.00	3765700.00	4.15175	
	439969.00	3765700.00	4.29164
440069.00	3765700.00	4.99170	
	440169.00	3765700.00	5.84784
440269.00	3765700.00	7.49644	

	439269.00	3765800.00	1.13569
439369.00	3765800.00	1.22334	
	439469.00	3765800.00	1.43259
439569.00	3765800.00	1.78112	
	439669.00	3765800.00	2.08787
439769.00	3765800.00	2.62679	
	439869.00	3765800.00	3.86597
439969.00	3765800.00	2.10074	
	440069.00	3765800.00	1.74667
440169.00	3765800.00	1.68548	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
440269.00	3765800.00	1.70829
439269.00	3765900.00	0.37802
439369.00	3765900.00	0.44420
439469.00	3765900.00	0.50621
439569.00	3765900.00	0.57509
439669.00	3765900.00	0.65261
439769.00	3765900.00	0.72950
439869.00	3765900.00	0.79633
439969.00	3765900.00	0.82815
440069.00	3765900.00	0.80664
440169.00	3765900.00	0.77711
440269.00	3765900.00	0.76499
439649.00	3765310.00	0.21221
439679.00	3765310.00	0.21367
439709.00	3765310.00	0.21506
439739.00	3765310.00	0.21636
439769.00	3765310.00	0.21749
439799.00	3765310.00	0.21838

	439829.00	3765310.00	0.21894
439859.00	3765310.00	0.21910	
	439889.00	3765310.00	0.21882
439649.00	3765340.00	0.22934	
	439679.00	3765340.00	0.23109
439709.00	3765340.00	0.23286	
	439739.00	3765340.00	0.23459
439769.00	3765340.00	0.23622	
	439799.00	3765340.00	0.23765
439829.00	3765340.00	0.23877	
	439859.00	3765340.00	0.23946
439889.00	3765340.00	0.23966	
	439649.00	3765370.00	0.24898
439679.00	3765370.00	0.25103	
	439709.00	3765370.00	0.25317
439739.00	3765370.00	0.25539	
	439769.00	3765370.00	0.25761
439799.00	3765370.00	0.25972	
	439829.00	3765370.00	0.26157
439859.00	3765370.00	0.26299	
	439889.00	3765370.00	0.26386
439649.00	3765400.00	0.27186	
	439679.00	3765400.00	0.27416
439709.00	3765400.00	0.27665	
	439739.00	3765400.00	0.27938
439769.00	3765400.00	0.28228	
	439799.00	3765400.00	0.28524
439829.00	3765400.00	0.28806	
	439859.00	3765400.00	0.29048
439889.00	3765400.00	0.29230	
	439649.00	3765430.00	0.29898
439679.00	3765430.00	0.30144	
	439709.00	3765430.00	0.30422
439739.00	3765430.00	0.30743	
	439769.00	3765430.00	0.31108
439799.00	3765430.00	0.31507	
	439829.00	3765430.00	0.31918
439859.00	3765430.00	0.32302	
	439889.00	3765430.00	0.32621
439649.00	3765460.00	0.33182	
	439679.00	3765460.00	0.33434
439709.00	3765460.00	0.33729	
	439739.00	3765460.00	0.34088
439769.00	3765460.00	0.34526	
	439799.00	3765460.00	0.35045
439829.00	3765460.00	0.35623	
	439859.00	3765460.00	0.36210
439889.00	3765460.00	0.36739	
	439649.00	3765490.00	0.37266
439679.00	3765490.00	0.37510	
	439709.00	3765490.00	0.37802
439739.00	3765490.00	0.38178	

	439769.00	3765490.00	0.38676
439799.00	3765490.00	0.39318	
	439829.00	3765490.00	0.40106
439859.00	3765490.00	0.40986	
	439889.00	3765490.00	0.41850

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439674.00	3765310.00	0.24726
439679.00	3765310.00	0.24721
439684.00	3765310.00	0.24715
439689.00	3765310.00	0.24709
439694.00	3765310.00	0.24703
439699.00	3765310.00	0.24696
439704.00	3765310.00	0.24689
439709.00	3765310.00	0.24681
439714.00	3765310.00	0.24673
439719.00	3765310.00	0.24665
439729.00	3765310.00	0.24647
439734.00	3765310.00	0.24638
439739.00	3765310.00	0.24628
439744.00	3765310.00	0.24618
439749.00	3765310.00	0.24607
439764.00	3765310.00	0.24572
439769.00	3765310.00	0.24560
439774.00	3765310.00	0.24547
439779.00	3765310.00	0.24534
439784.00	3765310.00	0.24520

	439789.00	3765310.00	0.24506
439794.00	3765310.00	0.24492	
	439799.00	3765310.00	0.24477
439804.00	3765310.00	0.24461	
	439809.00	3765310.00	0.24445
439814.00	3765310.00	0.24429	
	439819.00	3765310.00	0.24412
439824.00	3765310.00	0.24395	
	439829.00	3765310.00	0.24377
439839.00	3765310.00	0.24340	
	439844.00	3765310.00	0.24321
439849.00	3765310.00	0.24301	
	439854.00	3765310.00	0.24281
439859.00	3765310.00	0.24260	
	439864.00	3765310.00	0.24238
439869.00	3765310.00	0.24217	
	439874.00	3765310.00	0.24194
439879.00	3765310.00	0.24171	
	439884.00	3765310.00	0.24148
439674.00	3765315.00	0.25048	
	439679.00	3765315.00	0.25043
439684.00	3765315.00	0.25038	
	439689.00	3765315.00	0.25032
439694.00	3765315.00	0.25026	
	439699.00	3765315.00	0.25020
439704.00	3765315.00	0.25013	
	439709.00	3765315.00	0.25006
439714.00	3765315.00	0.24998	
	439719.00	3765315.00	0.24990
439729.00	3765315.00	0.24973	
	439734.00	3765315.00	0.24964
439739.00	3765315.00	0.24954	
	439744.00	3765315.00	0.24944
439749.00	3765315.00	0.24934	
	439764.00	3765315.00	0.24900
439769.00	3765315.00	0.24888	
	439774.00	3765315.00	0.24875
439779.00	3765315.00	0.24862	
	439784.00	3765315.00	0.24849
439789.00	3765315.00	0.24835	
	439794.00	3765315.00	0.24821
439799.00	3765315.00	0.24806	
	439804.00	3765315.00	0.24791
439809.00	3765315.00	0.24775	
	439814.00	3765315.00	0.24760
439819.00	3765315.00	0.24743	
	439824.00	3765315.00	0.24726
439829.00	3765315.00	0.24708	
	439839.00	3765315.00	0.24672
439844.00	3765315.00	0.24653	
	439849.00	3765315.00	0.24633
439854.00	3765315.00	0.24613	

	439859.00	3765315.00	0.24592
439864.00	3765315.00	0.24572	
	439869.00	3765315.00	0.24550
439874.00	3765315.00	0.24528	
	439879.00	3765315.00	0.24505
439884.00	3765315.00	0.24482	
	439674.00	3765320.00	0.25378
439679.00	3765320.00	0.25374	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439684.00	3765320.00	0.25369
439689.00	3765320.00	0.25363
439694.00	3765320.00	0.25357
439699.00	3765320.00	0.25351
439704.00	3765320.00	0.25345
439709.00	3765320.00	0.25338
439714.00	3765320.00	0.25330
439719.00	3765320.00	0.25323
439729.00	3765320.00	0.25306
439734.00	3765320.00	0.25297
439739.00	3765320.00	0.25288
439744.00	3765320.00	0.25278
439749.00	3765320.00	0.25268
439764.00	3765320.00	0.25235
439769.00	3765320.00	0.25223
439774.00	3765320.00	0.25211
439779.00	3765320.00	0.25199
439784.00	3765320.00	0.25186
439789.00	3765320.00	0.25172
439794.00	3765320.00	0.25158

	439799.00	3765320.00	0.25144
439804.00	3765320.00	0.25129	
	439809.00	3765320.00	0.25113
439814.00	3765320.00	0.25098	
	439819.00	3765320.00	0.25081
439824.00	3765320.00	0.25064	
	439829.00	3765320.00	0.25047
439839.00	3765320.00	0.25011	
	439844.00	3765320.00	0.24992
439849.00	3765320.00	0.24973	
	439854.00	3765320.00	0.24953
439859.00	3765320.00	0.24933	
	439864.00	3765320.00	0.24912
439869.00	3765320.00	0.24891	
	439874.00	3765320.00	0.24869
439879.00	3765320.00	0.24846	
	439884.00	3765320.00	0.24823
439674.00	3765325.00	0.25716	
	439679.00	3765325.00	0.25712
439684.00	3765325.00	0.25707	
	439689.00	3765325.00	0.25702
439694.00	3765325.00	0.25696	
	439699.00	3765325.00	0.25690
439704.00	3765325.00	0.25684	
	439709.00	3765325.00	0.25677
439714.00	3765325.00	0.25671	
	439719.00	3765325.00	0.25663
439729.00	3765325.00	0.25647	
	439734.00	3765325.00	0.25638
439739.00	3765325.00	0.25629	
	439744.00	3765325.00	0.25620
439749.00	3765325.00	0.25610	
	439754.00	3765325.00	0.25600
439769.00	3765325.00	0.25567	
	439774.00	3765325.00	0.25555
439779.00	3765325.00	0.25542	
	439784.00	3765325.00	0.25529
439789.00	3765325.00	0.25516	
	439794.00	3765325.00	0.25503
439799.00	3765325.00	0.25488	
	439804.00	3765325.00	0.25474
439809.00	3765325.00	0.25459	
	439814.00	3765325.00	0.25443
439819.00	3765325.00	0.25427	
	439824.00	3765325.00	0.25411
439829.00	3765325.00	0.25394	
	439839.00	3765325.00	0.25358
439844.00	3765325.00	0.25340	
	439849.00	3765325.00	0.25321
439854.00	3765325.00	0.25301	
	439859.00	3765325.00	0.25281
439864.00	3765325.00	0.25260	

	439869.00	3765325.00	0.25239
439874.00	3765325.00	0.25218	
	439879.00	3765325.00	0.25196
439884.00	3765325.00	0.25173	
	439674.00	3765330.00	0.26061
439679.00	3765330.00	0.26057	
	439684.00	3765330.00	0.26053
439689.00	3765330.00	0.26048	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439694.00	3765330.00	0.26043
439699.00	3765330.00	0.26037
439704.00	3765330.00	0.26032
439709.00	3765330.00	0.26025
439714.00	3765330.00	0.26018
439719.00	3765330.00	0.26011
439729.00	3765330.00	0.25996
439734.00	3765330.00	0.25988
439739.00	3765330.00	0.25979
439744.00	3765330.00	0.25970
439749.00	3765330.00	0.25960
439754.00	3765330.00	0.25950
439774.00	3765330.00	0.25906
439779.00	3765330.00	0.25894
439784.00	3765330.00	0.25882
439789.00	3765330.00	0.25869
439794.00	3765330.00	0.25855
439799.00	3765330.00	0.25841
439804.00	3765330.00	0.25827
439809.00	3765330.00	0.25812

	439814.00	3765330.00	0.25797
439819.00	3765330.00	0.25781	
	439824.00	3765330.00	0.25765
439829.00	3765330.00	0.25748	
	439839.00	3765330.00	0.25713
439844.00	3765330.00	0.25695	
	439849.00	3765330.00	0.25676
439854.00	3765330.00	0.25657	
	439859.00	3765330.00	0.25638
439864.00	3765330.00	0.25617	
	439869.00	3765330.00	0.25596
439874.00	3765330.00	0.25575	
	439879.00	3765330.00	0.25553
439884.00	3765330.00	0.25531	
	439674.00	3765335.00	0.26415
439679.00	3765335.00	0.26411	
	439684.00	3765335.00	0.26407
439689.00	3765335.00	0.26403	
	439694.00	3765335.00	0.26398
439699.00	3765335.00	0.26393	
	439704.00	3765335.00	0.26387
439709.00	3765335.00	0.26381	
	439714.00	3765335.00	0.26375
439719.00	3765335.00	0.26368	
	439729.00	3765335.00	0.26353
439734.00	3765335.00	0.26345	
	439739.00	3765335.00	0.26337
439744.00	3765335.00	0.26328	
	439749.00	3765335.00	0.26319
439774.00	3765335.00	0.26266	
	439779.00	3765335.00	0.26255
439784.00	3765335.00	0.26242	
	439789.00	3765335.00	0.26230
439794.00	3765335.00	0.26217	
	439839.00	3765335.00	0.26077
439844.00	3765335.00	0.26059	
	439849.00	3765335.00	0.26041
439854.00	3765335.00	0.26022	
	439859.00	3765335.00	0.26002
439864.00	3765335.00	0.25982	
	439869.00	3765335.00	0.25962
439874.00	3765335.00	0.25941	
	439879.00	3765335.00	0.25919
439884.00	3765335.00	0.25897	
	439674.00	3765340.00	0.26777
439679.00	3765340.00	0.26774	
	439684.00	3765340.00	0.26770
439689.00	3765340.00	0.26766	
	439694.00	3765340.00	0.26762
439699.00	3765340.00	0.26756	
	439704.00	3765340.00	0.26751
439709.00	3765340.00	0.26746	

	439714.00	3765340.00	0.26740
439719.00	3765340.00	0.26733	
	439729.00	3765340.00	0.26719
439734.00	3765340.00	0.26711	
	439739.00	3765340.00	0.26703
439744.00	3765340.00	0.26695	
	439749.00	3765340.00	0.26686
439774.00	3765340.00	0.26635	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439779.00	3765340.00	0.26624
439784.00	3765340.00	0.26612
439789.00	3765340.00	0.26599
439794.00	3765340.00	0.26586
439839.00	3765340.00	0.26450
439844.00	3765340.00	0.26432
439849.00	3765340.00	0.26414
439854.00	3765340.00	0.26395
439859.00	3765340.00	0.26376
439864.00	3765340.00	0.26356
439869.00	3765340.00	0.26336
439874.00	3765340.00	0.26315
439879.00	3765340.00	0.26294
439884.00	3765340.00	0.26272
439674.00	3765345.00	0.27148
439679.00	3765345.00	0.27145
439684.00	3765345.00	0.27142
439689.00	3765345.00	0.27138
439694.00	3765345.00	0.27134
439699.00	3765345.00	0.27129

	439704.00	3765345.00	0.27125
439709.00	3765345.00	0.27119	
	439714.00	3765345.00	0.27113
439719.00	3765345.00	0.27107	
	439729.00	3765345.00	0.27094
439734.00	3765345.00	0.27086	
	439739.00	3765345.00	0.27079
439744.00	3765345.00	0.27070	
	439749.00	3765345.00	0.27062
439774.00	3765345.00	0.27013	
	439779.00	3765345.00	0.27002
439784.00	3765345.00	0.26990	
	439789.00	3765345.00	0.26978
439794.00	3765345.00	0.26965	
	439839.00	3765345.00	0.26831
439844.00	3765345.00	0.26814	
	439849.00	3765345.00	0.26796
439854.00	3765345.00	0.26778	
	439859.00	3765345.00	0.26759
439864.00	3765345.00	0.26740	
	439869.00	3765345.00	0.26719
439874.00	3765345.00	0.26699	
	439879.00	3765345.00	0.26677
439884.00	3765345.00	0.26656	
	439674.00	3765350.00	0.27528
439679.00	3765350.00	0.27526	
	439684.00	3765350.00	0.27522
439689.00	3765350.00	0.27520	
	439694.00	3765350.00	0.27515
439699.00	3765350.00	0.27512	
	439704.00	3765350.00	0.27506
439709.00	3765350.00	0.27502	
	439714.00	3765350.00	0.27496
439719.00	3765350.00	0.27491	
	439729.00	3765350.00	0.27478
439734.00	3765350.00	0.27471	
	439739.00	3765350.00	0.27463
439744.00	3765350.00	0.27456	
	439749.00	3765350.00	0.27447
439774.00	3765350.00	0.27400	
	439779.00	3765350.00	0.27389
439784.00	3765350.00	0.27378	
	439789.00	3765350.00	0.27366
439794.00	3765350.00	0.27354	
	439839.00	3765350.00	0.27223
439844.00	3765350.00	0.27205	
	439849.00	3765350.00	0.27188
439854.00	3765350.00	0.27170	
	439859.00	3765350.00	0.27151
439864.00	3765350.00	0.27132	
	439869.00	3765350.00	0.27112
439874.00	3765350.00	0.27092	

	439879.00	3765350.00	0.27072
439884.00	3765350.00	0.27050	
	439674.00	3765355.00	0.27919
439679.00	3765355.00	0.27916	
	439684.00	3765355.00	0.27914
439689.00	3765355.00	0.27910	
	439694.00	3765355.00	0.27907
439699.00	3765355.00	0.27903	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439704.00	3765355.00	0.27899
439709.00	3765355.00	0.27894
439714.00	3765355.00	0.27889
439719.00	3765355.00	0.27884
439729.00	3765355.00	0.27872
439734.00	3765355.00	0.27864
439739.00	3765355.00	0.27858
439744.00	3765355.00	0.27850
439749.00	3765355.00	0.27843
439774.00	3765355.00	0.27796
439779.00	3765355.00	0.27786
439784.00	3765355.00	0.27775
439789.00	3765355.00	0.27764
439794.00	3765355.00	0.27752
439839.00	3765355.00	0.27623
439844.00	3765355.00	0.27607
439849.00	3765355.00	0.27589
439854.00	3765355.00	0.27572
439859.00	3765355.00	0.27553
439864.00	3765355.00	0.27535

	439869.00	3765355.00	0.27515
439874.00	3765355.00	0.27495	
	439879.00	3765355.00	0.27475
439884.00	3765355.00	0.27454	
	439674.00	3765360.00	0.28318
439679.00	3765360.00	0.28316	
	439684.00	3765360.00	0.28314
439689.00	3765360.00	0.28311	
	439694.00	3765360.00	0.28308
439699.00	3765360.00	0.28305	
	439704.00	3765360.00	0.28301
439709.00	3765360.00	0.28296	
	439714.00	3765360.00	0.28292
439719.00	3765360.00	0.28287	
	439729.00	3765360.00	0.28275
439734.00	3765360.00	0.28269	
	439739.00	3765360.00	0.28262
439744.00	3765360.00	0.28256	
	439749.00	3765360.00	0.28247
439774.00	3765360.00	0.28203	
	439779.00	3765360.00	0.28193
439784.00	3765360.00	0.28183	
	439789.00	3765360.00	0.28172
439794.00	3765360.00	0.28160	
	439799.00	3765360.00	0.28148
439804.00	3765360.00	0.28135	
	439809.00	3765360.00	0.28123
439814.00	3765360.00	0.28109	
	439839.00	3765360.00	0.28035
439844.00	3765360.00	0.28018	
	439849.00	3765360.00	0.28001
439854.00	3765360.00	0.27983	
	439859.00	3765360.00	0.27966
439864.00	3765360.00	0.27947	
	439869.00	3765360.00	0.27928
439874.00	3765360.00	0.27909	
	439879.00	3765360.00	0.27888
439884.00	3765360.00	0.27868	
	439674.00	3765365.00	0.28728
439679.00	3765365.00	0.28727	
	439684.00	3765365.00	0.28725
439689.00	3765365.00	0.28723	
	439694.00	3765365.00	0.28719
439699.00	3765365.00	0.28717	
	439704.00	3765365.00	0.28713
439709.00	3765365.00	0.28709	
	439714.00	3765365.00	0.28705
439719.00	3765365.00	0.28701	
	439729.00	3765365.00	0.28690
439734.00	3765365.00	0.28684	
	439739.00	3765365.00	0.28678
439744.00	3765365.00	0.28670	

	439749.00	3765365.00	0.28664
439774.00	3765365.00	0.28621	
	439779.00	3765365.00	0.28611
439784.00	3765365.00	0.28601	
	439789.00	3765365.00	0.28590
439794.00	3765365.00	0.28579	
	439799.00	3765365.00	0.28567
439804.00	3765365.00	0.28555	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439809.00	3765365.00	0.28542
439814.00	3765365.00	0.28530
439839.00	3765365.00	0.28456
439844.00	3765365.00	0.28440
439849.00	3765365.00	0.28423
439854.00	3765365.00	0.28406
439859.00	3765365.00	0.28389
439864.00	3765365.00	0.28370
439869.00	3765365.00	0.28352
439874.00	3765365.00	0.28332
439879.00	3765365.00	0.28313
439884.00	3765365.00	0.28292
439674.00	3765370.00	0.29149
439679.00	3765370.00	0.29147
439684.00	3765370.00	0.29147
439689.00	3765370.00	0.29144
439694.00	3765370.00	0.29143
439699.00	3765370.00	0.29139
439704.00	3765370.00	0.29137
439709.00	3765370.00	0.29133

	439714.00	3765370.00	0.29129
439719.00	3765370.00	0.29124	
	439729.00	3765370.00	0.29115
439734.00	3765370.00	0.29109	
	439739.00	3765370.00	0.29103
439744.00	3765370.00	0.29097	
	439749.00	3765370.00	0.29090
439774.00	3765370.00	0.29049	
	439779.00	3765370.00	0.29040
439784.00	3765370.00	0.29029	
	439789.00	3765370.00	0.29020
439794.00	3765370.00	0.29008	
	439799.00	3765370.00	0.28997
439804.00	3765370.00	0.28985	
	439809.00	3765370.00	0.28973
439814.00	3765370.00	0.28960	
	439839.00	3765370.00	0.28889
439844.00	3765370.00	0.28874	
	439849.00	3765370.00	0.28857
439854.00	3765370.00	0.28840	
	439859.00	3765370.00	0.28823
439864.00	3765370.00	0.28805	
	439869.00	3765370.00	0.28786
439874.00	3765370.00	0.28768	
	439879.00	3765370.00	0.28747
439884.00	3765370.00	0.28728	
	439674.00	3765375.00	0.29580
439679.00	3765375.00	0.29581	
	439684.00	3765375.00	0.29579
439689.00	3765375.00	0.29578	
	439694.00	3765375.00	0.29576
439699.00	3765375.00	0.29573	
	439704.00	3765375.00	0.29571
439709.00	3765375.00	0.29568	
	439714.00	3765375.00	0.29564
439719.00	3765375.00	0.29560	
	439729.00	3765375.00	0.29551
439734.00	3765375.00	0.29547	
	439739.00	3765375.00	0.29540
439744.00	3765375.00	0.29535	
	439749.00	3765375.00	0.29527
439754.00	3765375.00	0.29522	
	439774.00	3765375.00	0.29490
439779.00	3765375.00	0.29480	
	439784.00	3765375.00	0.29470
439789.00	3765375.00	0.29460	
	439794.00	3765375.00	0.29450
439799.00	3765375.00	0.29439	
	439804.00	3765375.00	0.29427
439809.00	3765375.00	0.29416	
	439814.00	3765375.00	0.29402
439839.00	3765375.00	0.29334	

	439844.00	3765375.00	0.29317
439849.00	3765375.00	0.29303	
	439854.00	3765375.00	0.29285
439859.00	3765375.00	0.29268	
	439864.00	3765375.00	0.29250
439869.00	3765375.00	0.29233	
	439874.00	3765375.00	0.29214
439879.00	3765375.00	0.29194	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439884.00	3765375.00	0.29174
439774.00	3765380.00	0.29940
439779.00	3765380.00	0.29932
439784.00	3765380.00	0.29923
439789.00	3765380.00	0.29912
439794.00	3765380.00	0.29903
439799.00	3765380.00	0.29892
439804.00	3765380.00	0.29882
439809.00	3765380.00	0.29868
439814.00	3765380.00	0.29858
439769.00	3765385.00	0.30412
439819.00	3765385.00	0.30313
439769.00	3765400.00	0.31883
439844.00	3765400.00	0.31731
439849.00	3765400.00	0.31717
439674.00	3765405.00	0.32438
439714.00	3765405.00	0.32441
439719.00	3765405.00	0.32441
439734.00	3765405.00	0.32433
439749.00	3765405.00	0.32423

	439754.00	3765405.00	0.32418
439774.00	3765405.00	0.32395	
	439779.00	3765405.00	0.32389
439784.00	3765405.00	0.32381	
	439789.00	3765405.00	0.32373
439794.00	3765405.00	0.32365	
	439799.00	3765405.00	0.32357
439804.00	3765405.00	0.32347	
	439809.00	3765405.00	0.32337
439814.00	3765405.00	0.32328	
	439819.00	3765405.00	0.32316
439824.00	3765405.00	0.32306	
	439829.00	3765405.00	0.32294
439834.00	3765405.00	0.32282	
	439839.00	3765405.00	0.32268
439844.00	3765405.00	0.32256	
	439849.00	3765405.00	0.32242
439854.00	3765405.00	0.32227	
	439859.00	3765405.00	0.32212
439674.00	3765410.00	0.32963	
	439679.00	3765410.00	0.32966
439684.00	3765410.00	0.32967	
	439689.00	3765410.00	0.32969
439694.00	3765410.00	0.32971	
	439699.00	3765410.00	0.32970
439704.00	3765410.00	0.32972	
	439709.00	3765410.00	0.32971
439714.00	3765410.00	0.32971	
	439719.00	3765410.00	0.32969
439729.00	3765410.00	0.32966	
	439734.00	3765410.00	0.32965
439739.00	3765410.00	0.32961	
	439744.00	3765410.00	0.32959
439749.00	3765410.00	0.32954	
	439774.00	3765410.00	0.32930
439779.00	3765410.00	0.32923	
	439784.00	3765410.00	0.32916
439789.00	3765410.00	0.32909	
	439794.00	3765410.00	0.32901
439799.00	3765410.00	0.32893	
	439804.00	3765410.00	0.32884
439809.00	3765410.00	0.32876	
	439814.00	3765410.00	0.32864
439819.00	3765410.00	0.32856	
	439824.00	3765410.00	0.32844
439829.00	3765410.00	0.32834	
	439834.00	3765410.00	0.32820
439839.00	3765410.00	0.32810	
	439844.00	3765410.00	0.32795
439849.00	3765410.00	0.32783	
	439854.00	3765410.00	0.32769
439859.00	3765410.00	0.32754	

	439674.00	3765415.00	0.33505
439679.00	3765415.00	0.33507	
	439684.00	3765415.00	0.33510
439689.00	3765415.00	0.33512	
	439694.00	3765415.00	0.33513
439699.00	3765415.00	0.33515	
	439704.00	3765415.00	0.33515
439709.00	3765415.00	0.33516	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439714.00	3765415.00	0.33515
439719.00	3765415.00	0.33516
439729.00	3765415.00	0.33514
439734.00	3765415.00	0.33511
439739.00	3765415.00	0.33509
439744.00	3765415.00	0.33506
439749.00	3765415.00	0.33504
439774.00	3765415.00	0.33480
439779.00	3765415.00	0.33474
439784.00	3765415.00	0.33468
439789.00	3765415.00	0.33461
439794.00	3765415.00	0.33454
439799.00	3765415.00	0.33446
439804.00	3765415.00	0.33438
439809.00	3765415.00	0.33428
439814.00	3765415.00	0.33420
439819.00	3765415.00	0.33408
439824.00	3765415.00	0.33400
439829.00	3765415.00	0.33387
439834.00	3765415.00	0.33378

	439839.00	3765415.00	0.33364
439844.00	3765415.00	0.33353	
	439849.00	3765415.00	0.33339
439854.00	3765415.00	0.33326	
	439859.00	3765415.00	0.33311
439674.00	3765420.00	0.34062	
	439679.00	3765420.00	0.34066
439684.00	3765420.00	0.34069	
	439689.00	3765420.00	0.34071
439694.00	3765420.00	0.34074	
	439699.00	3765420.00	0.34075
439704.00	3765420.00	0.34077	
	439709.00	3765420.00	0.34077
439714.00	3765420.00	0.34079	
	439719.00	3765420.00	0.34077
439729.00	3765420.00	0.34076	
	439734.00	3765420.00	0.34075
439739.00	3765420.00	0.34073	
	439744.00	3765420.00	0.34071
439749.00	3765420.00	0.34068	
	439774.00	3765420.00	0.34048
439779.00	3765420.00	0.34042	
	439784.00	3765420.00	0.34036
439789.00	3765420.00	0.34030	
	439794.00	3765420.00	0.34023
439799.00	3765420.00	0.34016	
	439804.00	3765420.00	0.34007
439809.00	3765420.00	0.34000	
	439814.00	3765420.00	0.33989
439819.00	3765420.00	0.33981	
	439824.00	3765420.00	0.33970
439829.00	3765420.00	0.33961	
	439834.00	3765420.00	0.33948
439839.00	3765420.00	0.33939	
	439844.00	3765420.00	0.33925
439849.00	3765420.00	0.33913	
	439854.00	3765420.00	0.33900
439859.00	3765420.00	0.33886	
	439674.00	3765425.00	0.34637
439679.00	3765425.00	0.34642	
	439684.00	3765425.00	0.34645
439689.00	3765425.00	0.34649	
	439694.00	3765425.00	0.34650
439699.00	3765425.00	0.34654	
	439704.00	3765425.00	0.34655
439709.00	3765425.00	0.34657	
	439714.00	3765425.00	0.34656
439719.00	3765425.00	0.34658	
	439729.00	3765425.00	0.34658
439734.00	3765425.00	0.34656	
	439739.00	3765425.00	0.34655
439744.00	3765425.00	0.34653	

	439749.00	3765425.00	0.34651
439774.00	3765425.00	0.34633	
	439779.00	3765425.00	0.34628
439784.00	3765425.00	0.34623	
	439789.00	3765425.00	0.34615
439794.00	3765425.00	0.34610	
	439799.00	3765425.00	0.34603
439804.00	3765425.00	0.34596	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439809.00	3765425.00	0.34586
439814.00	3765425.00	0.34580
439819.00	3765425.00	0.34569
439824.00	3765425.00	0.34561
439829.00	3765425.00	0.34549
439834.00	3765425.00	0.34540
439839.00	3765425.00	0.34527
439844.00	3765425.00	0.34517
439849.00	3765425.00	0.34505
439854.00	3765425.00	0.34492
439859.00	3765425.00	0.34478
439674.00	3765430.00	0.35232
439679.00	3765430.00	0.35235
439684.00	3765430.00	0.35240
439689.00	3765430.00	0.35243
439694.00	3765430.00	0.35248
439699.00	3765430.00	0.35249
439704.00	3765430.00	0.35252
439709.00	3765430.00	0.35253
439714.00	3765430.00	0.35256

	439719.00	3765430.00	0.35255
439729.00	3765430.00	0.35256	
	439734.00	3765430.00	0.35256
439739.00	3765430.00	0.35255	
	439744.00	3765430.00	0.35254
439749.00	3765430.00	0.35252	
	439774.00	3765430.00	0.35236
439779.00	3765430.00	0.35232	
	439784.00	3765430.00	0.35226
439789.00	3765430.00	0.35222	
	439794.00	3765430.00	0.35215
439799.00	3765430.00	0.35209	
	439804.00	3765430.00	0.35201
439809.00	3765430.00	0.35195	
	439814.00	3765430.00	0.35185
439819.00	3765430.00	0.35178	
	439824.00	3765430.00	0.35168
439829.00	3765430.00	0.35160	
	439834.00	3765430.00	0.35148
439839.00	3765430.00	0.35139	
	439844.00	3765430.00	0.35126
439849.00	3765430.00	0.35115	
	439854.00	3765430.00	0.35102
439859.00	3765430.00	0.35090	
	439674.00	3765435.00	0.35843
439679.00	3765435.00	0.35849	
	439684.00	3765435.00	0.35853
439689.00	3765435.00	0.35858	
	439694.00	3765435.00	0.35861
439699.00	3765435.00	0.35865	
	439704.00	3765435.00	0.35867
439709.00	3765435.00	0.35870	
	439714.00	3765435.00	0.35871
439719.00	3765435.00	0.35874	
	439729.00	3765435.00	0.35875
439734.00	3765435.00	0.35875	
	439739.00	3765435.00	0.35875
439744.00	3765435.00	0.35874	
	439749.00	3765435.00	0.35872
439774.00	3765435.00	0.35859	
	439779.00	3765435.00	0.35855
439784.00	3765435.00	0.35851	
	439789.00	3765435.00	0.35845
439794.00	3765435.00	0.35840	
	439799.00	3765435.00	0.35834
439804.00	3765435.00	0.35828	
	439809.00	3765435.00	0.35820
439814.00	3765435.00	0.35813	
	439819.00	3765435.00	0.35804
439824.00	3765435.00	0.35797	
	439829.00	3765435.00	0.35786
439834.00	3765435.00	0.35778	

	439839.00	3765435.00	0.35766
439844.00	3765435.00	0.35756	
	439849.00	3765435.00	0.35744
439854.00	3765435.00	0.35733	
	439859.00	3765435.00	0.35720
439674.00	3765440.00	0.36477	
	439679.00	3765440.00	0.36482
439684.00	3765440.00	0.36488	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439689.00	3765440.00	0.36492
439694.00	3765440.00	0.36497
439699.00	3765440.00	0.36500
439704.00	3765440.00	0.36504
439709.00	3765440.00	0.36506
439714.00	3765440.00	0.36509
439719.00	3765440.00	0.36511
439729.00	3765440.00	0.36514
439734.00	3765440.00	0.36514
439739.00	3765440.00	0.36514
439744.00	3765440.00	0.36514
439749.00	3765440.00	0.36514
439774.00	3765440.00	0.36502
439779.00	3765440.00	0.36499
439784.00	3765440.00	0.36495
439789.00	3765440.00	0.36491
439794.00	3765440.00	0.36485
439799.00	3765440.00	0.36480
439804.00	3765440.00	0.36473
439809.00	3765440.00	0.36467

	439814.00	3765440.00	0.36459
439819.00	3765440.00	0.36453	
	439824.00	3765440.00	0.36444
439829.00	3765440.00	0.36436	
	439834.00	3765440.00	0.36425
439839.00	3765440.00	0.36417	
	439844.00	3765440.00	0.36405
439849.00	3765440.00	0.36395	
	439854.00	3765440.00	0.36383
439859.00	3765440.00	0.36372	
	439674.00	3765445.00	0.37131
439679.00	3765445.00	0.37137	
	439684.00	3765445.00	0.37142
439689.00	3765445.00	0.37148	
	439694.00	3765445.00	0.37153
439699.00	3765445.00	0.37157	
	439704.00	3765445.00	0.37161
439709.00	3765445.00	0.37165	
	439714.00	3765445.00	0.37167
439719.00	3765445.00	0.37170	
	439729.00	3765445.00	0.37174
439734.00	3765445.00	0.37175	
	439739.00	3765445.00	0.37176
439744.00	3765445.00	0.37176	
	439749.00	3765445.00	0.37176
439774.00	3765445.00	0.37168	
	439779.00	3765445.00	0.37164
439784.00	3765445.00	0.37161	
	439789.00	3765445.00	0.37157
439794.00	3765445.00	0.37153	
	439799.00	3765445.00	0.37147
439804.00	3765445.00	0.37142	
	439809.00	3765445.00	0.37135
439814.00	3765445.00	0.37129	
	439819.00	3765445.00	0.37121
439824.00	3765445.00	0.37114	
	439829.00	3765445.00	0.37105
439834.00	3765445.00	0.37097	
	439839.00	3765445.00	0.37087
439844.00	3765445.00	0.37078	
	439849.00	3765445.00	0.37066
439854.00	3765445.00	0.37056	
	439859.00	3765445.00	0.37044
439674.00	3765450.00	0.37807	
	439679.00	3765450.00	0.37814
439684.00	3765450.00	0.37820	
	439689.00	3765450.00	0.37826
439694.00	3765450.00	0.37831	
	439699.00	3765450.00	0.37836
439704.00	3765450.00	0.37841	
	439709.00	3765450.00	0.37845
439714.00	3765450.00	0.37849	

	439719.00	3765450.00	0.37852
439729.00	3765450.00	0.37857	
	439734.00	3765450.00	0.37858
439739.00	3765450.00	0.37859	
	439744.00	3765450.00	0.37860
439749.00	3765450.00	0.37861	
	439774.00	3765450.00	0.37855
439844.00	3765450.00	0.37772	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439849.00	3765450.00	0.37762
439854.00	3765450.00	0.37751
439859.00	3765450.00	0.37740
439674.00	3765455.00	0.38507
439679.00	3765455.00	0.38514
439684.00	3765455.00	0.38521
439689.00	3765455.00	0.38528
439694.00	3765455.00	0.38534
439699.00	3765455.00	0.38539
439704.00	3765455.00	0.38544
439709.00	3765455.00	0.38549
439714.00	3765455.00	0.38553
439719.00	3765455.00	0.38557
439729.00	3765455.00	0.38563
439734.00	3765455.00	0.38565
439739.00	3765455.00	0.38567
439744.00	3765455.00	0.38568
439749.00	3765455.00	0.38569
439844.00	3765455.00	0.38491
439849.00	3765455.00	0.38481

	439854.00	3765455.00	0.38471
439859.00	3765455.00	0.38460	
	439674.00	3765460.00	0.39232
439679.00	3765460.00	0.39239	
	439684.00	3765460.00	0.39247
439689.00	3765460.00	0.39254	
	439694.00	3765460.00	0.39261
439699.00	3765460.00	0.39267	
	439704.00	3765460.00	0.39273
439709.00	3765460.00	0.39278	
	439714.00	3765460.00	0.39282
439719.00	3765460.00	0.39287	
	439729.00	3765460.00	0.39295
439734.00	3765460.00	0.39297	
	439739.00	3765460.00	0.39300
439744.00	3765460.00	0.39301	
	439749.00	3765460.00	0.39303
439789.00	3765460.00	0.39297	
	439794.00	3765460.00	0.39294
439799.00	3765460.00	0.39290	
	439804.00	3765460.00	0.39286
439809.00	3765460.00	0.39282	
	439814.00	3765460.00	0.39276
439819.00	3765460.00	0.39271	
	439824.00	3765460.00	0.39264
439829.00	3765460.00	0.39258	
	439844.00	3765460.00	0.39234
439849.00	3765460.00	0.39225	
	439854.00	3765460.00	0.39216
439859.00	3765460.00	0.39205	
	439674.00	3765465.00	0.39982
439679.00	3765465.00	0.39991	
	439684.00	3765465.00	0.39999
439689.00	3765465.00	0.40007	
	439694.00	3765465.00	0.40014
439699.00	3765465.00	0.40021	
	439704.00	3765465.00	0.40027
439709.00	3765465.00	0.40033	
	439714.00	3765465.00	0.40039
439719.00	3765465.00	0.40043	
	439729.00	3765465.00	0.40052
439734.00	3765465.00	0.40056	
	439739.00	3765465.00	0.40058
439744.00	3765465.00	0.40061	
	439749.00	3765465.00	0.40062
439789.00	3765465.00	0.40061	
	439794.00	3765465.00	0.40059
439799.00	3765465.00	0.40056	
	439804.00	3765465.00	0.40052
439809.00	3765465.00	0.40048	
	439814.00	3765465.00	0.40044
439819.00	3765465.00	0.40038	

	439824.00	3765465.00	0.40033
439829.00	3765465.00	0.40026	
	439844.00	3765465.00	0.40004
439849.00	3765465.00	0.39996	
	439854.00	3765465.00	0.39987
439859.00	3765465.00	0.39978	
	439674.00	3765470.00	0.40762
439679.00	3765470.00	0.40770	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439684.00	3765470.00	0.40780
439689.00	3765470.00	0.40787
439694.00	3765470.00	0.40796
439699.00	3765470.00	0.40803
439704.00	3765470.00	0.40810
439709.00	3765470.00	0.40816
439714.00	3765470.00	0.40822
439719.00	3765470.00	0.40828
439729.00	3765470.00	0.40838
439734.00	3765470.00	0.40841
439739.00	3765470.00	0.40845
439744.00	3765470.00	0.40848
439749.00	3765470.00	0.40852
439789.00	3765470.00	0.40854
439794.00	3765470.00	0.40852
439799.00	3765470.00	0.40849
439804.00	3765470.00	0.40847
439809.00	3765470.00	0.40843
439814.00	3765470.00	0.40839
439819.00	3765470.00	0.40834

	439824.00	3765470.00	0.40829
439829.00	3765470.00	0.40823	
	439844.00	3765470.00	0.40803
439849.00	3765470.00	0.40795	
	439854.00	3765470.00	0.40787
439859.00	3765470.00	0.40777	
	439674.00	3765475.00	0.41568
439679.00	3765475.00	0.41579	
	439684.00	3765475.00	0.41587
439689.00	3765475.00	0.41598	
	439694.00	3765475.00	0.41605
439699.00	3765475.00	0.41614	
	439704.00	3765475.00	0.41621
439709.00	3765475.00	0.41629	
	439714.00	3765475.00	0.41635
439719.00	3765475.00	0.41642	
	439729.00	3765475.00	0.41652
439734.00	3765475.00	0.41657	
	439739.00	3765475.00	0.41661
439744.00	3765475.00	0.41665	
	439749.00	3765475.00	0.41668
439754.00	3765475.00	0.41671	
	439789.00	3765475.00	0.41676
439794.00	3765475.00	0.41675	
	439799.00	3765475.00	0.41673
439804.00	3765475.00	0.41670	
	439809.00	3765475.00	0.41668
439814.00	3765475.00	0.41664	
	439819.00	3765475.00	0.41660
439824.00	3765475.00	0.41656	
	439829.00	3765475.00	0.41650
439269.00	3764900.00	0.11272	
	439369.00	3764900.00	0.11327
439469.00	3764900.00	0.11287	
	439569.00	3764900.00	0.11148
439669.00	3764900.00	0.10909	
	439769.00	3764900.00	0.10568
439869.00	3764900.00	0.10126	
	439969.00	3764900.00	0.09589
440069.00	3764900.00	0.08965	
	440169.00	3764900.00	0.08276
440269.00	3764900.00	0.07557	
	439269.00	3765000.00	0.13139
439369.00	3765000.00	0.13256	
	439469.00	3765000.00	0.13262
439569.00	3765000.00	0.13157	
	439669.00	3765000.00	0.12939
439769.00	3765000.00	0.12601	
	439869.00	3765000.00	0.12135
439969.00	3765000.00	0.11538	
	440069.00	3765000.00	0.10815
440169.00	3765000.00	0.09983	

	440269.00	3765000.00	0.09079
439269.00	3765100.00	0.15545	
	439369.00	3765100.00	0.15738
439469.00	3765100.00	0.15803	
	439569.00	3765100.00	0.15747
439669.00	3765100.00	0.15566	
	439769.00	3765100.00	0.15251
439869.00	3765100.00	0.14786	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439969.00	3765100.00	0.14152
440069.00	3765100.00	0.13338
440169.00	3765100.00	0.12349
440269.00	3765100.00	0.11214
439269.00	3765200.00	0.18773
439369.00	3765200.00	0.19063
439469.00	3765200.00	0.19207
439569.00	3765200.00	0.19216
439669.00	3765200.00	0.19092
439769.00	3765200.00	0.18826
439869.00	3765200.00	0.18395
439969.00	3765200.00	0.17767
440069.00	3765200.00	0.16900
440169.00	3765200.00	0.15761
440269.00	3765200.00	0.14351
439269.00	3765300.00	0.23357
439369.00	3765300.00	0.23782
439469.00	3765300.00	0.24036
439569.00	3765300.00	0.24142
439669.00	3765300.00	0.24107

	439769.00	3765300.00	0.23926
439869.00	3765300.00	0.23572	
	439969.00	3765300.00	0.23002
440069.00	3765300.00	0.22147	
	440169.00	3765300.00	0.20915
440269.00	3765300.00	0.19223	
	439269.00	3765400.00	0.30461
439369.00	3765400.00	0.31095	
	439469.00	3765400.00	0.31533
439569.00	3765400.00	0.31805	
	439669.00	3765400.00	0.31926
439769.00	3765400.00	0.31883	
	439869.00	3765400.00	0.31655
439969.00	3765400.00	0.31197	
	440069.00	3765400.00	0.30429
440169.00	3765400.00	0.29215	
	440269.00	3765400.00	0.27341
439269.00	3765500.00	0.43248	
	439369.00	3765500.00	0.44306
439469.00	3765500.00	0.45116	
	439569.00	3765500.00	0.45706
439669.00	3765500.00	0.46098	
	439769.00	3765500.00	0.46288
439869.00	3765500.00	0.46261	
	439969.00	3765500.00	0.45986
440069.00	3765500.00	0.45390	
	440169.00	3765500.00	0.44334
440269.00	3765500.00	0.42515	
	439269.00	3765600.00	0.75084
439369.00	3765600.00	0.77243	
	439469.00	3765600.00	0.78930
439569.00	3765600.00	0.80230	
	439669.00	3765600.00	0.81192
439769.00	3765600.00	0.81854	
	439869.00	3765600.00	0.82228
439969.00	3765600.00	0.82306	
	440069.00	3765600.00	0.82052
440169.00	3765600.00	0.81381	
	440269.00	3765600.00	0.79979
439269.00	3765700.00	4.13462	
	439369.00	3765700.00	4.32925
439469.00	3765700.00	4.52490	
	439569.00	3765700.00	4.72540
439669.00	3765700.00	4.86807	
	439769.00	3765700.00	4.98531
439869.00	3765700.00	5.05422	
	439969.00	3765700.00	5.11092
440069.00	3765700.00	5.16995	
	440169.00	3765700.00	5.20211
440269.00	3765700.00	5.23339	
	439269.00	3765800.00	1.80341
439369.00	3765800.00	1.88088	

	439469.00	3765800.00	1.92794
439569.00	3765800.00	1.95799	
	439669.00	3765800.00	1.97776
439769.00	3765800.00	1.99076	
	439869.00	3765800.00	1.99870
439969.00	3765800.00	2.00254	
	440069.00	3765800.00	2.00199
440169.00	3765800.00	1.99518	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
440269.00	3765800.00	1.97689
439269.00	3765900.00	0.56991
439369.00	3765900.00	0.65615
439469.00	3765900.00	0.71994
439569.00	3765900.00	0.76676
439669.00	3765900.00	0.80139
439769.00	3765900.00	0.82715
439869.00	3765900.00	0.84626
439969.00	3765900.00	0.86007
440069.00	3765900.00	0.86937
440169.00	3765900.00	0.87429
440269.00	3765900.00	0.87445
439649.00	3765310.00	0.24747
439679.00	3765310.00	0.24721
439709.00	3765310.00	0.24681
439739.00	3765310.00	0.24628
439769.00	3765310.00	0.24560
439799.00	3765310.00	0.24477
439829.00	3765310.00	0.24377
439859.00	3765310.00	0.24260

	439889.00	3765310.00	0.24124
439649.00	3765340.00	0.26788	
	439679.00	3765340.00	0.26774
439709.00	3765340.00	0.26746	
	439739.00	3765340.00	0.26703
439769.00	3765340.00	0.26646	
	439799.00	3765340.00	0.26573
439829.00	3765340.00	0.26483	
	439859.00	3765340.00	0.26376
439889.00	3765340.00	0.26249	
	439649.00	3765370.00	0.29149
439679.00	3765370.00	0.29147	
	439709.00	3765370.00	0.29133
439739.00	3765370.00	0.29103	
	439769.00	3765370.00	0.29058
439799.00	3765370.00	0.28997	
	439829.00	3765370.00	0.28919
439859.00	3765370.00	0.28823	
	439889.00	3765370.00	0.28707
439649.00	3765400.00	0.31915	
	439679.00	3765400.00	0.31929
439709.00	3765400.00	0.31930	
	439739.00	3765400.00	0.31914
439769.00	3765400.00	0.31883	
	439799.00	3765400.00	0.31835
439829.00	3765400.00	0.31770	
	439859.00	3765400.00	0.31687
439889.00	3765400.00	0.31584	
	439649.00	3765430.00	0.35203
439679.00	3765430.00	0.35235	
	439709.00	3765430.00	0.35253
439739.00	3765430.00	0.35255	
	439769.00	3765430.00	0.35241
439799.00	3765430.00	0.35209	
	439829.00	3765430.00	0.35160
439859.00	3765430.00	0.35090	
	439889.00	3765430.00	0.34999
439649.00	3765460.00	0.39185	
	439679.00	3765460.00	0.39239
439709.00	3765460.00	0.39278	
	439739.00	3765460.00	0.39300
439769.00	3765460.00	0.39304	
	439799.00	3765460.00	0.39290
439829.00	3765460.00	0.39258	
	439859.00	3765460.00	0.39205
439889.00	3765460.00	0.39132	
	439649.00	3765490.00	0.44118
439679.00	3765490.00	0.44199	
	439709.00	3765490.00	0.44261
439739.00	3765490.00	0.44305	
	439769.00	3765490.00	0.44333
439799.00	3765490.00	0.44341	

	439829.00	3765490.00	0.44329
439859.00	3765490.00	0.44297	
	439889.00	3765490.00	0.44242

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439674.00	3765310.00	0.07741
439679.00	3765310.00	0.07746
439684.00	3765310.00	0.07751
439689.00	3765310.00	0.07755
439694.00	3765310.00	0.07759
439699.00	3765310.00	0.07762
439704.00	3765310.00	0.07766
439709.00	3765310.00	0.07769
439714.00	3765310.00	0.07772
439719.00	3765310.00	0.07774
439729.00	3765310.00	0.07778
439734.00	3765310.00	0.07780
439739.00	3765310.00	0.07781
439744.00	3765310.00	0.07782
439749.00	3765310.00	0.07782
439764.00	3765310.00	0.07782
439769.00	3765310.00	0.07781
439774.00	3765310.00	0.07780

	439779.00	3765310.00	0.07779
439784.00	3765310.00	0.07777	
	439789.00	3765310.00	0.07774
439794.00	3765310.00	0.07771	
	439799.00	3765310.00	0.07768
439804.00	3765310.00	0.07764	
	439809.00	3765310.00	0.07760
439814.00	3765310.00	0.07755	
	439819.00	3765310.00	0.07750
439824.00	3765310.00	0.07744	
	439829.00	3765310.00	0.07738
439839.00	3765310.00	0.07724	
	439844.00	3765310.00	0.07715
439849.00	3765310.00	0.07707	
	439854.00	3765310.00	0.07698
439859.00	3765310.00	0.07688	
	439864.00	3765310.00	0.07677
439869.00	3765310.00	0.07666	
	439874.00	3765310.00	0.07654
439879.00	3765310.00	0.07642	
	439884.00	3765310.00	0.07629
439674.00	3765315.00	0.07860	
	439679.00	3765315.00	0.07865
439684.00	3765315.00	0.07870	
	439689.00	3765315.00	0.07874
439694.00	3765315.00	0.07878	
	439699.00	3765315.00	0.07882
439704.00	3765315.00	0.07885	
	439709.00	3765315.00	0.07889
439714.00	3765315.00	0.07891	
	439719.00	3765315.00	0.07894
439729.00	3765315.00	0.07898	
	439734.00	3765315.00	0.07900
439739.00	3765315.00	0.07902	
	439744.00	3765315.00	0.07903
439749.00	3765315.00	0.07904	
	439764.00	3765315.00	0.07904
439769.00	3765315.00	0.07904	
	439774.00	3765315.00	0.07903
439779.00	3765315.00	0.07902	
	439784.00	3765315.00	0.07900
439789.00	3765315.00	0.07898	
	439794.00	3765315.00	0.07895
439799.00	3765315.00	0.07892	
	439804.00	3765315.00	0.07889
439809.00	3765315.00	0.07885	
	439814.00	3765315.00	0.07880
439819.00	3765315.00	0.07876	
	439824.00	3765315.00	0.07870
439829.00	3765315.00	0.07864	
	439839.00	3765315.00	0.07850
439844.00	3765315.00	0.07843	

	439849.00	3765315.00	0.07834
439854.00	3765315.00	0.07825	
	439859.00	3765315.00	0.07816
439864.00	3765315.00	0.07805	
	439869.00	3765315.00	0.07795
439874.00	3765315.00	0.07783	
	439879.00	3765315.00	0.07771
439884.00	3765315.00	0.07758	
	439674.00	3765320.00	0.07981
439679.00	3765320.00	0.07986	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439684.00	3765320.00	0.07991
439689.00	3765320.00	0.07996
439694.00	3765320.00	0.08000
439699.00	3765320.00	0.08004
439704.00	3765320.00	0.08008
439709.00	3765320.00	0.08011
439714.00	3765320.00	0.08014
439719.00	3765320.00	0.08017
439729.00	3765320.00	0.08022
439734.00	3765320.00	0.08024
439739.00	3765320.00	0.08025
439744.00	3765320.00	0.08027
439749.00	3765320.00	0.08028
439764.00	3765320.00	0.08029
439769.00	3765320.00	0.08029
439774.00	3765320.00	0.08028
439779.00	3765320.00	0.08027
439784.00	3765320.00	0.08026

	439789.00	3765320.00	0.08024
439794.00	3765320.00	0.08022	
	439799.00	3765320.00	0.08020
439804.00	3765320.00	0.08016	
	439809.00	3765320.00	0.08013
439814.00	3765320.00	0.08009	
	439819.00	3765320.00	0.08004
439824.00	3765320.00	0.07999	
	439829.00	3765320.00	0.07993
439839.00	3765320.00	0.07980	
	439844.00	3765320.00	0.07973
439849.00	3765320.00	0.07965	
	439854.00	3765320.00	0.07956
439859.00	3765320.00	0.07947	
	439864.00	3765320.00	0.07937
439869.00	3765320.00	0.07926	
	439874.00	3765320.00	0.07915
439879.00	3765320.00	0.07903	
	439884.00	3765320.00	0.07891
439674.00	3765325.00	0.08105	
	439679.00	3765325.00	0.08111
439684.00	3765325.00	0.08115	
	439689.00	3765325.00	0.08120
439694.00	3765325.00	0.08125	
	439699.00	3765325.00	0.08129
439704.00	3765325.00	0.08133	
	439709.00	3765325.00	0.08136
439714.00	3765325.00	0.08140	
	439719.00	3765325.00	0.08143
439729.00	3765325.00	0.08148	
	439734.00	3765325.00	0.08150
439739.00	3765325.00	0.08152	
	439744.00	3765325.00	0.08154
439749.00	3765325.00	0.08155	
	439754.00	3765325.00	0.08156
439769.00	3765325.00	0.08157	
	439774.00	3765325.00	0.08157
439779.00	3765325.00	0.08156	
	439784.00	3765325.00	0.08155
439789.00	3765325.00	0.08154	
	439794.00	3765325.00	0.08152
439799.00	3765325.00	0.08150	
	439804.00	3765325.00	0.08147
439809.00	3765325.00	0.08144	
	439814.00	3765325.00	0.08140
439819.00	3765325.00	0.08136	
	439824.00	3765325.00	0.08131
439829.00	3765325.00	0.08126	
	439839.00	3765325.00	0.08113
439844.00	3765325.00	0.08106	
	439849.00	3765325.00	0.08098
439854.00	3765325.00	0.08090	

	439859.00	3765325.00	0.08081
439864.00	3765325.00	0.08072	
	439869.00	3765325.00	0.08061
439874.00	3765325.00	0.08051	
	439879.00	3765325.00	0.08039
439884.00	3765325.00	0.08027	
	439674.00	3765330.00	0.08233
439679.00	3765330.00	0.08238	
	439684.00	3765330.00	0.08243
439689.00	3765330.00	0.08248	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439694.00	3765330.00	0.08253
439699.00	3765330.00	0.08257
439704.00	3765330.00	0.08261
439709.00	3765330.00	0.08265
439714.00	3765330.00	0.08268
439719.00	3765330.00	0.08272
439729.00	3765330.00	0.08277
439734.00	3765330.00	0.08280
439739.00	3765330.00	0.08282
439744.00	3765330.00	0.08284
439749.00	3765330.00	0.08285
439754.00	3765330.00	0.08287
439774.00	3765330.00	0.08289
439779.00	3765330.00	0.08288
439784.00	3765330.00	0.08288
439789.00	3765330.00	0.08287
439794.00	3765330.00	0.08285
439799.00	3765330.00	0.08283

	439804.00	3765330.00	0.08281
439809.00	3765330.00	0.08278	
	439814.00	3765330.00	0.08274
439819.00	3765330.00	0.08271	
	439824.00	3765330.00	0.08266
439829.00	3765330.00	0.08261	
	439839.00	3765330.00	0.08250
439844.00	3765330.00	0.08243	
	439849.00	3765330.00	0.08236
439854.00	3765330.00	0.08228	
	439859.00	3765330.00	0.08219
439864.00	3765330.00	0.08210	
	439869.00	3765330.00	0.08200
439874.00	3765330.00	0.08189	
	439879.00	3765330.00	0.08178
439884.00	3765330.00	0.08166	
	439674.00	3765335.00	0.08363
439679.00	3765335.00	0.08369	
	439684.00	3765335.00	0.08374
439689.00	3765335.00	0.08380	
	439694.00	3765335.00	0.08384
439699.00	3765335.00	0.08389	
	439704.00	3765335.00	0.08393
439709.00	3765335.00	0.08397	
	439714.00	3765335.00	0.08401
439719.00	3765335.00	0.08404	
	439729.00	3765335.00	0.08410
439734.00	3765335.00	0.08413	
	439739.00	3765335.00	0.08415
439744.00	3765335.00	0.08417	
	439749.00	3765335.00	0.08419
439774.00	3765335.00	0.08424	
	439779.00	3765335.00	0.08424
439784.00	3765335.00	0.08424	
	439789.00	3765335.00	0.08423
439794.00	3765335.00	0.08421	
	439839.00	3765335.00	0.08390
439844.00	3765335.00	0.08383	
	439849.00	3765335.00	0.08376
439854.00	3765335.00	0.08369	
	439859.00	3765335.00	0.08361
439864.00	3765335.00	0.08352	
	439869.00	3765335.00	0.08342
439874.00	3765335.00	0.08332	
	439879.00	3765335.00	0.08321
439884.00	3765335.00	0.08309	
	439674.00	3765340.00	0.08497
439679.00	3765340.00	0.08503	
	439684.00	3765340.00	0.08509
439689.00	3765340.00	0.08514	
	439694.00	3765340.00	0.08519
439699.00	3765340.00	0.08524	

	439704.00	3765340.00	0.08528
439709.00	3765340.00	0.08532	
	439714.00	3765340.00	0.08536
439719.00	3765340.00	0.08540	
	439729.00	3765340.00	0.08546
439734.00	3765340.00	0.08549	
	439739.00	3765340.00	0.08552
439744.00	3765340.00	0.08554	
	439749.00	3765340.00	0.08556
439774.00	3765340.00	0.08562	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439779.00	3765340.00	0.08562
439784.00	3765340.00	0.08562
439789.00	3765340.00	0.08562
439794.00	3765340.00	0.08561
439839.00	3765340.00	0.08533
439844.00	3765340.00	0.08527
439849.00	3765340.00	0.08521
439854.00	3765340.00	0.08514
439859.00	3765340.00	0.08506
439864.00	3765340.00	0.08497
439869.00	3765340.00	0.08488
439874.00	3765340.00	0.08478
439879.00	3765340.00	0.08468
439884.00	3765340.00	0.08456
439674.00	3765345.00	0.08635
439679.00	3765345.00	0.08641
439684.00	3765345.00	0.08647
439689.00	3765345.00	0.08652

	439694.00	3765345.00	0.08657
439699.00	3765345.00	0.08662	
	439704.00	3765345.00	0.08667
439709.00	3765345.00	0.08671	
	439714.00	3765345.00	0.08675
439719.00	3765345.00	0.08679	
	439729.00	3765345.00	0.08686
439734.00	3765345.00	0.08689	
	439739.00	3765345.00	0.08692
439744.00	3765345.00	0.08694	
	439749.00	3765345.00	0.08697
439774.00	3765345.00	0.08704	
	439779.00	3765345.00	0.08705
439784.00	3765345.00	0.08705	
	439789.00	3765345.00	0.08705
439794.00	3765345.00	0.08705	
	439839.00	3765345.00	0.08680
439844.00	3765345.00	0.08675	
	439849.00	3765345.00	0.08669
439854.00	3765345.00	0.08662	
	439859.00	3765345.00	0.08655
439864.00	3765345.00	0.08647	
	439869.00	3765345.00	0.08638
439874.00	3765345.00	0.08629	
	439879.00	3765345.00	0.08618
439884.00	3765345.00	0.08607	
	439674.00	3765350.00	0.08777
439679.00	3765350.00	0.08783	
	439684.00	3765350.00	0.08789
439689.00	3765350.00	0.08794	
	439694.00	3765350.00	0.08799
439699.00	3765350.00	0.08804	
	439704.00	3765350.00	0.08809
439709.00	3765350.00	0.08814	
	439714.00	3765350.00	0.08818
439719.00	3765350.00	0.08822	
	439729.00	3765350.00	0.08829
439734.00	3765350.00	0.08832	
	439739.00	3765350.00	0.08835
439744.00	3765350.00	0.08838	
	439749.00	3765350.00	0.08840
439774.00	3765350.00	0.08850	
	439779.00	3765350.00	0.08851
439784.00	3765350.00	0.08851	
	439789.00	3765350.00	0.08852
439794.00	3765350.00	0.08852	
	439839.00	3765350.00	0.08832
439844.00	3765350.00	0.08827	
	439849.00	3765350.00	0.08821
439854.00	3765350.00	0.08815	
	439859.00	3765350.00	0.08808
439864.00	3765350.00	0.08800	

	439869.00	3765350.00	0.08792
439874.00	3765350.00	0.08783	
	439879.00	3765350.00	0.08773
439884.00	3765350.00	0.08763	
	439674.00	3765355.00	0.08922
439679.00	3765355.00	0.08928	
	439684.00	3765355.00	0.08934
439689.00	3765355.00	0.08940	
	439694.00	3765355.00	0.08945
439699.00	3765355.00	0.08951	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439704.00	3765355.00	0.08956
439709.00	3765355.00	0.08960
439714.00	3765355.00	0.08964
439719.00	3765355.00	0.08969
439729.00	3765355.00	0.08976
439734.00	3765355.00	0.08980
439739.00	3765355.00	0.08983
439744.00	3765355.00	0.08986
439749.00	3765355.00	0.08989
439774.00	3765355.00	0.08999
439779.00	3765355.00	0.09001
439784.00	3765355.00	0.09002
439789.00	3765355.00	0.09002
439794.00	3765355.00	0.09003
439839.00	3765355.00	0.08987
439844.00	3765355.00	0.08983
439849.00	3765355.00	0.08977
439854.00	3765355.00	0.08972

	439859.00	3765355.00	0.08965
439864.00	3765355.00	0.08958	
	439869.00	3765355.00	0.08950
439874.00	3765355.00	0.08942	
	439879.00	3765355.00	0.08932
439884.00	3765355.00	0.08922	
	439674.00	3765360.00	0.09071
439679.00	3765360.00	0.09078	
	439684.00	3765360.00	0.09084
439689.00	3765360.00	0.09090	
	439694.00	3765360.00	0.09096
439699.00	3765360.00	0.09101	
	439704.00	3765360.00	0.09106
439709.00	3765360.00	0.09111	
	439714.00	3765360.00	0.09115
439719.00	3765360.00	0.09119	
	439729.00	3765360.00	0.09127
439734.00	3765360.00	0.09131	
	439739.00	3765360.00	0.09134
439744.00	3765360.00	0.09138	
	439749.00	3765360.00	0.09141
439774.00	3765360.00	0.09153	
	439779.00	3765360.00	0.09154
439784.00	3765360.00	0.09156	
	439789.00	3765360.00	0.09157
439794.00	3765360.00	0.09158	
	439799.00	3765360.00	0.09158
439804.00	3765360.00	0.09158	
	439809.00	3765360.00	0.09158
439814.00	3765360.00	0.09157	
	439839.00	3765360.00	0.09146
439844.00	3765360.00	0.09142	
	439849.00	3765360.00	0.09138
439854.00	3765360.00	0.09133	
	439859.00	3765360.00	0.09127
439864.00	3765360.00	0.09120	
	439869.00	3765360.00	0.09113
439874.00	3765360.00	0.09105	
	439879.00	3765360.00	0.09096
439884.00	3765360.00	0.09086	
	439674.00	3765365.00	0.09225
439679.00	3765365.00	0.09232	
	439684.00	3765365.00	0.09238
439689.00	3765365.00	0.09244	
	439694.00	3765365.00	0.09250
439699.00	3765365.00	0.09255	
	439704.00	3765365.00	0.09260
439709.00	3765365.00	0.09265	
	439714.00	3765365.00	0.09270
439719.00	3765365.00	0.09274	
	439729.00	3765365.00	0.09282
439734.00	3765365.00	0.09286	

	439739.00	3765365.00	0.09290
439744.00	3765365.00	0.09293	
	439749.00	3765365.00	0.09297
439774.00	3765365.00	0.09310	
	439779.00	3765365.00	0.09312
439784.00	3765365.00	0.09314	
	439789.00	3765365.00	0.09316
439794.00	3765365.00	0.09317	
	439799.00	3765365.00	0.09318
439804.00	3765365.00	0.09318	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439809.00	3765365.00	0.09319
439814.00	3765365.00	0.09318
439839.00	3765365.00	0.09310
439844.00	3765365.00	0.09307
439849.00	3765365.00	0.09303
439854.00	3765365.00	0.09298
439859.00	3765365.00	0.09293
439864.00	3765365.00	0.09287
439869.00	3765365.00	0.09280
439874.00	3765365.00	0.09273
439879.00	3765365.00	0.09264
439884.00	3765365.00	0.09255
439674.00	3765370.00	0.09383
439679.00	3765370.00	0.09390
439684.00	3765370.00	0.09397
439689.00	3765370.00	0.09403
439694.00	3765370.00	0.09409
439699.00	3765370.00	0.09414

	439704.00	3765370.00	0.09419
439709.00	3765370.00	0.09424	
	439714.00	3765370.00	0.09429
439719.00	3765370.00	0.09434	
	439729.00	3765370.00	0.09442
439734.00	3765370.00	0.09446	
	439739.00	3765370.00	0.09450
439744.00	3765370.00	0.09454	
	439749.00	3765370.00	0.09457
439774.00	3765370.00	0.09472	
	439779.00	3765370.00	0.09474
439784.00	3765370.00	0.09477	
	439789.00	3765370.00	0.09478
439794.00	3765370.00	0.09480	
	439799.00	3765370.00	0.09482
439804.00	3765370.00	0.09483	
	439809.00	3765370.00	0.09484
439814.00	3765370.00	0.09484	
	439839.00	3765370.00	0.09479
439844.00	3765370.00	0.09476	
	439849.00	3765370.00	0.09472
439854.00	3765370.00	0.09469	
	439859.00	3765370.00	0.09464
439864.00	3765370.00	0.09458	
	439869.00	3765370.00	0.09452
439874.00	3765370.00	0.09445	
	439879.00	3765370.00	0.09437
439884.00	3765370.00	0.09429	
	439674.00	3765375.00	0.09546
439679.00	3765375.00	0.09553	
	439684.00	3765375.00	0.09560
439689.00	3765375.00	0.09566	
	439694.00	3765375.00	0.09572
439699.00	3765375.00	0.09578	
	439704.00	3765375.00	0.09583
439709.00	3765375.00	0.09588	
	439714.00	3765375.00	0.09593
439719.00	3765375.00	0.09597	
	439729.00	3765375.00	0.09606
439734.00	3765375.00	0.09611	
	439739.00	3765375.00	0.09615
439744.00	3765375.00	0.09618	
	439749.00	3765375.00	0.09622
439754.00	3765375.00	0.09625	
	439774.00	3765375.00	0.09638
439779.00	3765375.00	0.09641	
	439784.00	3765375.00	0.09644
439789.00	3765375.00	0.09646	
	439794.00	3765375.00	0.09648
439799.00	3765375.00	0.09650	
	439804.00	3765375.00	0.09652
439809.00	3765375.00	0.09653	

	439814.00	3765375.00	0.09654
439839.00	3765375.00	0.09652	
	439844.00	3765375.00	0.09650
439849.00	3765375.00	0.09647	
	439854.00	3765375.00	0.09644
439859.00	3765375.00	0.09640	
	439864.00	3765375.00	0.09635
439869.00	3765375.00	0.09629	
	439874.00	3765375.00	0.09623
439879.00	3765375.00	0.09616	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
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 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439884.00	3765375.00	0.09608
439774.00	3765380.00	0.09809
439779.00	3765380.00	0.09813
439784.00	3765380.00	0.09815
439789.00	3765380.00	0.09818
439794.00	3765380.00	0.09821
439799.00	3765380.00	0.09823
439804.00	3765380.00	0.09825
439809.00	3765380.00	0.09827
439814.00	3765380.00	0.09829
439769.00	3765385.00	0.09982
439819.00	3765385.00	0.10011
439769.00	3765400.00	0.10541
439844.00	3765400.00	0.10599
439849.00	3765400.00	0.10600
439674.00	3765405.00	0.10636
439714.00	3765405.00	0.10686
439719.00	3765405.00	0.10692

	439734.00	3765405.00	0.10706
439749.00	3765405.00	0.10720	
	439754.00	3765405.00	0.10725
439774.00	3765405.00	0.10744	
	439779.00	3765405.00	0.10749
439784.00	3765405.00	0.10754	
	439789.00	3765405.00	0.10759
439794.00	3765405.00	0.10764	
	439799.00	3765405.00	0.10769
439804.00	3765405.00	0.10774	
	439809.00	3765405.00	0.10778
439814.00	3765405.00	0.10783	
	439819.00	3765405.00	0.10788
439824.00	3765405.00	0.10792	
	439829.00	3765405.00	0.10797
439834.00	3765405.00	0.10800	
	439839.00	3765405.00	0.10804
439844.00	3765405.00	0.10807	
	439849.00	3765405.00	0.10809
439854.00	3765405.00	0.10811	
	439859.00	3765405.00	0.10812
439674.00	3765410.00	0.10839	
	439679.00	3765410.00	0.10847
439684.00	3765410.00	0.10854	
	439689.00	3765410.00	0.10861
439694.00	3765410.00	0.10867	
	439699.00	3765410.00	0.10873
439704.00	3765410.00	0.10879	
	439709.00	3765410.00	0.10885
439714.00	3765410.00	0.10890	
	439719.00	3765410.00	0.10895
439729.00	3765410.00	0.10905	
	439734.00	3765410.00	0.10910
439739.00	3765410.00	0.10914	
	439744.00	3765410.00	0.10919
439749.00	3765410.00	0.10924	
	439774.00	3765410.00	0.10948
439779.00	3765410.00	0.10954	
	439784.00	3765410.00	0.10959
439789.00	3765410.00	0.10964	
	439794.00	3765410.00	0.10970
439799.00	3765410.00	0.10975	
	439804.00	3765410.00	0.10981
439809.00	3765410.00	0.10987	
	439814.00	3765410.00	0.10992
439819.00	3765410.00	0.10997	
	439824.00	3765410.00	0.11003
439829.00	3765410.00	0.11008	
	439834.00	3765410.00	0.11012
439839.00	3765410.00	0.11017	
	439844.00	3765410.00	0.11021
439849.00	3765410.00	0.11024	

	439854.00	3765410.00	0.11027
439859.00	3765410.00	0.11029	
	439674.00	3765415.00	0.11049
439679.00	3765415.00	0.11057	
	439684.00	3765415.00	0.11064
439689.00	3765415.00	0.11071	
	439694.00	3765415.00	0.11077
439699.00	3765415.00	0.11083	
	439704.00	3765415.00	0.11089
439709.00	3765415.00	0.11095	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439714.00	3765415.00	0.11100
439719.00	3765415.00	0.11105
439729.00	3765415.00	0.11115
439734.00	3765415.00	0.11120
439739.00	3765415.00	0.11125
439744.00	3765415.00	0.11129
439749.00	3765415.00	0.11134
439774.00	3765415.00	0.11160
439779.00	3765415.00	0.11165
439784.00	3765415.00	0.11171
439789.00	3765415.00	0.11177
439794.00	3765415.00	0.11183
439799.00	3765415.00	0.11189
439804.00	3765415.00	0.11195
439809.00	3765415.00	0.11201
439814.00	3765415.00	0.11207
439819.00	3765415.00	0.11214
439824.00	3765415.00	0.11220

	439829.00	3765415.00	0.11226
439834.00	3765415.00	0.11231	
	439839.00	3765415.00	0.11237
439844.00	3765415.00	0.11242	
	439849.00	3765415.00	0.11246
439854.00	3765415.00	0.11250	
	439859.00	3765415.00	0.11254
439674.00	3765420.00	0.11266	
	439679.00	3765420.00	0.11274
439684.00	3765420.00	0.11282	
	439689.00	3765420.00	0.11288
439694.00	3765420.00	0.11295	
	439699.00	3765420.00	0.11301
439704.00	3765420.00	0.11307	
	439709.00	3765420.00	0.11312
439714.00	3765420.00	0.11317	
	439719.00	3765420.00	0.11323
439729.00	3765420.00	0.11332	
	439734.00	3765420.00	0.11337
439739.00	3765420.00	0.11342	
	439744.00	3765420.00	0.11347
439749.00	3765420.00	0.11352	
	439774.00	3765420.00	0.11378
439779.00	3765420.00	0.11384	
	439784.00	3765420.00	0.11390
439789.00	3765420.00	0.11396	
	439794.00	3765420.00	0.11403
439799.00	3765420.00	0.11409	
	439804.00	3765420.00	0.11416
439809.00	3765420.00	0.11423	
	439814.00	3765420.00	0.11430
439819.00	3765420.00	0.11437	
	439824.00	3765420.00	0.11444
439829.00	3765420.00	0.11451	
	439834.00	3765420.00	0.11457
439839.00	3765420.00	0.11464	
	439844.00	3765420.00	0.11470
439849.00	3765420.00	0.11476	
	439854.00	3765420.00	0.11481
439859.00	3765420.00	0.11485	
	439674.00	3765425.00	0.11491
439679.00	3765425.00	0.11499	
	439684.00	3765425.00	0.11507
439689.00	3765425.00	0.11514	
	439694.00	3765425.00	0.11520
439699.00	3765425.00	0.11526	
	439704.00	3765425.00	0.11532
439709.00	3765425.00	0.11538	
	439714.00	3765425.00	0.11543
439719.00	3765425.00	0.11548	
	439729.00	3765425.00	0.11558
439734.00	3765425.00	0.11562	

	439739.00	3765425.00	0.11567
439744.00	3765425.00	0.11572	
	439749.00	3765425.00	0.11577
439774.00	3765425.00	0.11604	
	439779.00	3765425.00	0.11610
439784.00	3765425.00	0.11616	
	439789.00	3765425.00	0.11622
439794.00	3765425.00	0.11630	
	439799.00	3765425.00	0.11637
439804.00	3765425.00	0.11644	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439809.00	3765425.00	0.11652
439814.00	3765425.00	0.11660
439819.00	3765425.00	0.11667
439824.00	3765425.00	0.11675
439829.00	3765425.00	0.11683
439834.00	3765425.00	0.11691
439839.00	3765425.00	0.11699
439844.00	3765425.00	0.11706
439849.00	3765425.00	0.11713
439854.00	3765425.00	0.11719
439859.00	3765425.00	0.11725
439674.00	3765430.00	0.11724
439679.00	3765430.00	0.11733
439684.00	3765430.00	0.11740
439689.00	3765430.00	0.11747
439694.00	3765430.00	0.11754
439699.00	3765430.00	0.11760
439704.00	3765430.00	0.11766

	439709.00	3765430.00	0.11771
439714.00	3765430.00	0.11776	
	439719.00	3765430.00	0.11781
439729.00	3765430.00	0.11791	
	439734.00	3765430.00	0.11796
439739.00	3765430.00	0.11800	
	439744.00	3765430.00	0.11805
439749.00	3765430.00	0.11810	
	439774.00	3765430.00	0.11837
439779.00	3765430.00	0.11843	
	439784.00	3765430.00	0.11850
439789.00	3765430.00	0.11857	
	439794.00	3765430.00	0.11865
439799.00	3765430.00	0.11872	
	439804.00	3765430.00	0.11880
439809.00	3765430.00	0.11889	
	439814.00	3765430.00	0.11897
439819.00	3765430.00	0.11906	
	439824.00	3765430.00	0.11915
439829.00	3765430.00	0.11924	
	439834.00	3765430.00	0.11933
439839.00	3765430.00	0.11941	
	439844.00	3765430.00	0.11950
439849.00	3765430.00	0.11958	
	439854.00	3765430.00	0.11966
439859.00	3765430.00	0.11973	
	439674.00	3765435.00	0.11967
439679.00	3765435.00	0.11974	
	439684.00	3765435.00	0.11982
439689.00	3765435.00	0.11989	
	439694.00	3765435.00	0.11996
439699.00	3765435.00	0.12002	
	439704.00	3765435.00	0.12008
439709.00	3765435.00	0.12013	
	439714.00	3765435.00	0.12018
439719.00	3765435.00	0.12023	
	439729.00	3765435.00	0.12033
439734.00	3765435.00	0.12037	
	439739.00	3765435.00	0.12042
439744.00	3765435.00	0.12047	
	439749.00	3765435.00	0.12051
439774.00	3765435.00	0.12079	
	439779.00	3765435.00	0.12086
439784.00	3765435.00	0.12093	
	439789.00	3765435.00	0.12100
439794.00	3765435.00	0.12107	
	439799.00	3765435.00	0.12116
439804.00	3765435.00	0.12124	
	439809.00	3765435.00	0.12133
439814.00	3765435.00	0.12143	
	439819.00	3765435.00	0.12152
439824.00	3765435.00	0.12162	

	439829.00	3765435.00	0.12172
439834.00	3765435.00	0.12182	
	439839.00	3765435.00	0.12192
439844.00	3765435.00	0.12203	
	439849.00	3765435.00	0.12212
439854.00	3765435.00	0.12221	
	439859.00	3765435.00	0.12230
439674.00	3765440.00	0.12217	
	439679.00	3765440.00	0.12226
439684.00	3765440.00	0.12233	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439689.00	3765440.00	0.12240
439694.00	3765440.00	0.12247
439699.00	3765440.00	0.12253
439704.00	3765440.00	0.12259
439709.00	3765440.00	0.12265
439714.00	3765440.00	0.12269
439719.00	3765440.00	0.12274
439729.00	3765440.00	0.12284
439734.00	3765440.00	0.12288
439739.00	3765440.00	0.12293
439744.00	3765440.00	0.12297
439749.00	3765440.00	0.12302
439774.00	3765440.00	0.12330
439779.00	3765440.00	0.12337
439784.00	3765440.00	0.12344
439789.00	3765440.00	0.12351
439794.00	3765440.00	0.12360
439799.00	3765440.00	0.12368

	439804.00	3765440.00	0.12377
439809.00	3765440.00	0.12387	
	439814.00	3765440.00	0.12397
439819.00	3765440.00	0.12408	
	439824.00	3765440.00	0.12419
439829.00	3765440.00	0.12430	
	439834.00	3765440.00	0.12441
439839.00	3765440.00	0.12452	
	439844.00	3765440.00	0.12464
439849.00	3765440.00	0.12475	
	439854.00	3765440.00	0.12486
439859.00	3765440.00	0.12496	
	439674.00	3765445.00	0.12478
439679.00	3765445.00	0.12487	
	439684.00	3765445.00	0.12494
439689.00	3765445.00	0.12502	
	439694.00	3765445.00	0.12508
439699.00	3765445.00	0.12514	
	439704.00	3765445.00	0.12520
439709.00	3765445.00	0.12525	
	439714.00	3765445.00	0.12530
439719.00	3765445.00	0.12535	
	439729.00	3765445.00	0.12545
439734.00	3765445.00	0.12549	
	439739.00	3765445.00	0.12553
439744.00	3765445.00	0.12558	
	439749.00	3765445.00	0.12562
439774.00	3765445.00	0.12590	
	439779.00	3765445.00	0.12597
439784.00	3765445.00	0.12604	
	439789.00	3765445.00	0.12612
439794.00	3765445.00	0.12621	
	439799.00	3765445.00	0.12630
439804.00	3765445.00	0.12640	
	439809.00	3765445.00	0.12650
439814.00	3765445.00	0.12661	
	439819.00	3765445.00	0.12672
439824.00	3765445.00	0.12684	
	439829.00	3765445.00	0.12696
439834.00	3765445.00	0.12709	
	439839.00	3765445.00	0.12722
439844.00	3765445.00	0.12735	
	439849.00	3765445.00	0.12747
439854.00	3765445.00	0.12760	
	439859.00	3765445.00	0.12772
439674.00	3765450.00	0.12749	
	439679.00	3765450.00	0.12758
439684.00	3765450.00	0.12766	
	439689.00	3765450.00	0.12773
439694.00	3765450.00	0.12780	
	439699.00	3765450.00	0.12786
439704.00	3765450.00	0.12792	

	439709.00	3765450.00	0.12797
439714.00	3765450.00	0.12802	
	439719.00	3765450.00	0.12807
439729.00	3765450.00	0.12815	
	439734.00	3765450.00	0.12820
439739.00	3765450.00	0.12824	
	439744.00	3765450.00	0.12829
439749.00	3765450.00	0.12833	
	439774.00	3765450.00	0.12861
439844.00	3765450.00	0.13015	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439849.00	3765450.00	0.13030
439854.00	3765450.00	0.13044
439859.00	3765450.00	0.13059
439674.00	3765455.00	0.13031
439679.00	3765455.00	0.13040
439684.00	3765455.00	0.13048
439689.00	3765455.00	0.13055
439694.00	3765455.00	0.13062
439699.00	3765455.00	0.13068
439704.00	3765455.00	0.13074
439709.00	3765455.00	0.13079
439714.00	3765455.00	0.13084
439719.00	3765455.00	0.13089
439729.00	3765455.00	0.13098
439734.00	3765455.00	0.13102
439739.00	3765455.00	0.13106
439744.00	3765455.00	0.13110
439749.00	3765455.00	0.13115

	439844.00	3765455.00	0.13307
439849.00	3765455.00	0.13323	
	439854.00	3765455.00	0.13340
439859.00	3765455.00	0.13356	
	439674.00	3765460.00	0.13324
439679.00	3765460.00	0.13333	
	439684.00	3765460.00	0.13342
439689.00	3765460.00	0.13349	
	439694.00	3765460.00	0.13356
439699.00	3765460.00	0.13362	
	439704.00	3765460.00	0.13368
439709.00	3765460.00	0.13374	
	439714.00	3765460.00	0.13379
439719.00	3765460.00	0.13383	
	439729.00	3765460.00	0.13392
439734.00	3765460.00	0.13396	
	439739.00	3765460.00	0.13400
439744.00	3765460.00	0.13404	
	439749.00	3765460.00	0.13408
439789.00	3765460.00	0.13457	
	439794.00	3765460.00	0.13467
439799.00	3765460.00	0.13477	
	439804.00	3765460.00	0.13488
439809.00	3765460.00	0.13500	
	439814.00	3765460.00	0.13513
439819.00	3765460.00	0.13527	
	439824.00	3765460.00	0.13542
439829.00	3765460.00	0.13558	
	439844.00	3765460.00	0.13610
439849.00	3765460.00	0.13628	
	439854.00	3765460.00	0.13646
439859.00	3765460.00	0.13665	
	439674.00	3765465.00	0.13630
439679.00	3765465.00	0.13639	
	439684.00	3765465.00	0.13648
439689.00	3765465.00	0.13656	
	439694.00	3765465.00	0.13663
439699.00	3765465.00	0.13669	
	439704.00	3765465.00	0.13675
439709.00	3765465.00	0.13680	
	439714.00	3765465.00	0.13685
439719.00	3765465.00	0.13690	
	439729.00	3765465.00	0.13698
439734.00	3765465.00	0.13702	
	439739.00	3765465.00	0.13706
439744.00	3765465.00	0.13710	
	439749.00	3765465.00	0.13714
439789.00	3765465.00	0.13763	
	439794.00	3765465.00	0.13772
439799.00	3765465.00	0.13783	
	439804.00	3765465.00	0.13794
439809.00	3765465.00	0.13807	

	439814.00	3765465.00	0.13820
439819.00	3765465.00	0.13835	
	439824.00	3765465.00	0.13851
439829.00	3765465.00	0.13868	
	439844.00	3765465.00	0.13924
439849.00	3765465.00	0.13945	
	439854.00	3765465.00	0.13965
439859.00	3765465.00	0.13986	
	439674.00	3765470.00	0.13949
439679.00	3765470.00	0.13958	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439684.00	3765470.00	0.13967
439689.00	3765470.00	0.13975
439694.00	3765470.00	0.13982
439699.00	3765470.00	0.13989
439704.00	3765470.00	0.13995
439709.00	3765470.00	0.14000
439714.00	3765470.00	0.14006
439719.00	3765470.00	0.14010
439729.00	3765470.00	0.14019
439734.00	3765470.00	0.14022
439739.00	3765470.00	0.14026
439744.00	3765470.00	0.14030
439749.00	3765470.00	0.14034
439789.00	3765470.00	0.14081
439794.00	3765470.00	0.14091
439799.00	3765470.00	0.14101
439804.00	3765470.00	0.14113
439809.00	3765470.00	0.14126

	439814.00	3765470.00	0.14140
439819.00	3765470.00	0.14156	
	439824.00	3765470.00	0.14173
439829.00	3765470.00	0.14191	
	439844.00	3765470.00	0.14252
439849.00	3765470.00	0.14274	
	439854.00	3765470.00	0.14297
439859.00	3765470.00	0.14320	
	439674.00	3765475.00	0.14281
439679.00	3765475.00	0.14291	
	439684.00	3765475.00	0.14301
439689.00	3765475.00	0.14309	
	439694.00	3765475.00	0.14316
439699.00	3765475.00	0.14323	
	439704.00	3765475.00	0.14329
439709.00	3765475.00	0.14335	
	439714.00	3765475.00	0.14340
439719.00	3765475.00	0.14345	
	439729.00	3765475.00	0.14353
439734.00	3765475.00	0.14357	
	439739.00	3765475.00	0.14361
439744.00	3765475.00	0.14364	
	439749.00	3765475.00	0.14368
439754.00	3765475.00	0.14372	
	439789.00	3765475.00	0.14414
439794.00	3765475.00	0.14423	
	439799.00	3765475.00	0.14434
439804.00	3765475.00	0.14446	
	439809.00	3765475.00	0.14459
439814.00	3765475.00	0.14474	
	439819.00	3765475.00	0.14490
439824.00	3765475.00	0.14508	
	439829.00	3765475.00	0.14527
439269.00	3764900.00	0.02871	
	439369.00	3764900.00	0.02965
439469.00	3764900.00	0.03007	
	439569.00	3764900.00	0.02997
439669.00	3764900.00	0.02936	
	439769.00	3764900.00	0.02825
439869.00	3764900.00	0.02670	
	439969.00	3764900.00	0.02480
440069.00	3764900.00	0.02267	
	440169.00	3764900.00	0.02047
440269.00	3764900.00	0.01834	
	439269.00	3765000.00	0.03348
439369.00	3765000.00	0.03513	
	439469.00	3765000.00	0.03608
439569.00	3765000.00	0.03634	
	439669.00	3765000.00	0.03593
439769.00	3765000.00	0.03485	
	439869.00	3765000.00	0.03307
439969.00	3765000.00	0.03069	

	440069.00	3765000.00	0.02789
440169.00	3765000.00	0.02491	
	440269.00	3765000.00	0.02202
439269.00	3765100.00	0.03935	
	439369.00	3765100.00	0.04212
439469.00	3765100.00	0.04392	
	439569.00	3765100.00	0.04477
439669.00	3765100.00	0.04478	
	439769.00	3765100.00	0.04390
439869.00	3765100.00	0.04196	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439969.00	3765100.00	0.03903
440069.00	3765100.00	0.03532
440169.00	3765100.00	0.03121
440269.00	3765100.00	0.02717
439269.00	3765200.00	0.04669
439369.00	3765200.00	0.05136
439469.00	3765200.00	0.05458
439569.00	3765200.00	0.05639
439669.00	3765200.00	0.05707
439769.00	3765200.00	0.05666
439869.00	3765200.00	0.05479
439969.00	3765200.00	0.05135
440069.00	3765200.00	0.04650
440169.00	3765200.00	0.04076
440269.00	3765200.00	0.03486
439269.00	3765300.00	0.05587
439369.00	3765300.00	0.06414
439469.00	3765300.00	0.07002

	439569.00	3765300.00	0.07344
439669.00	3765300.00	0.07509	
	439769.00	3765300.00	0.07545
439869.00	3765300.00	0.07419	
	439969.00	3765300.00	0.07058
440069.00	3765300.00	0.06450	
	440169.00	3765300.00	0.05647
440269.00	3765300.00	0.04748	
	439269.00	3765400.00	0.06689
439369.00	3765400.00	0.08264	
	439469.00	3765400.00	0.09448
439569.00	3765400.00	0.10132	
	439669.00	3765400.00	0.10432
439769.00	3765400.00	0.10541	
	439869.00	3765400.00	0.10599
439969.00	3765400.00	0.10352	
	440069.00	3765400.00	0.09656
440169.00	3765400.00	0.08558	
	440269.00	3765400.00	0.07127
439269.00	3765500.00	0.07824	
	439369.00	3765500.00	0.11065
439469.00	3765500.00	0.13891	
	439569.00	3765500.00	0.15530
439669.00	3765500.00	0.16175	
	439769.00	3765500.00	0.16314
439869.00	3765500.00	0.16744	
	439969.00	3765500.00	0.17292
440069.00	3765500.00	0.16606	
	440169.00	3765500.00	0.15023
440269.00	3765500.00	0.12670	
	439269.00	3765600.00	0.08414
439369.00	3765600.00	0.15237	
	439469.00	3765600.00	0.24745
439569.00	3765600.00	0.30313	
	439669.00	3765600.00	0.33142
439769.00	3765600.00	0.35795	
	439869.00	3765600.00	0.37055
439969.00	3765600.00	0.46849	
	440069.00	3765600.00	0.43901
440169.00	3765600.00	0.38301	
	440269.00	3765600.00	0.32391
439269.00	3765700.00	0.07478	
	439369.00	3765700.00	0.18371
439469.00	3765700.00	2.55756	
	439569.00	3765700.00	2.83983
439669.00	3765700.00	1.80797	
	439769.00	3765700.00	1.29619
439869.00	3765700.00	0.85891	
	439969.00	3765700.00	0.65175
440069.00	3765700.00	0.98812	
	440169.00	3765700.00	1.56800
440269.00	3765700.00	2.78830	

	439269.00	3765800.00		0.05166
439369.00	3765800.00		0.09184	
	439469.00	3765800.00		0.25257
439569.00	3765800.00		0.55015	
	439669.00	3765800.00		0.82529
439769.00	3765800.00		1.25365	
	439869.00	3765800.00		2.19339
439969.00	3765800.00		0.83984	
	440069.00	3765800.00		0.53479
440169.00	3765800.00		0.45632	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
440269.00	3765800.00	0.45448
439269.00	3765900.00	0.03428
439369.00	3765900.00	0.04726
439469.00	3765900.00	0.06963
439569.00	3765900.00	0.10866
439669.00	3765900.00	0.16257
439769.00	3765900.00	0.22134
439869.00	3765900.00	0.27263
439969.00	3765900.00	0.29388
440069.00	3765900.00	0.27249
440169.00	3765900.00	0.24334
440269.00	3765900.00	0.22600
439649.00	3765310.00	0.07713
439679.00	3765310.00	0.07746
439709.00	3765310.00	0.07769
439739.00	3765310.00	0.07781
439769.00	3765310.00	0.07781
439799.00	3765310.00	0.07768

	439829.00	3765310.00	0.07738
439859.00	3765310.00	0.07688	
	439889.00	3765310.00	0.07616
439649.00	3765340.00	0.08463	
	439679.00	3765340.00	0.08503
439709.00	3765340.00	0.08532	
	439739.00	3765340.00	0.08552
439769.00	3765340.00	0.08562	
	439799.00	3765340.00	0.08560
439829.00	3765340.00	0.08543	
	439859.00	3765340.00	0.08506
439889.00	3765340.00	0.08444	
	439649.00	3765370.00	0.09343
439679.00	3765370.00	0.09390	
	439709.00	3765370.00	0.09424
439739.00	3765370.00	0.09450	
	439769.00	3765370.00	0.09469
439799.00	3765370.00	0.09482	
	439829.00	3765370.00	0.09482
439859.00	3765370.00	0.09464	
	439889.00	3765370.00	0.09420
439649.00	3765400.00	0.10395	
	439679.00	3765400.00	0.10447
439709.00	3765400.00	0.10484	
	439739.00	3765400.00	0.10514
439769.00	3765400.00	0.10541	
	439799.00	3765400.00	0.10568
439829.00	3765400.00	0.10592	
	439859.00	3765400.00	0.10601
439889.00	3765400.00	0.10584	
	439649.00	3765430.00	0.11674
439679.00	3765430.00	0.11733	
	439709.00	3765430.00	0.11771
439739.00	3765430.00	0.11800	
	439769.00	3765430.00	0.11831
439799.00	3765430.00	0.11872	
	439829.00	3765430.00	0.11924
439859.00	3765430.00	0.11973	
	439889.00	3765430.00	0.12001
439649.00	3765460.00	0.13266	
	439679.00	3765460.00	0.13333
439709.00	3765460.00	0.13374	
	439739.00	3765460.00	0.13400
439769.00	3765460.00	0.13428	
	439799.00	3765460.00	0.13477
439829.00	3765460.00	0.13558	
	439859.00	3765460.00	0.13665
439889.00	3765460.00	0.13764	
	439649.00	3765490.00	0.15297
439679.00	3765490.00	0.15384	
	439709.00	3765490.00	0.15435
439739.00	3765490.00	0.15462	

	439769.00	3765490.00	0.15484
439799.00	3765490.00	0.15529	
	439829.00	3765490.00	0.15630
439859.00	3765490.00	0.15807	
	439889.00	3765490.00	0.16025

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*

INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439674.00	3765310.00	0.14832
439679.00	3765310.00	0.14829
439684.00	3765310.00	0.14826
439689.00	3765310.00	0.14824
439694.00	3765310.00	0.14820
439699.00	3765310.00	0.14817
439704.00	3765310.00	0.14813
439709.00	3765310.00	0.14809
439714.00	3765310.00	0.14805
439719.00	3765310.00	0.14800
439729.00	3765310.00	0.14790
439734.00	3765310.00	0.14785
439739.00	3765310.00	0.14780
439744.00	3765310.00	0.14774
439749.00	3765310.00	0.14768
439764.00	3765310.00	0.14749
439769.00	3765310.00	0.14742
439774.00	3765310.00	0.14735
439779.00	3765310.00	0.14727
439784.00	3765310.00	0.14719

	439789.00	3765310.00	0.14711
439794.00	3765310.00	0.14703	
	439799.00	3765310.00	0.14695
439804.00	3765310.00	0.14686	
	439809.00	3765310.00	0.14677
439814.00	3765310.00	0.14667	
	439819.00	3765310.00	0.14658
439824.00	3765310.00	0.14648	
	439829.00	3765310.00	0.14637
439839.00	3765310.00	0.14616	
	439844.00	3765310.00	0.14605
439849.00	3765310.00	0.14593	
	439854.00	3765310.00	0.14582
439859.00	3765310.00	0.14570	
	439864.00	3765310.00	0.14557
439869.00	3765310.00	0.14545	
	439874.00	3765310.00	0.14531
439879.00	3765310.00	0.14518	
	439884.00	3765310.00	0.14504
439674.00	3765315.00	0.15028	
	439679.00	3765315.00	0.15026
439684.00	3765315.00	0.15023	
	439689.00	3765315.00	0.15020
439694.00	3765315.00	0.15017	
	439699.00	3765315.00	0.15014
439704.00	3765315.00	0.15010	
	439709.00	3765315.00	0.15006
439714.00	3765315.00	0.15002	
	439719.00	3765315.00	0.14998
439729.00	3765315.00	0.14988	
	439734.00	3765315.00	0.14983
439739.00	3765315.00	0.14978	
	439744.00	3765315.00	0.14973
439749.00	3765315.00	0.14967	
	439764.00	3765315.00	0.14948
439769.00	3765315.00	0.14941	
	439774.00	3765315.00	0.14934
439779.00	3765315.00	0.14927	
	439784.00	3765315.00	0.14919
439789.00	3765315.00	0.14911	
	439794.00	3765315.00	0.14903
439799.00	3765315.00	0.14895	
	439804.00	3765315.00	0.14886
439809.00	3765315.00	0.14877	
	439814.00	3765315.00	0.14868
439819.00	3765315.00	0.14859	
	439824.00	3765315.00	0.14849
439829.00	3765315.00	0.14839	
	439839.00	3765315.00	0.14818
439844.00	3765315.00	0.14807	
	439849.00	3765315.00	0.14796
439854.00	3765315.00	0.14784	

	439859.00	3765315.00	0.14772
439864.00	3765315.00	0.14760	
	439869.00	3765315.00	0.14747
439874.00	3765315.00	0.14734	
	439879.00	3765315.00	0.14721
439884.00	3765315.00	0.14708	
	439674.00	3765320.00	0.15229
439679.00	3765320.00	0.15226	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*

INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439684.00	3765320.00	0.15224
439689.00	3765320.00	0.15221
439694.00	3765320.00	0.15218
439699.00	3765320.00	0.15215
439704.00	3765320.00	0.15212
439709.00	3765320.00	0.15208
439714.00	3765320.00	0.15204
439719.00	3765320.00	0.15200
439729.00	3765320.00	0.15191
439734.00	3765320.00	0.15186
439739.00	3765320.00	0.15181
439744.00	3765320.00	0.15176
439749.00	3765320.00	0.15170
439764.00	3765320.00	0.15152
439769.00	3765320.00	0.15145
439774.00	3765320.00	0.15138
439779.00	3765320.00	0.15131
439784.00	3765320.00	0.15124
439789.00	3765320.00	0.15116
439794.00	3765320.00	0.15108

	439799.00	3765320.00	0.15100
439804.00	3765320.00	0.15092	
	439809.00	3765320.00	0.15083
439814.00	3765320.00	0.15074	
	439819.00	3765320.00	0.15065
439824.00	3765320.00	0.15055	
	439829.00	3765320.00	0.15045
439839.00	3765320.00	0.15024	
	439844.00	3765320.00	0.15014
439849.00	3765320.00	0.15003	
	439854.00	3765320.00	0.14991
439859.00	3765320.00	0.14979	
	439864.00	3765320.00	0.14967
439869.00	3765320.00	0.14955	
	439874.00	3765320.00	0.14942
439879.00	3765320.00	0.14929	
	439884.00	3765320.00	0.14916
439674.00	3765325.00	0.15434	
	439679.00	3765325.00	0.15432
439684.00	3765325.00	0.15429	
	439689.00	3765325.00	0.15427
439694.00	3765325.00	0.15424	
	439699.00	3765325.00	0.15421
439704.00	3765325.00	0.15418	
	439709.00	3765325.00	0.15415
439714.00	3765325.00	0.15411	
	439719.00	3765325.00	0.15407
439729.00	3765325.00	0.15398	
	439734.00	3765325.00	0.15394
439739.00	3765325.00	0.15389	
	439744.00	3765325.00	0.15384
439749.00	3765325.00	0.15378	
	439754.00	3765325.00	0.15373
439769.00	3765325.00	0.15354	
	439774.00	3765325.00	0.15347
439779.00	3765325.00	0.15341	
	439784.00	3765325.00	0.15333
439789.00	3765325.00	0.15326	
	439794.00	3765325.00	0.15318
439799.00	3765325.00	0.15310	
	439804.00	3765325.00	0.15302
439809.00	3765325.00	0.15293	
	439814.00	3765325.00	0.15284
439819.00	3765325.00	0.15275	
	439824.00	3765325.00	0.15266
439829.00	3765325.00	0.15256	
	439839.00	3765325.00	0.15236
439844.00	3765325.00	0.15225	
	439849.00	3765325.00	0.15214
439854.00	3765325.00	0.15203	
	439859.00	3765325.00	0.15191
439864.00	3765325.00	0.15179	

	439869.00	3765325.00	0.15167
439874.00	3765325.00	0.15155	
	439879.00	3765325.00	0.15142
439884.00	3765325.00	0.15128	
	439674.00	3765330.00	0.15644
439679.00	3765330.00	0.15642	
	439684.00	3765330.00	0.15640
439689.00	3765330.00	0.15638	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*

INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439694.00	3765330.00	0.15635
439699.00	3765330.00	0.15632
439704.00	3765330.00	0.15629
439709.00	3765330.00	0.15626
439714.00	3765330.00	0.15623
439719.00	3765330.00	0.15619
439729.00	3765330.00	0.15611
439734.00	3765330.00	0.15606
439739.00	3765330.00	0.15602
439744.00	3765330.00	0.15597
439749.00	3765330.00	0.15591
439754.00	3765330.00	0.15586
439774.00	3765330.00	0.15562
439779.00	3765330.00	0.15555
439784.00	3765330.00	0.15548
439789.00	3765330.00	0.15541
439794.00	3765330.00	0.15533
439799.00	3765330.00	0.15525
439804.00	3765330.00	0.15517
439809.00	3765330.00	0.15509

	439814.00	3765330.00	0.15500
439819.00	3765330.00	0.15491	
	439824.00	3765330.00	0.15482
439829.00	3765330.00	0.15472	
	439839.00	3765330.00	0.15452
439844.00	3765330.00	0.15442	
	439849.00	3765330.00	0.15431
439854.00	3765330.00	0.15420	
	439859.00	3765330.00	0.15408
439864.00	3765330.00	0.15397	
	439869.00	3765330.00	0.15385
439874.00	3765330.00	0.15372	
	439879.00	3765330.00	0.15360
439884.00	3765330.00	0.15347	
	439674.00	3765335.00	0.15859
439679.00	3765335.00	0.15858	
	439684.00	3765335.00	0.15856
439689.00	3765335.00	0.15854	
	439694.00	3765335.00	0.15851
439699.00	3765335.00	0.15849	
	439704.00	3765335.00	0.15846
439709.00	3765335.00	0.15843	
	439714.00	3765335.00	0.15840
439719.00	3765335.00	0.15836	
	439729.00	3765335.00	0.15828
439734.00	3765335.00	0.15824	
	439739.00	3765335.00	0.15819
439744.00	3765335.00	0.15815	
	439749.00	3765335.00	0.15810
439774.00	3765335.00	0.15781	
	439779.00	3765335.00	0.15774
439784.00	3765335.00	0.15767	
	439789.00	3765335.00	0.15760
439794.00	3765335.00	0.15753	
	439839.00	3765335.00	0.15674
439844.00	3765335.00	0.15663	
	439849.00	3765335.00	0.15653
439854.00	3765335.00	0.15642	
	439859.00	3765335.00	0.15631
439864.00	3765335.00	0.15619	
	439869.00	3765335.00	0.15608
439874.00	3765335.00	0.15595	
	439879.00	3765335.00	0.15583
439884.00	3765335.00	0.15570	
	439674.00	3765340.00	0.16080
439679.00	3765340.00	0.16078	
	439684.00	3765340.00	0.16077
439689.00	3765340.00	0.16075	
	439694.00	3765340.00	0.16073
439699.00	3765340.00	0.16070	
	439704.00	3765340.00	0.16068
439709.00	3765340.00	0.16065	

	439714.00	3765340.00	0.16062
439719.00	3765340.00	0.16058	
	439729.00	3765340.00	0.16051
439734.00	3765340.00	0.16047	
	439739.00	3765340.00	0.16043
439744.00	3765340.00	0.16038	
	439749.00	3765340.00	0.16033
439774.00	3765340.00	0.16005	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*

INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439779.00	3765340.00	0.15999
439784.00	3765340.00	0.15992
439789.00	3765340.00	0.15986
439794.00	3765340.00	0.15978
439839.00	3765340.00	0.15901
439844.00	3765340.00	0.15891
439849.00	3765340.00	0.15880
439854.00	3765340.00	0.15870
439859.00	3765340.00	0.15859
439864.00	3765340.00	0.15847
439869.00	3765340.00	0.15836
439874.00	3765340.00	0.15823
439879.00	3765340.00	0.15811
439884.00	3765340.00	0.15798
439674.00	3765345.00	0.16306
439679.00	3765345.00	0.16305
439684.00	3765345.00	0.16303
439689.00	3765345.00	0.16301
439694.00	3765345.00	0.16300
439699.00	3765345.00	0.16297

	439704.00	3765345.00	0.16295
439709.00	3765345.00	0.16292	
	439714.00	3765345.00	0.16289
439719.00	3765345.00	0.16286	
	439729.00	3765345.00	0.16279
439734.00	3765345.00	0.16276	
	439739.00	3765345.00	0.16272
439744.00	3765345.00	0.16267	
	439749.00	3765345.00	0.16263
439774.00	3765345.00	0.16236	
	439779.00	3765345.00	0.16230
439784.00	3765345.00	0.16223	
	439789.00	3765345.00	0.16216
439794.00	3765345.00	0.16209	
	439839.00	3765345.00	0.16134
439844.00	3765345.00	0.16124	
	439849.00	3765345.00	0.16113
439854.00	3765345.00	0.16103	
	439859.00	3765345.00	0.16092
439864.00	3765345.00	0.16081	
	439869.00	3765345.00	0.16069
439874.00	3765345.00	0.16058	
	439879.00	3765345.00	0.16045
439884.00	3765345.00	0.16033	
	439674.00	3765350.00	0.16537
439679.00	3765350.00	0.16537	
	439684.00	3765350.00	0.16535
439689.00	3765350.00	0.16534	
	439694.00	3765350.00	0.16532
439699.00	3765350.00	0.16530	
	439704.00	3765350.00	0.16528
439709.00	3765350.00	0.16526	
	439714.00	3765350.00	0.16523
439719.00	3765350.00	0.16520	
	439729.00	3765350.00	0.16513
439734.00	3765350.00	0.16510	
	439739.00	3765350.00	0.16506
439744.00	3765350.00	0.16502	
	439749.00	3765350.00	0.16497
439774.00	3765350.00	0.16472	
	439779.00	3765350.00	0.16466
439784.00	3765350.00	0.16460	
	439789.00	3765350.00	0.16453
439794.00	3765350.00	0.16446	
	439839.00	3765350.00	0.16372
439844.00	3765350.00	0.16362	
	439849.00	3765350.00	0.16353
439854.00	3765350.00	0.16342	
	439859.00	3765350.00	0.16332
439864.00	3765350.00	0.16320	
	439869.00	3765350.00	0.16309
439874.00	3765350.00	0.16297	

	439879.00	3765350.00	0.16286
439884.00	3765350.00	0.16273	
	439674.00	3765355.00	0.16775
439679.00	3765355.00	0.16774	
	439684.00	3765355.00	0.16773
439689.00	3765355.00	0.16772	
	439694.00	3765355.00	0.16771
439699.00	3765355.00	0.16769	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*

INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439704.00	3765355.00	0.16767
439709.00	3765355.00	0.16765
439714.00	3765355.00	0.16762
439719.00	3765355.00	0.16760
439729.00	3765355.00	0.16754
439734.00	3765355.00	0.16750
439739.00	3765355.00	0.16747
439744.00	3765355.00	0.16743
439749.00	3765355.00	0.16739
439774.00	3765355.00	0.16714
439779.00	3765355.00	0.16708
439784.00	3765355.00	0.16702
439789.00	3765355.00	0.16696
439794.00	3765355.00	0.16689
439839.00	3765355.00	0.16617
439844.00	3765355.00	0.16608
439849.00	3765355.00	0.16597
439854.00	3765355.00	0.16588
439859.00	3765355.00	0.16577
439864.00	3765355.00	0.16566

	439869.00	3765355.00	0.16555
439874.00	3765355.00	0.16543	
	439879.00	3765355.00	0.16532
439884.00	3765355.00	0.16519	
	439674.00	3765360.00	0.17019
439679.00	3765360.00	0.17018	
	439684.00	3765360.00	0.17017
439689.00	3765360.00	0.17017	
	439694.00	3765360.00	0.17015
439699.00	3765360.00	0.17014	
	439704.00	3765360.00	0.17012
439709.00	3765360.00	0.17010	
	439714.00	3765360.00	0.17008
439719.00	3765360.00	0.17005	
	439729.00	3765360.00	0.17000
439734.00	3765360.00	0.16997	
	439739.00	3765360.00	0.16993
439744.00	3765360.00	0.16990	
	439749.00	3765360.00	0.16985
439774.00	3765360.00	0.16962	
	439779.00	3765360.00	0.16956
439784.00	3765360.00	0.16951	
	439789.00	3765360.00	0.16945
439794.00	3765360.00	0.16938	
	439799.00	3765360.00	0.16932
439804.00	3765360.00	0.16924	
	439809.00	3765360.00	0.16918
439814.00	3765360.00	0.16910	
	439839.00	3765360.00	0.16868
439844.00	3765360.00	0.16858	
	439849.00	3765360.00	0.16849
439854.00	3765360.00	0.16839	
	439859.00	3765360.00	0.16829
439864.00	3765360.00	0.16818	
	439869.00	3765360.00	0.16807
439874.00	3765360.00	0.16796	
	439879.00	3765360.00	0.16784
439884.00	3765360.00	0.16772	
	439674.00	3765365.00	0.17269
439679.00	3765365.00	0.17269	
	439684.00	3765365.00	0.17268
439689.00	3765365.00	0.17268	
	439694.00	3765365.00	0.17266
439699.00	3765365.00	0.17265	
	439704.00	3765365.00	0.17264
439709.00	3765365.00	0.17262	
	439714.00	3765365.00	0.17260
439719.00	3765365.00	0.17258	
	439729.00	3765365.00	0.17253
439734.00	3765365.00	0.17250	
	439739.00	3765365.00	0.17247
439744.00	3765365.00	0.17243	

	439749.00	3765365.00	0.17239
439774.00	3765365.00	0.17217	
	439779.00	3765365.00	0.17211
439784.00	3765365.00	0.17206	
	439789.00	3765365.00	0.17200
439794.00	3765365.00	0.17194	
	439799.00	3765365.00	0.17187
439804.00	3765365.00	0.17181	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*

INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439809.00	3765365.00	0.17173
439814.00	3765365.00	0.17167
439839.00	3765365.00	0.17125
439844.00	3765365.00	0.17116
439849.00	3765365.00	0.17107
439854.00	3765365.00	0.17097
439859.00	3765365.00	0.17087
439864.00	3765365.00	0.17076
439869.00	3765365.00	0.17066
439874.00	3765365.00	0.17054
439879.00	3765365.00	0.17044
439884.00	3765365.00	0.17031
439674.00	3765370.00	0.17526
439679.00	3765370.00	0.17526
439684.00	3765370.00	0.17526
439689.00	3765370.00	0.17525
439694.00	3765370.00	0.17524
439699.00	3765370.00	0.17523
439704.00	3765370.00	0.17522
439709.00	3765370.00	0.17521

	439714.00	3765370.00	0.17519
439719.00	3765370.00	0.17517	
	439729.00	3765370.00	0.17512
439734.00	3765370.00	0.17509	
	439739.00	3765370.00	0.17506
439744.00	3765370.00	0.17503	
	439749.00	3765370.00	0.17500
439774.00	3765370.00	0.17478	
	439779.00	3765370.00	0.17473
439784.00	3765370.00	0.17468	
	439789.00	3765370.00	0.17462
439794.00	3765370.00	0.17456	
	439799.00	3765370.00	0.17450
439804.00	3765370.00	0.17444	
	439809.00	3765370.00	0.17437
439814.00	3765370.00	0.17430	
	439839.00	3765370.00	0.17390
439844.00	3765370.00	0.17381	
	439849.00	3765370.00	0.17371
439854.00	3765370.00	0.17362	
	439859.00	3765370.00	0.17352
439864.00	3765370.00	0.17342	
	439869.00	3765370.00	0.17331
439874.00	3765370.00	0.17321	
	439879.00	3765370.00	0.17309
439884.00	3765370.00	0.17298	
	439674.00	3765375.00	0.17789
439679.00	3765375.00	0.17790	
	439684.00	3765375.00	0.17790
439689.00	3765375.00	0.17790	
	439694.00	3765375.00	0.17789
439699.00	3765375.00	0.17788	
	439704.00	3765375.00	0.17787
439709.00	3765375.00	0.17786	
	439714.00	3765375.00	0.17785
439719.00	3765375.00	0.17783	
	439729.00	3765375.00	0.17778
439734.00	3765375.00	0.17777	
	439739.00	3765375.00	0.17773
439744.00	3765375.00	0.17771	
	439749.00	3765375.00	0.17767
439754.00	3765375.00	0.17764	
	439774.00	3765375.00	0.17747
439779.00	3765375.00	0.17742	
	439784.00	3765375.00	0.17737
439789.00	3765375.00	0.17731	
	439794.00	3765375.00	0.17726
439799.00	3765375.00	0.17720	
	439804.00	3765375.00	0.17713
439809.00	3765375.00	0.17707	
	439814.00	3765375.00	0.17699
439839.00	3765375.00	0.17662	

	439844.00	3765375.00	0.17652
439849.00	3765375.00	0.17644	
	439854.00	3765375.00	0.17634
439859.00	3765375.00	0.17625	
	439864.00	3765375.00	0.17614
439869.00	3765375.00	0.17605	
	439874.00	3765375.00	0.17593
439879.00	3765375.00	0.17583	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*

INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439884.00	3765375.00	0.17571
439774.00	3765380.00	0.18023
439779.00	3765380.00	0.18018
439784.00	3765380.00	0.18013
439789.00	3765380.00	0.18008
439794.00	3765380.00	0.18003
439799.00	3765380.00	0.17997
439804.00	3765380.00	0.17991
439809.00	3765380.00	0.17984
439814.00	3765380.00	0.17979
439769.00	3765385.00	0.18311
439819.00	3765385.00	0.18257
439769.00	3765400.00	0.19211
439844.00	3765400.00	0.19129
439849.00	3765400.00	0.19122
439674.00	3765405.00	0.19536
439714.00	3765405.00	0.19544
439719.00	3765405.00	0.19545
439734.00	3765405.00	0.19543
439749.00	3765405.00	0.19538

	439754.00	3765405.00	0.19536
439774.00	3765405.00	0.19525	
	439779.00	3765405.00	0.19522
439784.00	3765405.00	0.19518	
	439789.00	3765405.00	0.19514
439794.00	3765405.00	0.19510	
	439799.00	3765405.00	0.19506
439804.00	3765405.00	0.19501	
	439809.00	3765405.00	0.19495
439814.00	3765405.00	0.19491	
	439819.00	3765405.00	0.19484
439824.00	3765405.00	0.19479	
	439829.00	3765405.00	0.19472
439834.00	3765405.00	0.19466	
	439839.00	3765405.00	0.19458
439844.00	3765405.00	0.19451	
	439849.00	3765405.00	0.19444
439854.00	3765405.00	0.19435	
	439859.00	3765405.00	0.19427
439674.00	3765410.00	0.19858	
	439679.00	3765410.00	0.19860
439684.00	3765410.00	0.19862	
	439689.00	3765410.00	0.19864
439694.00	3765410.00	0.19866	
	439699.00	3765410.00	0.19866
439704.00	3765410.00	0.19868	
	439709.00	3765410.00	0.19868
439714.00	3765410.00	0.19869	
	439719.00	3765410.00	0.19868
439729.00	3765410.00	0.19868	
	439734.00	3765410.00	0.19868
439739.00	3765410.00	0.19867	
	439744.00	3765410.00	0.19866
439749.00	3765410.00	0.19864	
	439774.00	3765410.00	0.19853
439779.00	3765410.00	0.19850	
	439784.00	3765410.00	0.19846
439789.00	3765410.00	0.19843	
	439794.00	3765410.00	0.19839
439799.00	3765410.00	0.19834	
	439804.00	3765410.00	0.19830
439809.00	3765410.00	0.19826	
	439814.00	3765410.00	0.19819
439819.00	3765410.00	0.19815	
	439824.00	3765410.00	0.19808
439829.00	3765410.00	0.19803	
	439834.00	3765410.00	0.19795
439839.00	3765410.00	0.19790	
	439844.00	3765410.00	0.19782
439849.00	3765410.00	0.19775	
	439854.00	3765410.00	0.19767
439859.00	3765410.00	0.19759	

	439674.00	3765415.00	0.20190
439679.00	3765415.00	0.20192	
	439684.00	3765415.00	0.20194
439689.00	3765415.00	0.20197	
	439694.00	3765415.00	0.20198
439699.00	3765415.00	0.20200	
	439704.00	3765415.00	0.20201
439709.00	3765415.00	0.20202	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*

INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439714.00	3765415.00	0.20202
439719.00	3765415.00	0.20204
439729.00	3765415.00	0.20204
439734.00	3765415.00	0.20203
439739.00	3765415.00	0.20203
439744.00	3765415.00	0.20201
439749.00	3765415.00	0.20201
439774.00	3765415.00	0.20190
439779.00	3765415.00	0.20188
439784.00	3765415.00	0.20185
439789.00	3765415.00	0.20181
439794.00	3765415.00	0.20177
439799.00	3765415.00	0.20174
439804.00	3765415.00	0.20169
439809.00	3765415.00	0.20164
439814.00	3765415.00	0.20160
439819.00	3765415.00	0.20154
439824.00	3765415.00	0.20149
439829.00	3765415.00	0.20143
439834.00	3765415.00	0.20138

	439839.00	3765415.00	0.20130
439844.00	3765415.00	0.20124	
	439849.00	3765415.00	0.20117
439854.00	3765415.00	0.20109	
	439859.00	3765415.00	0.20101
439674.00	3765420.00	0.20532	
	439679.00	3765420.00	0.20535
439684.00	3765420.00	0.20537	
	439689.00	3765420.00	0.20539
439694.00	3765420.00	0.20542	
	439699.00	3765420.00	0.20543
439704.00	3765420.00	0.20545	
	439709.00	3765420.00	0.20546
439714.00	3765420.00	0.20548	
	439719.00	3765420.00	0.20548
439729.00	3765420.00	0.20549	
	439734.00	3765420.00	0.20549
439739.00	3765420.00	0.20549	
	439744.00	3765420.00	0.20548
439749.00	3765420.00	0.20547	
	439774.00	3765420.00	0.20539
439779.00	3765420.00	0.20536	
	439784.00	3765420.00	0.20533
439789.00	3765420.00	0.20531	
	439794.00	3765420.00	0.20527
439799.00	3765420.00	0.20523	
	439804.00	3765420.00	0.20519
439809.00	3765420.00	0.20515	
	439814.00	3765420.00	0.20509
439819.00	3765420.00	0.20505	
	439824.00	3765420.00	0.20500
439829.00	3765420.00	0.20495	
	439834.00	3765420.00	0.20488
439839.00	3765420.00	0.20483	
	439844.00	3765420.00	0.20475
439849.00	3765420.00	0.20469	
	439854.00	3765420.00	0.20461
439859.00	3765420.00	0.20454	
	439674.00	3765425.00	0.20884
439679.00	3765425.00	0.20888	
	439684.00	3765425.00	0.20891
439689.00	3765425.00	0.20894	
	439694.00	3765425.00	0.20895
439699.00	3765425.00	0.20898	
	439704.00	3765425.00	0.20900
439709.00	3765425.00	0.20902	
	439714.00	3765425.00	0.20903
439719.00	3765425.00	0.20904	
	439729.00	3765425.00	0.20905
439734.00	3765425.00	0.20906	
	439739.00	3765425.00	0.20906
439744.00	3765425.00	0.20905	

	439749.00	3765425.00	0.20905
439774.00	3765425.00	0.20898	
	439779.00	3765425.00	0.20896
439784.00	3765425.00	0.20893	
	439789.00	3765425.00	0.20890
439794.00	3765425.00	0.20887	
	439799.00	3765425.00	0.20884
439804.00	3765425.00	0.20880	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*

INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439809.00	3765425.00	0.20875
439814.00	3765425.00	0.20872
439819.00	3765425.00	0.20866
439824.00	3765425.00	0.20862
439829.00	3765425.00	0.20856
439834.00	3765425.00	0.20851
439839.00	3765425.00	0.20844
439844.00	3765425.00	0.20839
439849.00	3765425.00	0.20832
439854.00	3765425.00	0.20825
439859.00	3765425.00	0.20818
439674.00	3765430.00	0.21249
439679.00	3765430.00	0.21253
439684.00	3765430.00	0.21256
439689.00	3765430.00	0.21259
439694.00	3765430.00	0.21262
439699.00	3765430.00	0.21264
439704.00	3765430.00	0.21266
439709.00	3765430.00	0.21268
439714.00	3765430.00	0.21270

	439719.00	3765430.00	0.21271
439729.00	3765430.00	0.21273	
	439734.00	3765430.00	0.21274
439739.00	3765430.00	0.21274	
	439744.00	3765430.00	0.21274
439749.00	3765430.00	0.21274	
	439774.00	3765430.00	0.21269
439779.00	3765430.00	0.21267	
	439784.00	3765430.00	0.21264
439789.00	3765430.00	0.21262	
	439794.00	3765430.00	0.21259
439799.00	3765430.00	0.21256	
	439804.00	3765430.00	0.21252
439809.00	3765430.00	0.21249	
	439814.00	3765430.00	0.21244
439819.00	3765430.00	0.21241	
	439824.00	3765430.00	0.21235
439829.00	3765430.00	0.21231	
	439834.00	3765430.00	0.21225
439839.00	3765430.00	0.21220	
	439844.00	3765430.00	0.21213
439849.00	3765430.00	0.21207	
	439854.00	3765430.00	0.21200
439859.00	3765430.00	0.21194	
	439674.00	3765435.00	0.21625
439679.00	3765435.00	0.21630	
	439684.00	3765435.00	0.21633
439689.00	3765435.00	0.21637	
	439694.00	3765435.00	0.21639
439699.00	3765435.00	0.21642	
	439704.00	3765435.00	0.21645
439709.00	3765435.00	0.21647	
	439714.00	3765435.00	0.21649
439719.00	3765435.00	0.21651	
	439729.00	3765435.00	0.21654
439734.00	3765435.00	0.21655	
	439739.00	3765435.00	0.21655
439744.00	3765435.00	0.21655	
	439749.00	3765435.00	0.21655
439774.00	3765435.00	0.21652	
	439779.00	3765435.00	0.21650
439784.00	3765435.00	0.21648	
	439789.00	3765435.00	0.21646
439794.00	3765435.00	0.21643	
	439799.00	3765435.00	0.21640
439804.00	3765435.00	0.21637	
	439809.00	3765435.00	0.21634
439814.00	3765435.00	0.21630	
	439819.00	3765435.00	0.21626
439824.00	3765435.00	0.21622	
	439829.00	3765435.00	0.21616
439834.00	3765435.00	0.21612	

	439839.00	3765435.00	0.21606
439844.00	3765435.00	0.21601	
	439849.00	3765435.00	0.21594
439854.00	3765435.00	0.21588	
	439859.00	3765435.00	0.21581
439674.00	3765440.00	0.22014	
	439679.00	3765440.00	0.22019
439684.00	3765440.00	0.22023	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*

INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439689.00	3765440.00	0.22026
439694.00	3765440.00	0.22030
439699.00	3765440.00	0.22033
439704.00	3765440.00	0.22036
439709.00	3765440.00	0.22039
439714.00	3765440.00	0.22041
439719.00	3765440.00	0.22043
439729.00	3765440.00	0.22046
439734.00	3765440.00	0.22047
439739.00	3765440.00	0.22048
439744.00	3765440.00	0.22049
439749.00	3765440.00	0.22050
439774.00	3765440.00	0.22047
439779.00	3765440.00	0.22046
439784.00	3765440.00	0.22044
439789.00	3765440.00	0.22043
439794.00	3765440.00	0.22040
439799.00	3765440.00	0.22038
439804.00	3765440.00	0.22035
439809.00	3765440.00	0.22032

	439814.00	3765440.00	0.22028
439819.00	3765440.00	0.22025	
	439824.00	3765440.00	0.22020
439829.00	3765440.00	0.22016	
	439834.00	3765440.00	0.22011
439839.00	3765440.00	0.22006	
	439844.00	3765440.00	0.22000
439849.00	3765440.00	0.21995	
	439854.00	3765440.00	0.21989
439859.00	3765440.00	0.21982	
	439674.00	3765445.00	0.22417
439679.00	3765445.00	0.22422	
	439684.00	3765445.00	0.22426
439689.00	3765445.00	0.22430	
	439694.00	3765445.00	0.22434
439699.00	3765445.00	0.22437	
	439704.00	3765445.00	0.22440
439709.00	3765445.00	0.22444	
	439714.00	3765445.00	0.22446
439719.00	3765445.00	0.22449	
	439729.00	3765445.00	0.22453
439734.00	3765445.00	0.22454	
	439739.00	3765445.00	0.22456
439744.00	3765445.00	0.22457	
	439749.00	3765445.00	0.22457
439774.00	3765445.00	0.22457	
	439779.00	3765445.00	0.22455
439784.00	3765445.00	0.22455	
	439789.00	3765445.00	0.22453
439794.00	3765445.00	0.22451	
	439799.00	3765445.00	0.22448
439804.00	3765445.00	0.22446	
	439809.00	3765445.00	0.22443
439814.00	3765445.00	0.22440	
	439819.00	3765445.00	0.22436
439824.00	3765445.00	0.22433	
	439829.00	3765445.00	0.22428
439834.00	3765445.00	0.22424	
	439839.00	3765445.00	0.22419
439844.00	3765445.00	0.22414	
	439849.00	3765445.00	0.22408
439854.00	3765445.00	0.22403	
	439859.00	3765445.00	0.22396
439674.00	3765450.00	0.22833	
	439679.00	3765450.00	0.22838
439684.00	3765450.00	0.22843	
	439689.00	3765450.00	0.22847
439694.00	3765450.00	0.22851	
	439699.00	3765450.00	0.22855
439704.00	3765450.00	0.22859	
	439709.00	3765450.00	0.22862
439714.00	3765450.00	0.22866	

	439719.00	3765450.00	0.22868
439729.00	3765450.00	0.22873	
	439734.00	3765450.00	0.22875
439739.00	3765450.00	0.22877	
	439744.00	3765450.00	0.22878
439749.00	3765450.00	0.22879	
	439774.00	3765450.00	0.22880
439844.00	3765450.00	0.22842	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*

INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439849.00	3765450.00	0.22837
439854.00	3765450.00	0.22831
439859.00	3765450.00	0.22826
439674.00	3765455.00	0.23264
439679.00	3765455.00	0.23270
439684.00	3765455.00	0.23275
439689.00	3765455.00	0.23280
439694.00	3765455.00	0.23284
439699.00	3765455.00	0.23288
439704.00	3765455.00	0.23292
439709.00	3765455.00	0.23296
439714.00	3765455.00	0.23300
439719.00	3765455.00	0.23303
439729.00	3765455.00	0.23308
439734.00	3765455.00	0.23310
439739.00	3765455.00	0.23313
439744.00	3765455.00	0.23314
439749.00	3765455.00	0.23316
439844.00	3765455.00	0.23285
439849.00	3765455.00	0.23280

	439854.00	3765455.00	0.23275
439859.00	3765455.00	0.23269	
	439674.00	3765460.00	0.23711
439679.00	3765460.00	0.23717	
	439684.00	3765460.00	0.23722
439689.00	3765460.00	0.23727	
	439694.00	3765460.00	0.23732
439699.00	3765460.00	0.23737	
	439704.00	3765460.00	0.23742
439709.00	3765460.00	0.23745	
	439714.00	3765460.00	0.23749
439719.00	3765460.00	0.23753	
	439729.00	3765460.00	0.23759
439734.00	3765460.00	0.23762	
	439739.00	3765460.00	0.23764
439744.00	3765460.00	0.23766	
	439749.00	3765460.00	0.23768
439789.00	3765460.00	0.23772	
	439794.00	3765460.00	0.23771
439799.00	3765460.00	0.23770	
	439804.00	3765460.00	0.23768
439809.00	3765460.00	0.23766	
	439814.00	3765460.00	0.23764
439819.00	3765460.00	0.23762	
	439824.00	3765460.00	0.23759
439829.00	3765460.00	0.23756	
	439844.00	3765460.00	0.23744
439849.00	3765460.00	0.23739	
	439854.00	3765460.00	0.23735
439859.00	3765460.00	0.23729	
	439674.00	3765465.00	0.24174
439679.00	3765465.00	0.24181	
	439684.00	3765465.00	0.24186
439689.00	3765465.00	0.24192	
	439694.00	3765465.00	0.24197
439699.00	3765465.00	0.24202	
	439704.00	3765465.00	0.24207
439709.00	3765465.00	0.24212	
	439714.00	3765465.00	0.24216
439719.00	3765465.00	0.24220	
	439729.00	3765465.00	0.24227
439734.00	3765465.00	0.24230	
	439739.00	3765465.00	0.24232
439744.00	3765465.00	0.24235	
	439749.00	3765465.00	0.24237
439789.00	3765465.00	0.24244	
	439794.00	3765465.00	0.24243
439799.00	3765465.00	0.24243	
	439804.00	3765465.00	0.24241
439809.00	3765465.00	0.24240	
	439814.00	3765465.00	0.24238
439819.00	3765465.00	0.24236	

	439824.00	3765465.00	0.24233
439829.00	3765465.00	0.24230	
	439844.00	3765465.00	0.24220
439849.00	3765465.00	0.24216	
	439854.00	3765465.00	0.24211
439859.00	3765465.00	0.24206	
	439674.00	3765470.00	0.24655
439679.00	3765470.00	0.24661	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*

INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439684.00	3765470.00	0.24668
439689.00	3765470.00	0.24673
439694.00	3765470.00	0.24680
439699.00	3765470.00	0.24685
439704.00	3765470.00	0.24690
439709.00	3765470.00	0.24695
439714.00	3765470.00	0.24700
439719.00	3765470.00	0.24704
439729.00	3765470.00	0.24712
439734.00	3765470.00	0.24715
439739.00	3765470.00	0.24719
439744.00	3765470.00	0.24721
439749.00	3765470.00	0.24724
439789.00	3765470.00	0.24733
439794.00	3765470.00	0.24734
439799.00	3765470.00	0.24733
439804.00	3765470.00	0.24732
439809.00	3765470.00	0.24731
439814.00	3765470.00	0.24729
439819.00	3765470.00	0.24727

	439824.00	3765470.00	0.24725
439829.00	3765470.00	0.24723	
	439844.00	3765470.00	0.24713
439849.00	3765470.00	0.24709	
	439854.00	3765470.00	0.24705
439859.00	3765470.00	0.24700	
	439674.00	3765475.00	0.25153
439679.00	3765475.00	0.25161	
	439684.00	3765475.00	0.25167
439689.00	3765475.00	0.25175	
	439694.00	3765475.00	0.25180
439699.00	3765475.00	0.25187	
	439704.00	3765475.00	0.25192
439709.00	3765475.00	0.25197	
	439714.00	3765475.00	0.25203
439719.00	3765475.00	0.25207	
	439729.00	3765475.00	0.25216
439734.00	3765475.00	0.25220	
	439739.00	3765475.00	0.25223
439744.00	3765475.00	0.25227	
	439749.00	3765475.00	0.25229
439754.00	3765475.00	0.25232	
	439789.00	3765475.00	0.25242
439794.00	3765475.00	0.25242	
	439799.00	3765475.00	0.25242
439804.00	3765475.00	0.25241	
	439809.00	3765475.00	0.25241
439814.00	3765475.00	0.25240	
	439819.00	3765475.00	0.25238
439824.00	3765475.00	0.25236	
	439829.00	3765475.00	0.25234
439269.00	3764900.00	0.06694	
	439369.00	3764900.00	0.06730
439469.00	3764900.00	0.06709	
	439569.00	3764900.00	0.06629
439669.00	3764900.00	0.06490	
	439769.00	3764900.00	0.06291
439869.00	3764900.00	0.06032	
	439969.00	3764900.00	0.05716
440069.00	3764900.00	0.05349	
	440169.00	3764900.00	0.04945
440269.00	3764900.00	0.04523	
	439269.00	3765000.00	0.07813
439369.00	3765000.00	0.07886	
	439469.00	3765000.00	0.07894
439569.00	3765000.00	0.07835	
	439669.00	3765000.00	0.07708
439769.00	3765000.00	0.07510	
	439869.00	3765000.00	0.07237
439969.00	3765000.00	0.06886	
	440069.00	3765000.00	0.06460
440169.00	3765000.00	0.05970	

	440269.00	3765000.00	0.05439
439269.00	3765100.00	0.09256	
	439369.00	3765100.00	0.09377
439469.00	3765100.00	0.09421	
	439569.00	3765100.00	0.09392
439669.00	3765100.00	0.09289	
	439769.00	3765100.00	0.09105
439869.00	3765100.00	0.08832	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*

INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439969.00	3765100.00	0.08459
440069.00	3765100.00	0.07979
440169.00	3765100.00	0.07394
440269.00	3765100.00	0.06726
439269.00	3765200.00	0.11197
439369.00	3765200.00	0.11379
439469.00	3765200.00	0.11472
439569.00	3765200.00	0.11484
439669.00	3765200.00	0.11417
439769.00	3765200.00	0.11263
439869.00	3765200.00	0.11012
439969.00	3765200.00	0.10642
440069.00	3765200.00	0.10129
440169.00	3765200.00	0.09455
440269.00	3765200.00	0.08621
439269.00	3765300.00	0.13962
439369.00	3765300.00	0.14229
439469.00	3765300.00	0.14392
439569.00	3765300.00	0.14466
439669.00	3765300.00	0.14456

	439769.00	3765300.00	0.14356
439869.00	3765300.00	0.14152	
	439969.00	3765300.00	0.13819
440069.00	3765300.00	0.13313	
	440169.00	3765300.00	0.12583
440269.00	3765300.00	0.11578	
	439269.00	3765400.00	0.18272
439369.00	3765400.00	0.18672	
	439469.00	3765400.00	0.18953
439569.00	3765400.00	0.19134	
	439669.00	3765400.00	0.19222
439769.00	3765400.00	0.19211	
	439869.00	3765400.00	0.19087
439969.00	3765400.00	0.18824	
	440069.00	3765400.00	0.18373
440169.00	3765400.00	0.17654	
	440269.00	3765400.00	0.16538
439269.00	3765500.00	0.26115	
	439369.00	3765500.00	0.26790
439469.00	3765500.00	0.27312	
	439569.00	3765500.00	0.27697
439669.00	3765500.00	0.27960	
	439769.00	3765500.00	0.28098
439869.00	3765500.00	0.28103	
	439969.00	3765500.00	0.27957
440069.00	3765500.00	0.27615	
	440169.00	3765500.00	0.26992
440269.00	3765500.00	0.25909	
	439269.00	3765600.00	0.46137
439369.00	3765600.00	0.47549	
	439469.00	3765600.00	0.48661
439569.00	3765600.00	0.49522	
	439669.00	3765600.00	0.50162
439769.00	3765600.00	0.50609	
	439869.00	3765600.00	0.50871
439969.00	3765600.00	0.50950	
	440069.00	3765600.00	0.50821
440169.00	3765600.00	0.50426	
	440269.00	3765600.00	0.49585
439269.00	3765700.00	2.98095	
	439369.00	3765700.00	3.14515
439469.00	3765700.00	3.31373	
	439569.00	3765700.00	3.49248
439669.00	3765700.00	3.61893	
	439769.00	3765700.00	3.72200
439869.00	3765700.00	3.77977	
	439969.00	3765700.00	3.82780
440069.00	3765700.00	3.87835	
	440169.00	3765700.00	3.89913
440269.00	3765700.00	3.91286	
	439269.00	3765800.00	1.09061
439369.00	3765800.00	1.13970	

	439469.00	3765800.00	1.16949
439569.00	3765800.00	1.18842	
	439669.00	3765800.00	1.20093
439769.00	3765800.00	1.20953	
	439869.00	3765800.00	1.21519
439969.00	3765800.00	1.21847	
	440069.00	3765800.00	1.21911
440169.00	3765800.00	1.21623	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*

INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
440269.00	3765800.00	1.20733
439269.00	3765900.00	0.34806
439369.00	3765900.00	0.40226
439469.00	3765900.00	0.44251
439569.00	3765900.00	0.47214
439669.00	3765900.00	0.49409
439769.00	3765900.00	0.51049
439869.00	3765900.00	0.52275
439969.00	3765900.00	0.53176
440069.00	3765900.00	0.53800
440169.00	3765900.00	0.54159
440269.00	3765900.00	0.54233
439649.00	3765310.00	0.14842
439679.00	3765310.00	0.14829
439709.00	3765310.00	0.14809
439739.00	3765310.00	0.14780
439769.00	3765310.00	0.14742
439799.00	3765310.00	0.14695
439829.00	3765310.00	0.14637
439859.00	3765310.00	0.14570

	439889.00	3765310.00	0.14491
439649.00	3765340.00	0.16084	
	439679.00	3765340.00	0.16078
439709.00	3765340.00	0.16065	
	439739.00	3765340.00	0.16043
439769.00	3765340.00	0.16012	
	439799.00	3765340.00	0.15971
439829.00	3765340.00	0.15920	
	439859.00	3765340.00	0.15859
439889.00	3765340.00	0.15786	
	439649.00	3765370.00	0.17522
439679.00	3765370.00	0.17526	
	439709.00	3765370.00	0.17521
439739.00	3765370.00	0.17506	
	439769.00	3765370.00	0.17483
439799.00	3765370.00	0.17450	
	439829.00	3765370.00	0.17406
439859.00	3765370.00	0.17352	
	439889.00	3765370.00	0.17286
439649.00	3765400.00	0.19212	
	439679.00	3765400.00	0.19225
439709.00	3765400.00	0.19230	
	439739.00	3765400.00	0.19225
439769.00	3765400.00	0.19211	
	439799.00	3765400.00	0.19186
439829.00	3765400.00	0.19151	
	439859.00	3765400.00	0.19105
439889.00	3765400.00	0.19047	
	439649.00	3765430.00	0.21228
439679.00	3765430.00	0.21253	
	439709.00	3765430.00	0.21268
439739.00	3765430.00	0.21274	
	439769.00	3765430.00	0.21271
439799.00	3765430.00	0.21256	
	439829.00	3765430.00	0.21231
439859.00	3765430.00	0.21194	
	439889.00	3765430.00	0.21144
439649.00	3765460.00	0.23678	
	439679.00	3765460.00	0.23717
439709.00	3765460.00	0.23745	
	439739.00	3765460.00	0.23764
439769.00	3765460.00	0.23773	
	439799.00	3765460.00	0.23770
439829.00	3765460.00	0.23756	
	439859.00	3765460.00	0.23729
439889.00	3765460.00	0.23690	
	439649.00	3765490.00	0.26728
439679.00	3765490.00	0.26783	
	439709.00	3765490.00	0.26827
439739.00	3765490.00	0.26860	
	439769.00	3765490.00	0.26884
439799.00	3765490.00	0.26895	

	439829.00	3765490.00	0.26894
439859.00	3765490.00	0.26880	
	439889.00	3765490.00	0.26853

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*  
 INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439674.00	3765310.00	0.06511
439679.00	3765310.00	0.06537
439684.00	3765310.00	0.06564
439689.00	3765310.00	0.06591
439694.00	3765310.00	0.06618
439699.00	3765310.00	0.06644
439704.00	3765310.00	0.06671
439709.00	3765310.00	0.06698
439714.00	3765310.00	0.06725
439719.00	3765310.00	0.06751
439729.00	3765310.00	0.06804
439734.00	3765310.00	0.06830
439739.00	3765310.00	0.06857
439744.00	3765310.00	0.06882
439749.00	3765310.00	0.06908
439764.00	3765310.00	0.06983
439769.00	3765310.00	0.07007
439774.00	3765310.00	0.07031

	439779.00	3765310.00	0.07055
439784.00	3765310.00	0.07077	
	439789.00	3765310.00	0.07100
439794.00	3765310.00	0.07122	
	439799.00	3765310.00	0.07143
439804.00	3765310.00	0.07164	
	439809.00	3765310.00	0.07184
439814.00	3765310.00	0.07203	
	439819.00	3765310.00	0.07221
439824.00	3765310.00	0.07239	
	439829.00	3765310.00	0.07256
439839.00	3765310.00	0.07288	
	439844.00	3765310.00	0.07302
439849.00	3765310.00	0.07316	
	439854.00	3765310.00	0.07329
439859.00	3765310.00	0.07340	
	439864.00	3765310.00	0.07351
439869.00	3765310.00	0.07361	
	439874.00	3765310.00	0.07370
439879.00	3765310.00	0.07378	
	439884.00	3765310.00	0.07385
439674.00	3765315.00	0.06589	
	439679.00	3765315.00	0.06616
439684.00	3765315.00	0.06644	
	439689.00	3765315.00	0.06671
439694.00	3765315.00	0.06699	
	439699.00	3765315.00	0.06727
439704.00	3765315.00	0.06754	
	439709.00	3765315.00	0.06782
439714.00	3765315.00	0.06809	
	439719.00	3765315.00	0.06837
439729.00	3765315.00	0.06892	
	439734.00	3765315.00	0.06919
439739.00	3765315.00	0.06946	
	439744.00	3765315.00	0.06973
439749.00	3765315.00	0.07000	
	439764.00	3765315.00	0.07078
439769.00	3765315.00	0.07104	
	439774.00	3765315.00	0.07129
439779.00	3765315.00	0.07153	
	439784.00	3765315.00	0.07177
439789.00	3765315.00	0.07201	
	439794.00	3765315.00	0.07224
439799.00	3765315.00	0.07246	
	439804.00	3765315.00	0.07268
439809.00	3765315.00	0.07290	
	439814.00	3765315.00	0.07310
439819.00	3765315.00	0.07330	
	439824.00	3765315.00	0.07349
439829.00	3765315.00	0.07367	
	439839.00	3765315.00	0.07401
439844.00	3765315.00	0.07416	

	439849.00	3765315.00	0.07431
439854.00	3765315.00	0.07445	
	439859.00	3765315.00	0.07458
439864.00	3765315.00	0.07470	
	439869.00	3765315.00	0.07481
439874.00	3765315.00	0.07491	
	439879.00	3765315.00	0.07500
439884.00	3765315.00	0.07508	
	439674.00	3765320.00	0.06669
439679.00	3765320.00	0.06697	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*

INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439684.00	3765320.00	0.06725
439689.00	3765320.00	0.06753
439694.00	3765320.00	0.06782
439699.00	3765320.00	0.06810
439704.00	3765320.00	0.06838
439709.00	3765320.00	0.06867
439714.00	3765320.00	0.06895
439719.00	3765320.00	0.06924
439729.00	3765320.00	0.06981
439734.00	3765320.00	0.07009
439739.00	3765320.00	0.07037
439744.00	3765320.00	0.07065
439749.00	3765320.00	0.07093
439764.00	3765320.00	0.07175
439769.00	3765320.00	0.07202
439774.00	3765320.00	0.07228
439779.00	3765320.00	0.07254
439784.00	3765320.00	0.07279

	439789.00	3765320.00	0.07304
439794.00	3765320.00	0.07328	
	439799.00	3765320.00	0.07352
439804.00	3765320.00	0.07375	
	439809.00	3765320.00	0.07397
439814.00	3765320.00	0.07419	
	439819.00	3765320.00	0.07440
439824.00	3765320.00	0.07461	
	439829.00	3765320.00	0.07480
439839.00	3765320.00	0.07516	
	439844.00	3765320.00	0.07533
439849.00	3765320.00	0.07549	
	439854.00	3765320.00	0.07564
439859.00	3765320.00	0.07578	
	439864.00	3765320.00	0.07591
439869.00	3765320.00	0.07603	
	439874.00	3765320.00	0.07615
439879.00	3765320.00	0.07625	
	439884.00	3765320.00	0.07634
439674.00	3765325.00	0.06749	
	439679.00	3765325.00	0.06778
439684.00	3765325.00	0.06807	
	439689.00	3765325.00	0.06836
439694.00	3765325.00	0.06865	
	439699.00	3765325.00	0.06895
439704.00	3765325.00	0.06924	
	439709.00	3765325.00	0.06953
439714.00	3765325.00	0.06983	
	439719.00	3765325.00	0.07012
439729.00	3765325.00	0.07071	
	439734.00	3765325.00	0.07100
439739.00	3765325.00	0.07130	
	439744.00	3765325.00	0.07159
439749.00	3765325.00	0.07188	
	439754.00	3765325.00	0.07216
439769.00	3765325.00	0.07301	
	439774.00	3765325.00	0.07329
439779.00	3765325.00	0.07356	
	439784.00	3765325.00	0.07382
439789.00	3765325.00	0.07409	
	439794.00	3765325.00	0.07434
439799.00	3765325.00	0.07459	
	439804.00	3765325.00	0.07484
439809.00	3765325.00	0.07508	
	439814.00	3765325.00	0.07531
439819.00	3765325.00	0.07553	
	439824.00	3765325.00	0.07575
439829.00	3765325.00	0.07595	
	439839.00	3765325.00	0.07635
439844.00	3765325.00	0.07652	
	439849.00	3765325.00	0.07670
439854.00	3765325.00	0.07686	

	439859.00	3765325.00	0.07701
439864.00	3765325.00	0.07716	
	439869.00	3765325.00	0.07729
439874.00	3765325.00	0.07741	
	439879.00	3765325.00	0.07752
439884.00	3765325.00	0.07763	
	439674.00	3765330.00	0.06832
439679.00	3765330.00	0.06861	
	439684.00	3765330.00	0.06891
439689.00	3765330.00	0.06920	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*  
 INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439694.00	3765330.00	0.06951
439699.00	3765330.00	0.06981
439704.00	3765330.00	0.07011
439709.00	3765330.00	0.07041
439714.00	3765330.00	0.07071
439719.00	3765330.00	0.07102
439729.00	3765330.00	0.07163
439734.00	3765330.00	0.07193
439739.00	3765330.00	0.07224
439744.00	3765330.00	0.07254
439749.00	3765330.00	0.07284
439754.00	3765330.00	0.07314
439774.00	3765330.00	0.07431
439779.00	3765330.00	0.07460
439784.00	3765330.00	0.07488
439789.00	3765330.00	0.07515
439794.00	3765330.00	0.07542
439799.00	3765330.00	0.07569

	439804.00	3765330.00	0.07595
439809.00	3765330.00	0.07620	
	439814.00	3765330.00	0.07644
439819.00	3765330.00	0.07668	
	439824.00	3765330.00	0.07691
439829.00	3765330.00	0.07713	
	439839.00	3765330.00	0.07755
439844.00	3765330.00	0.07774	
	439849.00	3765330.00	0.07793
439854.00	3765330.00	0.07811	
	439859.00	3765330.00	0.07827
439864.00	3765330.00	0.07843	
	439869.00	3765330.00	0.07857
439874.00	3765330.00	0.07871	
	439879.00	3765330.00	0.07883
439884.00	3765330.00	0.07894	
	439674.00	3765335.00	0.06915
439679.00	3765335.00	0.06945	
	439684.00	3765335.00	0.06976
439689.00	3765335.00	0.07006	
	439694.00	3765335.00	0.07037
439699.00	3765335.00	0.07068	
	439704.00	3765335.00	0.07099
439709.00	3765335.00	0.07130	
	439714.00	3765335.00	0.07162
439719.00	3765335.00	0.07193	
	439729.00	3765335.00	0.07256
439734.00	3765335.00	0.07288	
	439739.00	3765335.00	0.07319
439744.00	3765335.00	0.07351	
	439749.00	3765335.00	0.07382
439774.00	3765335.00	0.07536	
	439779.00	3765335.00	0.07566
439784.00	3765335.00	0.07595	
	439789.00	3765335.00	0.07624
439794.00	3765335.00	0.07652	
	439839.00	3765335.00	0.07878
439844.00	3765335.00	0.07899	
	439849.00	3765335.00	0.07919
439854.00	3765335.00	0.07938	
	439859.00	3765335.00	0.07956
439864.00	3765335.00	0.07973	
	439869.00	3765335.00	0.07989
439874.00	3765335.00	0.08004	
	439879.00	3765335.00	0.08017
439884.00	3765335.00	0.08030	
	439674.00	3765340.00	0.07000
439679.00	3765340.00	0.07031	
	439684.00	3765340.00	0.07062
439689.00	3765340.00	0.07093	
	439694.00	3765340.00	0.07125
439699.00	3765340.00	0.07157	

	439704.00	3765340.00	0.07189
439709.00	3765340.00	0.07221	
	439714.00	3765340.00	0.07253
439719.00	3765340.00	0.07286	
	439729.00	3765340.00	0.07351
439734.00	3765340.00	0.07383	
	439739.00	3765340.00	0.07416
439744.00	3765340.00	0.07449	
	439749.00	3765340.00	0.07481
439774.00	3765340.00	0.07642	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*

INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439779.00	3765340.00	0.07673
439784.00	3765340.00	0.07704
439789.00	3765340.00	0.07735
439794.00	3765340.00	0.07765
439839.00	3765340.00	0.08004
439844.00	3765340.00	0.08026
439849.00	3765340.00	0.08048
439854.00	3765340.00	0.08068
439859.00	3765340.00	0.08088
439864.00	3765340.00	0.08106
439869.00	3765340.00	0.08123
439874.00	3765340.00	0.08140
439879.00	3765340.00	0.08154
439884.00	3765340.00	0.08168
439674.00	3765345.00	0.07086
439679.00	3765345.00	0.07118
439684.00	3765345.00	0.07150
439689.00	3765345.00	0.07182

	439694.00	3765345.00	0.07214
439699.00	3765345.00	0.07247	
	439704.00	3765345.00	0.07280
439709.00	3765345.00	0.07313	
	439714.00	3765345.00	0.07346
439719.00	3765345.00	0.07380	
	439729.00	3765345.00	0.07447
439734.00	3765345.00	0.07481	
	439739.00	3765345.00	0.07515
439744.00	3765345.00	0.07548	
	439749.00	3765345.00	0.07583
439774.00	3765345.00	0.07750	
	439779.00	3765345.00	0.07783
439784.00	3765345.00	0.07815	
	439789.00	3765345.00	0.07847
439794.00	3765345.00	0.07879	
	439839.00	3765345.00	0.08133
439844.00	3765345.00	0.08157	
	439849.00	3765345.00	0.08180
439854.00	3765345.00	0.08202	
	439859.00	3765345.00	0.08223
439864.00	3765345.00	0.08242	
	439869.00	3765345.00	0.08261
439874.00	3765345.00	0.08279	
	439879.00	3765345.00	0.08295
439884.00	3765345.00	0.08310	
	439674.00	3765350.00	0.07175
439679.00	3765350.00	0.07207	
	439684.00	3765350.00	0.07239
439689.00	3765350.00	0.07272	
	439694.00	3765350.00	0.07305
439699.00	3765350.00	0.07339	
	439704.00	3765350.00	0.07373
439709.00	3765350.00	0.07407	
	439714.00	3765350.00	0.07441
439719.00	3765350.00	0.07475	
	439729.00	3765350.00	0.07545
439734.00	3765350.00	0.07580	
	439739.00	3765350.00	0.07615
439744.00	3765350.00	0.07650	
	439749.00	3765350.00	0.07685
439774.00	3765350.00	0.07860	
	439779.00	3765350.00	0.07894
439784.00	3765350.00	0.07928	
	439789.00	3765350.00	0.07962
439794.00	3765350.00	0.07995	
	439839.00	3765350.00	0.08264
439844.00	3765350.00	0.08290	
	439849.00	3765350.00	0.08315
439854.00	3765350.00	0.08338	
	439859.00	3765350.00	0.08361
439864.00	3765350.00	0.08382	

	439869.00	3765350.00	0.08403
439874.00	3765350.00	0.08421	
	439879.00	3765350.00	0.08439
439884.00	3765350.00	0.08456	
	439674.00	3765355.00	0.07264
439679.00	3765355.00	0.07297	
	439684.00	3765355.00	0.07330
439689.00	3765355.00	0.07364	
	439694.00	3765355.00	0.07398
439699.00	3765355.00	0.07432	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*  
 INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439704.00	3765355.00	0.07467
439709.00	3765355.00	0.07502
439714.00	3765355.00	0.07537
439719.00	3765355.00	0.07572
439729.00	3765355.00	0.07644
439734.00	3765355.00	0.07681
439739.00	3765355.00	0.07717
439744.00	3765355.00	0.07753
439749.00	3765355.00	0.07790
439774.00	3765355.00	0.07972
439779.00	3765355.00	0.08008
439784.00	3765355.00	0.08043
439789.00	3765355.00	0.08079
439794.00	3765355.00	0.08113
439839.00	3765355.00	0.08399
439844.00	3765355.00	0.08426
439849.00	3765355.00	0.08452
439854.00	3765355.00	0.08478

	439859.00	3765355.00	0.08502
439864.00	3765355.00	0.08525	
	439869.00	3765355.00	0.08547
439874.00	3765355.00	0.08568	
	439879.00	3765355.00	0.08587
439884.00	3765355.00	0.08606	
	439674.00	3765360.00	0.07355
439679.00	3765360.00	0.07389	
	439684.00	3765360.00	0.07423
439689.00	3765360.00	0.07457	
	439694.00	3765360.00	0.07492
439699.00	3765360.00	0.07527	
	439704.00	3765360.00	0.07563
439709.00	3765360.00	0.07598	
	439714.00	3765360.00	0.07635
439719.00	3765360.00	0.07671	
	439729.00	3765360.00	0.07745
439734.00	3765360.00	0.07783	
	439739.00	3765360.00	0.07820
439744.00	3765360.00	0.07858	
	439749.00	3765360.00	0.07896
439774.00	3765360.00	0.08085	
	439779.00	3765360.00	0.08123
439784.00	3765360.00	0.08160	
	439789.00	3765360.00	0.08197
439794.00	3765360.00	0.08234	
	439799.00	3765360.00	0.08270
439804.00	3765360.00	0.08306	
	439809.00	3765360.00	0.08341
439814.00	3765360.00	0.08375	
	439839.00	3765360.00	0.08536
439844.00	3765360.00	0.08565	
	439849.00	3765360.00	0.08594
439854.00	3765360.00	0.08621	
	439859.00	3765360.00	0.08647
439864.00	3765360.00	0.08672	
	439869.00	3765360.00	0.08696
439874.00	3765360.00	0.08718	
	439879.00	3765360.00	0.08739
439884.00	3765360.00	0.08759	
	439674.00	3765365.00	0.07448
439679.00	3765365.00	0.07482	
	439684.00	3765365.00	0.07517
439689.00	3765365.00	0.07552	
	439694.00	3765365.00	0.07587
439699.00	3765365.00	0.07623	
	439704.00	3765365.00	0.07660
439709.00	3765365.00	0.07697	
	439714.00	3765365.00	0.07734
439719.00	3765365.00	0.07771	
	439729.00	3765365.00	0.07848
439734.00	3765365.00	0.07887	

	439739.00	3765365.00	0.07925
439744.00	3765365.00	0.07964	
	439749.00	3765365.00	0.08004
439774.00	3765365.00	0.08201	
	439779.00	3765365.00	0.08240
439784.00	3765365.00	0.08280	
	439789.00	3765365.00	0.08318
439794.00	3765365.00	0.08357	
	439799.00	3765365.00	0.08395
439804.00	3765365.00	0.08433	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*  
 INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439809.00	3765365.00	0.08470
439814.00	3765365.00	0.08506
439839.00	3765365.00	0.08676
439844.00	3765365.00	0.08708
439849.00	3765365.00	0.08738
439854.00	3765365.00	0.08767
439859.00	3765365.00	0.08795
439864.00	3765365.00	0.08822
439869.00	3765365.00	0.08848
439874.00	3765365.00	0.08872
439879.00	3765365.00	0.08895
439884.00	3765365.00	0.08916
439674.00	3765370.00	0.07543
439679.00	3765370.00	0.07577
439684.00	3765370.00	0.07613
439689.00	3765370.00	0.07648
439694.00	3765370.00	0.07685
439699.00	3765370.00	0.07722

	439704.00	3765370.00	0.07759
439709.00	3765370.00	0.07797	
	439714.00	3765370.00	0.07835
439719.00	3765370.00	0.07874	
	439729.00	3765370.00	0.07952
439734.00	3765370.00	0.07992	
	439739.00	3765370.00	0.08032
439744.00	3765370.00	0.08073	
	439749.00	3765370.00	0.08113
439774.00	3765370.00	0.08319	
	439779.00	3765370.00	0.08360
439784.00	3765370.00	0.08401	
	439789.00	3765370.00	0.08442
439794.00	3765370.00	0.08482	
	439799.00	3765370.00	0.08522
439804.00	3765370.00	0.08562	
	439809.00	3765370.00	0.08601
439814.00	3765370.00	0.08639	
	439839.00	3765370.00	0.08820
439844.00	3765370.00	0.08854	
	439849.00	3765370.00	0.08886
439854.00	3765370.00	0.08917	
	439859.00	3765370.00	0.08947
439864.00	3765370.00	0.08976	
	439869.00	3765370.00	0.09004
439874.00	3765370.00	0.09030	
	439879.00	3765370.00	0.09055
439884.00	3765370.00	0.09078	
	439674.00	3765375.00	0.07639
439679.00	3765375.00	0.07674	
	439684.00	3765375.00	0.07710
439689.00	3765375.00	0.07747	
	439694.00	3765375.00	0.07784
439699.00	3765375.00	0.07822	
	439704.00	3765375.00	0.07860
439709.00	3765375.00	0.07899	
	439714.00	3765375.00	0.07938
439719.00	3765375.00	0.07977	
	439729.00	3765375.00	0.08058
439734.00	3765375.00	0.08099	
	439739.00	3765375.00	0.08141
439744.00	3765375.00	0.08183	
	439749.00	3765375.00	0.08225
439754.00	3765375.00	0.08267	
	439774.00	3765375.00	0.08439
439779.00	3765375.00	0.08482	
	439784.00	3765375.00	0.08525
439789.00	3765375.00	0.08567	
	439794.00	3765375.00	0.08610
439799.00	3765375.00	0.08652	
	439804.00	3765375.00	0.08693
439809.00	3765375.00	0.08735	

	439814.00	3765375.00	0.08775
439839.00	3765375.00	0.08967	
	439844.00	3765375.00	0.09003
439849.00	3765375.00	0.09038	
	439854.00	3765375.00	0.09071
439859.00	3765375.00	0.09103	
	439864.00	3765375.00	0.09134
439869.00	3765375.00	0.09164	
	439874.00	3765375.00	0.09192
439879.00	3765375.00	0.09219	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*  
 INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439884.00	3765375.00	0.09244
439774.00	3765380.00	0.08561
439779.00	3765380.00	0.08606
439784.00	3765380.00	0.08650
439789.00	3765380.00	0.08695
439794.00	3765380.00	0.08740
439799.00	3765380.00	0.08784
439804.00	3765380.00	0.08828
439809.00	3765380.00	0.08871
439814.00	3765380.00	0.08914
439769.00	3765385.00	0.08638
439819.00	3765385.00	0.09100
439769.00	3765400.00	0.09017
439844.00	3765400.00	0.09804
439849.00	3765400.00	0.09852
439674.00	3765405.00	0.08262
439714.00	3765405.00	0.08594
439719.00	3765405.00	0.08640

	439734.00	3765405.00	0.08783
439749.00	3765405.00	0.08935	
	439754.00	3765405.00	0.08987
439774.00	3765405.00	0.09203	
	439779.00	3765405.00	0.09259
439784.00	3765405.00	0.09314	
	439789.00	3765405.00	0.09370
439794.00	3765405.00	0.09427	
	439799.00	3765405.00	0.09483
439804.00	3765405.00	0.09539	
	439809.00	3765405.00	0.09596
439814.00	3765405.00	0.09652	
	439819.00	3765405.00	0.09707
439824.00	3765405.00	0.09763	
	439829.00	3765405.00	0.09817
439834.00	3765405.00	0.09871	
	439839.00	3765405.00	0.09924
439844.00	3765405.00	0.09976	
	439849.00	3765405.00	0.10027
439854.00	3765405.00	0.10077	
	439859.00	3765405.00	0.10125
439674.00	3765410.00	0.08374	
	439679.00	3765410.00	0.08412
439684.00	3765410.00	0.08452	
	439689.00	3765410.00	0.08493
439694.00	3765410.00	0.08534	
	439699.00	3765410.00	0.08577
439704.00	3765410.00	0.08620	
	439709.00	3765410.00	0.08665
439714.00	3765410.00	0.08711	
	439719.00	3765410.00	0.08758
439729.00	3765410.00	0.08854	
	439734.00	3765410.00	0.08904
439739.00	3765410.00	0.08955	
	439744.00	3765410.00	0.09008
439749.00	3765410.00	0.09060	
	439774.00	3765410.00	0.09338
439779.00	3765410.00	0.09396	
	439784.00	3765410.00	0.09454
439789.00	3765410.00	0.09513	
	439794.00	3765410.00	0.09572
439799.00	3765410.00	0.09631	
	439804.00	3765410.00	0.09690
439809.00	3765410.00	0.09750	
	439814.00	3765410.00	0.09809
439819.00	3765410.00	0.09867	
	439824.00	3765410.00	0.09926
439829.00	3765410.00	0.09984	
	439834.00	3765410.00	0.10041
439839.00	3765410.00	0.10097	
	439844.00	3765410.00	0.10152
439849.00	3765410.00	0.10207	

	439854.00	3765410.00	0.10260
439859.00	3765410.00	0.10311	
	439674.00	3765415.00	0.08488
439679.00	3765415.00	0.08528	
	439684.00	3765415.00	0.08567
439689.00	3765415.00	0.08609	
	439694.00	3765415.00	0.08651
439699.00	3765415.00	0.08694	
	439704.00	3765415.00	0.08738
439709.00	3765415.00	0.08783	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*  
 INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439714.00	3765415.00	0.08830
439719.00	3765415.00	0.08878
439729.00	3765415.00	0.08977
439734.00	3765415.00	0.09028
439739.00	3765415.00	0.09080
439744.00	3765415.00	0.09134
439749.00	3765415.00	0.09188
439774.00	3765415.00	0.09476
439779.00	3765415.00	0.09536
439784.00	3765415.00	0.09597
439789.00	3765415.00	0.09658
439794.00	3765415.00	0.09720
439799.00	3765415.00	0.09782
439804.00	3765415.00	0.09844
439809.00	3765415.00	0.09906
439814.00	3765415.00	0.09969
439819.00	3765415.00	0.10031
439824.00	3765415.00	0.10092

	439829.00	3765415.00	0.10154
439834.00	3765415.00	0.10214	
	439839.00	3765415.00	0.10274
439844.00	3765415.00	0.10333	
	439849.00	3765415.00	0.10391
439854.00	3765415.00	0.10447	
	439859.00	3765415.00	0.10503
439674.00	3765420.00	0.08607	
	439679.00	3765420.00	0.08646
439684.00	3765420.00	0.08686	
	439689.00	3765420.00	0.08727
439694.00	3765420.00	0.08770	
	439699.00	3765420.00	0.08814
439704.00	3765420.00	0.08858	
	439709.00	3765420.00	0.08904
439714.00	3765420.00	0.08952	
	439719.00	3765420.00	0.09000
439729.00	3765420.00	0.09101	
	439734.00	3765420.00	0.09154
439739.00	3765420.00	0.09207	
	439744.00	3765420.00	0.09262
439749.00	3765420.00	0.09318	
	439774.00	3765420.00	0.09616
439779.00	3765420.00	0.09679	
	439784.00	3765420.00	0.09742
439789.00	3765420.00	0.09806	
	439794.00	3765420.00	0.09871
439799.00	3765420.00	0.09935	
	439804.00	3765420.00	0.10001
439809.00	3765420.00	0.10066	
	439814.00	3765420.00	0.10132
439819.00	3765420.00	0.10197	
	439824.00	3765420.00	0.10263
439829.00	3765420.00	0.10327	
	439834.00	3765420.00	0.10392
439839.00	3765420.00	0.10455	
	439844.00	3765420.00	0.10518
439849.00	3765420.00	0.10579	
	439854.00	3765420.00	0.10640
439859.00	3765420.00	0.10699	
	439674.00	3765425.00	0.08727
439679.00	3765425.00	0.08767	
	439684.00	3765425.00	0.08807
439689.00	3765425.00	0.08849	
	439694.00	3765425.00	0.08892
439699.00	3765425.00	0.08936	
	439704.00	3765425.00	0.08981
439709.00	3765425.00	0.09028	
	439714.00	3765425.00	0.09076
439719.00	3765425.00	0.09125	
	439729.00	3765425.00	0.09228
439734.00	3765425.00	0.09282	

	439739.00	3765425.00	0.09337
439744.00	3765425.00	0.09393	
	439749.00	3765425.00	0.09451
439774.00	3765425.00	0.09759	
	439779.00	3765425.00	0.09824
439784.00	3765425.00	0.09890	
	439789.00	3765425.00	0.09956
439794.00	3765425.00	0.10024	
	439799.00	3765425.00	0.10092
439804.00	3765425.00	0.10161	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*

INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439809.00	3765425.00	0.10229
439814.00	3765425.00	0.10299
439819.00	3765425.00	0.10368
439824.00	3765425.00	0.10437
439829.00	3765425.00	0.10505
439834.00	3765425.00	0.10573
439839.00	3765425.00	0.10641
439844.00	3765425.00	0.10707
439849.00	3765425.00	0.10773
439854.00	3765425.00	0.10838
439859.00	3765425.00	0.10901
439674.00	3765430.00	0.08852
439679.00	3765430.00	0.08891
439684.00	3765430.00	0.08932
439689.00	3765430.00	0.08974
439694.00	3765430.00	0.09017
439699.00	3765430.00	0.09061
439704.00	3765430.00	0.09107

	439709.00	3765430.00	0.09154
439714.00	3765430.00	0.09203	
	439719.00	3765430.00	0.09253
439729.00	3765430.00	0.09358	
	439734.00	3765430.00	0.09413
439739.00	3765430.00	0.09469	
	439744.00	3765430.00	0.09527
439749.00	3765430.00	0.09586	
	439774.00	3765430.00	0.09904
439779.00	3765430.00	0.09972	
	439784.00	3765430.00	0.10040
439789.00	3765430.00	0.10110	
	439794.00	3765430.00	0.10180
439799.00	3765430.00	0.10252	
	439804.00	3765430.00	0.10324
439809.00	3765430.00	0.10396	
	439814.00	3765430.00	0.10469
439819.00	3765430.00	0.10541	
	439824.00	3765430.00	0.10615
439829.00	3765430.00	0.10687	
	439834.00	3765430.00	0.10759
439839.00	3765430.00	0.10831	
	439844.00	3765430.00	0.10902
439849.00	3765430.00	0.10972	
	439854.00	3765430.00	0.11041
439859.00	3765430.00	0.11108	
	439674.00	3765435.00	0.08980
439679.00	3765435.00	0.09019	
	439684.00	3765435.00	0.09060
439689.00	3765435.00	0.09102	
	439694.00	3765435.00	0.09145
439699.00	3765435.00	0.09190	
	439704.00	3765435.00	0.09236
439709.00	3765435.00	0.09284	
	439714.00	3765435.00	0.09333
439719.00	3765435.00	0.09384	
	439729.00	3765435.00	0.09491
439734.00	3765435.00	0.09546	
	439739.00	3765435.00	0.09604
439744.00	3765435.00	0.09663	
	439749.00	3765435.00	0.09724
439774.00	3765435.00	0.10052	
	439779.00	3765435.00	0.10122
439784.00	3765435.00	0.10193	
	439789.00	3765435.00	0.10266
439794.00	3765435.00	0.10340	
	439799.00	3765435.00	0.10414
439804.00	3765435.00	0.10490	
	439809.00	3765435.00	0.10566
439814.00	3765435.00	0.10642	
	439819.00	3765435.00	0.10719
439824.00	3765435.00	0.10796	

	439829.00	3765435.00	0.10873
439834.00	3765435.00	0.10949	
	439839.00	3765435.00	0.11025
439844.00	3765435.00	0.11101	
	439849.00	3765435.00	0.11176
439854.00	3765435.00	0.11249	
	439859.00	3765435.00	0.11321
439674.00	3765440.00	0.09111	
	439679.00	3765440.00	0.09150
439684.00	3765440.00	0.09191	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*  
 INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439689.00	3765440.00	0.09233
439694.00	3765440.00	0.09277
439699.00	3765440.00	0.09322
439704.00	3765440.00	0.09368
439709.00	3765440.00	0.09417
439714.00	3765440.00	0.09466
439719.00	3765440.00	0.09518
439729.00	3765440.00	0.09626
439734.00	3765440.00	0.09683
439739.00	3765440.00	0.09741
439744.00	3765440.00	0.09802
439749.00	3765440.00	0.09864
439774.00	3765440.00	0.10203
439779.00	3765440.00	0.10275
439784.00	3765440.00	0.10350
439789.00	3765440.00	0.10425
439794.00	3765440.00	0.10502
439799.00	3765440.00	0.10580

	439804.00	3765440.00	0.10659
439809.00	3765440.00	0.10739	
	439814.00	3765440.00	0.10819
439819.00	3765440.00	0.10901	
	439824.00	3765440.00	0.10982
439829.00	3765440.00	0.11063	
	439834.00	3765440.00	0.11144
439839.00	3765440.00	0.11225	
	439844.00	3765440.00	0.11305
439849.00	3765440.00	0.11385	
	439854.00	3765440.00	0.11463
439859.00	3765440.00	0.11540	
	439674.00	3765445.00	0.09246
439679.00	3765445.00	0.09286	
	439684.00	3765445.00	0.09326
439689.00	3765445.00	0.09369	
	439694.00	3765445.00	0.09412
439699.00	3765445.00	0.09457	
	439704.00	3765445.00	0.09504
439709.00	3765445.00	0.09553	
	439714.00	3765445.00	0.09603
439719.00	3765445.00	0.09655	
	439729.00	3765445.00	0.09765
439734.00	3765445.00	0.09822	
	439739.00	3765445.00	0.09882
439744.00	3765445.00	0.09944	
	439749.00	3765445.00	0.10008
439774.00	3765445.00	0.10356	
	439779.00	3765445.00	0.10431
439784.00	3765445.00	0.10508	
	439789.00	3765445.00	0.10587
439794.00	3765445.00	0.10667	
	439799.00	3765445.00	0.10749
439804.00	3765445.00	0.10831	
	439809.00	3765445.00	0.10915
439814.00	3765445.00	0.11000	
	439819.00	3765445.00	0.11086
439824.00	3765445.00	0.11171	
	439829.00	3765445.00	0.11257
439834.00	3765445.00	0.11343	
	439839.00	3765445.00	0.11429
439844.00	3765445.00	0.11515	
	439849.00	3765445.00	0.11599
439854.00	3765445.00	0.11683	
	439859.00	3765445.00	0.11765
439674.00	3765450.00	0.09386	
	439679.00	3765450.00	0.09425
439684.00	3765450.00	0.09466	
	439689.00	3765450.00	0.09508
439694.00	3765450.00	0.09551	
	439699.00	3765450.00	0.09597
439704.00	3765450.00	0.09643	

	439709.00	3765450.00	0.09692
439714.00	3765450.00	0.09743	
	439719.00	3765450.00	0.09795
439729.00	3765450.00	0.09906	
	439734.00	3765450.00	0.09965
439739.00	3765450.00	0.10026	
	439744.00	3765450.00	0.10089
439749.00	3765450.00	0.10154	
	439774.00	3765450.00	0.10512
439844.00	3765450.00	0.11729	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*

INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439849.00	3765450.00	0.11819
439854.00	3765450.00	0.11909
439859.00	3765450.00	0.11997
439674.00	3765455.00	0.09530
439679.00	3765455.00	0.09569
439684.00	3765455.00	0.09609
439689.00	3765455.00	0.09651
439694.00	3765455.00	0.09695
439699.00	3765455.00	0.09740
439704.00	3765455.00	0.09787
439709.00	3765455.00	0.09836
439714.00	3765455.00	0.09887
439719.00	3765455.00	0.09939
439729.00	3765455.00	0.10052
439734.00	3765455.00	0.10111
439739.00	3765455.00	0.10173
439744.00	3765455.00	0.10237
439749.00	3765455.00	0.10304

	439844.00	3765455.00	0.11949
439849.00	3765455.00	0.12045	
	439854.00	3765455.00	0.12141
439859.00	3765455.00	0.12235	
	439674.00	3765460.00	0.09679
439679.00	3765460.00	0.09717	
	439684.00	3765460.00	0.09757
439689.00	3765460.00	0.09799	
	439694.00	3765460.00	0.09842
439699.00	3765460.00	0.09887	
	439704.00	3765460.00	0.09934
439709.00	3765460.00	0.09983	
	439714.00	3765460.00	0.10034
439719.00	3765460.00	0.10087	
	439729.00	3765460.00	0.10201
439734.00	3765460.00	0.10261	
	439739.00	3765460.00	0.10324
439744.00	3765460.00	0.10389	
	439749.00	3765460.00	0.10456
439789.00	3765460.00	0.11092	
	439794.00	3765460.00	0.11182
439799.00	3765460.00	0.11275	
	439804.00	3765460.00	0.11370
439809.00	3765460.00	0.11466	
	439814.00	3765460.00	0.11564
439819.00	3765460.00	0.11664	
	439824.00	3765460.00	0.11765
439829.00	3765460.00	0.11867	
	439844.00	3765460.00	0.12175
439849.00	3765460.00	0.12277	
	439854.00	3765460.00	0.12379
439859.00	3765460.00	0.12480	
	439674.00	3765465.00	0.09833
439679.00	3765465.00	0.09871	
	439684.00	3765465.00	0.09910
439689.00	3765465.00	0.09952	
	439694.00	3765465.00	0.09995
439699.00	3765465.00	0.10040	
	439704.00	3765465.00	0.10087
439709.00	3765465.00	0.10135	
	439714.00	3765465.00	0.10186
439719.00	3765465.00	0.10240	
	439729.00	3765465.00	0.10354
439734.00	3765465.00	0.10415	
	439739.00	3765465.00	0.10478
439744.00	3765465.00	0.10544	
	439749.00	3765465.00	0.10613
439789.00	3765465.00	0.11266	
	439794.00	3765465.00	0.11360
439799.00	3765465.00	0.11457	
	439804.00	3765465.00	0.11556
439809.00	3765465.00	0.11657	

	439814.00	3765465.00	0.11760
439819.00	3765465.00	0.11865	
	439824.00	3765465.00	0.11971
439829.00	3765465.00	0.12079	
	439844.00	3765465.00	0.12406
439849.00	3765465.00	0.12515	
	439854.00	3765465.00	0.12624
439859.00	3765465.00	0.12732	
	439674.00	3765470.00	0.09992
439679.00	3765470.00	0.10030	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*

INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439684.00	3765470.00	0.10069
439689.00	3765470.00	0.10110
439694.00	3765470.00	0.10152
439699.00	3765470.00	0.10197
439704.00	3765470.00	0.10244
439709.00	3765470.00	0.10292
439714.00	3765470.00	0.10344
439719.00	3765470.00	0.10397
439729.00	3765470.00	0.10511
439734.00	3765470.00	0.10572
439739.00	3765470.00	0.10636
439744.00	3765470.00	0.10704
439749.00	3765470.00	0.10774
439789.00	3765470.00	0.11445
439794.00	3765470.00	0.11542
439799.00	3765470.00	0.11643
439804.00	3765470.00	0.11746
439809.00	3765470.00	0.11852

	439814.00	3765470.00	0.11960
439819.00	3765470.00	0.12070	
	439824.00	3765470.00	0.12182
439829.00	3765470.00	0.12296	
	439844.00	3765470.00	0.12643
439849.00	3765470.00	0.12760	
	439854.00	3765470.00	0.12876
439859.00	3765470.00	0.12991	
	439674.00	3765475.00	0.10157
439679.00	3765475.00	0.10194	
	439684.00	3765475.00	0.10233
439689.00	3765475.00	0.10273	
	439694.00	3765475.00	0.10315
439699.00	3765475.00	0.10360	
	439704.00	3765475.00	0.10406
439709.00	3765475.00	0.10454	
	439714.00	3765475.00	0.10505
439719.00	3765475.00	0.10559	
	439729.00	3765475.00	0.10673
439734.00	3765475.00	0.10735	
	439739.00	3765475.00	0.10800
439744.00	3765475.00	0.10867	
	439749.00	3765475.00	0.10938
439754.00	3765475.00	0.11012	
	439789.00	3765475.00	0.11626
439794.00	3765475.00	0.11727	
	439799.00	3765475.00	0.11832
439804.00	3765475.00	0.11940	
	439809.00	3765475.00	0.12050
439814.00	3765475.00	0.12164	
	439819.00	3765475.00	0.12279
439824.00	3765475.00	0.12397	
	439829.00	3765475.00	0.12518
439269.00	3764900.00	0.02450	
	439369.00	3764900.00	0.02574
439469.00	3764900.00	0.02664	
	439569.00	3764900.00	0.02713
439669.00	3764900.00	0.02715	
	439769.00	3764900.00	0.02665
439869.00	3764900.00	0.02563	
	439969.00	3764900.00	0.02416
440069.00	3764900.00	0.02237	
	440169.00	3764900.00	0.02044
440269.00	3764900.00	0.01853	
	439269.00	3765000.00	0.02795
439369.00	3765000.00	0.02982	
	439469.00	3765000.00	0.03134
439569.00	3765000.00	0.03243	
	439669.00	3765000.00	0.03297
439769.00	3765000.00	0.03281	
	439869.00	3765000.00	0.03183
439969.00	3765000.00	0.03008	

	440069.00	3765000.00	0.02775
440169.00	3765000.00	0.02513	
	440269.00	3765000.00	0.02251
439269.00	3765100.00	0.03203	
	439369.00	3765100.00	0.03473
439469.00	3765100.00	0.03709	
	439569.00	3765100.00	0.03906
439669.00	3765100.00	0.04053	
	439769.00	3765100.00	0.04112
439869.00	3765100.00	0.04047	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*  
 INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439969.00	3765100.00	0.03853
440069.00	3765100.00	0.03552
440169.00	3765100.00	0.03191
440269.00	3765100.00	0.02815
439269.00	3765200.00	0.03705
439369.00	3765200.00	0.04090
439469.00	3765200.00	0.04431
439569.00	3765200.00	0.04746
439669.00	3765200.00	0.05037
439769.00	3765200.00	0.05248
439869.00	3765200.00	0.05287
439969.00	3765200.00	0.05111
440069.00	3765200.00	0.04739
440169.00	3765200.00	0.04233
440269.00	3765200.00	0.03668
439269.00	3765300.00	0.04349
439369.00	3765300.00	0.04928
439469.00	3765300.00	0.05409

	439569.00	3765300.00	0.05852
439669.00	3765300.00	0.06333	
	439769.00	3765300.00	0.06819
439869.00	3765300.00	0.07130	
	439969.00	3765300.00	0.07091
440069.00	3765300.00	0.06684	
	440169.00	3765300.00	0.05973
440269.00	3765300.00	0.05075	
	439269.00	3765400.00	0.05175
439369.00	3765400.00	0.06170	
	439469.00	3765400.00	0.06921
439569.00	3765400.00	0.07494	
	439669.00	3765400.00	0.08115
439769.00	3765400.00	0.09017	
	439869.00	3765400.00	0.10030
439969.00	3765400.00	0.10493	
	440069.00	3765400.00	0.10202
440169.00	3765400.00	0.09226	
	440269.00	3765400.00	0.07730
439269.00	3765500.00	0.06140	
	439369.00	3765500.00	0.08150
439469.00	3765500.00	0.09671	
	439569.00	3765500.00	0.10526
439669.00	3765500.00	0.11056	
	439769.00	3765500.00	0.12174
439869.00	3765500.00	0.15064	
	439969.00	3765500.00	0.17642
440069.00	3765500.00	0.17862	
	440169.00	3765500.00	0.16481
440269.00	3765500.00	0.13993	
	439269.00	3765600.00	0.06865
439369.00	3765600.00	0.11561	
	439469.00	3765600.00	0.16096
439569.00	3765600.00	0.18097	
	439669.00	3765600.00	0.18447
439769.00	3765600.00	0.18856	
	439869.00	3765600.00	0.24142
439969.00	3765600.00	0.48202	
	440069.00	3765600.00	0.48365
440169.00	3765600.00	0.43362	
	440269.00	3765600.00	0.37185
439269.00	3765700.00	0.06381	
	439369.00	3765700.00	0.16443
439469.00	3765700.00	0.75902	
	439569.00	3765700.00	0.84610
439669.00	3765700.00	0.64623	
	439769.00	3765700.00	0.50617
439869.00	3765700.00	0.37198	
	439969.00	3765700.00	0.46383
440069.00	3765700.00	1.11334	
	440169.00	3765700.00	1.94871
440269.00	3765700.00	3.58358	

	439269.00	3765800.00	0.04509
439369.00	3765800.00	0.08363	
	439469.00	3765800.00	0.26310
439569.00	3765800.00	0.59270	
	439669.00	3765800.00	0.88694
439769.00	3765800.00	1.41727	
	439869.00	3765800.00	2.65078
439969.00	3765800.00	0.88228	
	440069.00	3765800.00	0.52756
440169.00	3765800.00	0.46924	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*  
 INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
440269.00	3765800.00	0.50096
439269.00	3765900.00	0.02997
439369.00	3765900.00	0.04194
439469.00	3765900.00	0.06370
439569.00	3765900.00	0.10296
439669.00	3765900.00	0.15851
439769.00	3765900.00	0.21901
439869.00	3765900.00	0.27358
439969.00	3765900.00	0.29639
440069.00	3765900.00	0.26864
440169.00	3765900.00	0.23552
440269.00	3765900.00	0.22265
439649.00	3765310.00	0.06379
439679.00	3765310.00	0.06537
439709.00	3765310.00	0.06698
439739.00	3765310.00	0.06857
439769.00	3765310.00	0.07007
439799.00	3765310.00	0.07143

	439829.00	3765310.00	0.07256
439859.00	3765310.00	0.07340	
	439889.00	3765310.00	0.07391
439649.00	3765340.00	0.06850	
	439679.00	3765340.00	0.07031
439709.00	3765340.00	0.07221	
	439739.00	3765340.00	0.07416
439769.00	3765340.00	0.07610	
	439799.00	3765340.00	0.07794
439829.00	3765340.00	0.07956	
	439859.00	3765340.00	0.08088
439889.00	3765340.00	0.08181	
	439649.00	3765370.00	0.07376
439679.00	3765370.00	0.07577	
	439709.00	3765370.00	0.07797
439739.00	3765370.00	0.08032	
	439769.00	3765370.00	0.08278
439799.00	3765370.00	0.08522	
	439829.00	3765370.00	0.08750
439859.00	3765370.00	0.08947	
	439889.00	3765370.00	0.09100
439649.00	3765400.00	0.07974	
	439679.00	3765400.00	0.08190
439709.00	3765400.00	0.08435	
	439739.00	3765400.00	0.08713
439769.00	3765400.00	0.09017	
	439799.00	3765400.00	0.09338
439829.00	3765400.00	0.09655	
	439859.00	3765400.00	0.09944
439889.00	3765400.00	0.10183	
	439649.00	3765430.00	0.08670
439679.00	3765430.00	0.08891	
	439709.00	3765430.00	0.09154
439739.00	3765430.00	0.09469	
	439769.00	3765430.00	0.09838
439799.00	3765430.00	0.10252	
	439829.00	3765430.00	0.10687
439859.00	3765430.00	0.11108	
	439889.00	3765430.00	0.11477
439649.00	3765460.00	0.09505	
	439679.00	3765460.00	0.09717
439709.00	3765460.00	0.09983	
	439739.00	3765460.00	0.10324
439769.00	3765460.00	0.10753	
	439799.00	3765460.00	0.11275
439829.00	3765460.00	0.11867	
	439859.00	3765460.00	0.12480
439889.00	3765460.00	0.13049	
	439649.00	3765490.00	0.10539
439679.00	3765490.00	0.10727	
	439709.00	3765490.00	0.10975
439739.00	3765490.00	0.11318	

	439769.00	3765490.00	0.11792
439799.00	3765490.00	0.12423	
	439829.00	3765490.00	0.13212
439859.00	3765490.00	0.14106	
	439889.00	3765490.00	0.14996

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439674.00	3765310.00	0.53810
439679.00	3765310.00	0.53834
439684.00	3765310.00	0.53856
439689.00	3765310.00	0.53878
439694.00	3765310.00	0.53899
439699.00	3765310.00	0.53919
439704.00	3765310.00	0.53939
439709.00	3765310.00	0.53957
439714.00	3765310.00	0.53974
439719.00	3765310.00	0.53990
439729.00	3765310.00	0.54020
439734.00	3765310.00	0.54033
439739.00	3765310.00	0.54045
439744.00	3765310.00	0.54056
439749.00	3765310.00	0.54065
439764.00	3765310.00	0.54086
439769.00	3765310.00	0.54090
439774.00	3765310.00	0.54093

	439779.00	3765310.00	0.54095
439784.00	3765310.00	0.54094	
	439789.00	3765310.00	0.54092
439794.00	3765310.00	0.54088	
	439799.00	3765310.00	0.54082
439804.00	3765310.00	0.54075	
	439809.00	3765310.00	0.54066
439814.00	3765310.00	0.54055	
	439819.00	3765310.00	0.54041
439824.00	3765310.00	0.54025	
	439829.00	3765310.00	0.54009
439839.00	3765310.00	0.53967	
	439844.00	3765310.00	0.53943
439849.00	3765310.00	0.53917	
	439854.00	3765310.00	0.53889
439859.00	3765310.00	0.53858	
	439864.00	3765310.00	0.53824
439869.00	3765310.00	0.53789	
	439874.00	3765310.00	0.53750
439879.00	3765310.00	0.53710	
	439884.00	3765310.00	0.53667
439674.00	3765315.00	0.54525	
	439679.00	3765315.00	0.54550
439684.00	3765315.00	0.54575	
	439689.00	3765315.00	0.54597
439694.00	3765315.00	0.54619	
	439699.00	3765315.00	0.54642
439704.00	3765315.00	0.54662	
	439709.00	3765315.00	0.54682
439714.00	3765315.00	0.54701	
	439719.00	3765315.00	0.54719
439729.00	3765315.00	0.54751	
	439734.00	3765315.00	0.54766
439739.00	3765315.00	0.54780	
	439744.00	3765315.00	0.54792
439749.00	3765315.00	0.54804	
	439764.00	3765315.00	0.54830
439769.00	3765315.00	0.54837	
	439774.00	3765315.00	0.54841
439779.00	3765315.00	0.54844	
	439784.00	3765315.00	0.54846
439789.00	3765315.00	0.54846	
	439794.00	3765315.00	0.54844
439799.00	3765315.00	0.54840	
	439804.00	3765315.00	0.54835
439809.00	3765315.00	0.54828	
	439814.00	3765315.00	0.54818
439819.00	3765315.00	0.54807	
	439824.00	3765315.00	0.54793
439829.00	3765315.00	0.54778	
	439839.00	3765315.00	0.54740
439844.00	3765315.00	0.54718	

	439849.00	3765315.00	0.54695
439854.00	3765315.00	0.54667	
	439859.00	3765315.00	0.54638
439864.00	3765315.00	0.54607	
	439869.00	3765315.00	0.54572
439874.00	3765315.00	0.54536	
	439879.00	3765315.00	0.54497
439884.00	3765315.00	0.54456	
	439674.00	3765320.00	0.55257
439679.00	3765320.00	0.55282	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439684.00	3765320.00	0.55309
439689.00	3765320.00	0.55333
439694.00	3765320.00	0.55357
439699.00	3765320.00	0.55380
439704.00	3765320.00	0.55402
439709.00	3765320.00	0.55423
439714.00	3765320.00	0.55444
439719.00	3765320.00	0.55464
439729.00	3765320.00	0.55500
439734.00	3765320.00	0.55516
439739.00	3765320.00	0.55532
439744.00	3765320.00	0.55546
439749.00	3765320.00	0.55559
439764.00	3765320.00	0.55591
439769.00	3765320.00	0.55600
439774.00	3765320.00	0.55606
439779.00	3765320.00	0.55611
439784.00	3765320.00	0.55615

	439789.00	3765320.00	0.55616
439794.00	3765320.00	0.55616	
	439799.00	3765320.00	0.55616
439804.00	3765320.00	0.55612	
	439809.00	3765320.00	0.55606
439814.00	3765320.00	0.55599	
	439819.00	3765320.00	0.55590
439824.00	3765320.00	0.55579	
	439829.00	3765320.00	0.55565
439839.00	3765320.00	0.55532	
	439844.00	3765320.00	0.55512
439849.00	3765320.00	0.55490	
	439854.00	3765320.00	0.55464
439859.00	3765320.00	0.55437	
	439864.00	3765320.00	0.55408
439869.00	3765320.00	0.55375	
	439874.00	3765320.00	0.55341
439879.00	3765320.00	0.55304	
	439884.00	3765320.00	0.55263
439674.00	3765325.00	0.56004	
	439679.00	3765325.00	0.56033
439684.00	3765325.00	0.56058	
	439689.00	3765325.00	0.56085
439694.00	3765325.00	0.56110	
	439699.00	3765325.00	0.56135
439704.00	3765325.00	0.56159	
	439709.00	3765325.00	0.56182
439714.00	3765325.00	0.56204	
	439719.00	3765325.00	0.56225
439729.00	3765325.00	0.56264	
	439734.00	3765325.00	0.56283
439739.00	3765325.00	0.56300	
	439744.00	3765325.00	0.56317
439749.00	3765325.00	0.56332	
	439754.00	3765325.00	0.56345
439769.00	3765325.00	0.56379	
	439774.00	3765325.00	0.56388
439779.00	3765325.00	0.56395	
	439784.00	3765325.00	0.56400
439789.00	3765325.00	0.56405	
	439794.00	3765325.00	0.56407
439799.00	3765325.00	0.56408	
	439804.00	3765325.00	0.56406
439809.00	3765325.00	0.56403	
	439814.00	3765325.00	0.56399
439819.00	3765325.00	0.56391	
	439824.00	3765325.00	0.56382
439829.00	3765325.00	0.56371	
	439839.00	3765325.00	0.56342
439844.00	3765325.00	0.56323	
	439849.00	3765325.00	0.56303
439854.00	3765325.00	0.56280	

	439859.00	3765325.00	0.56255
439864.00	3765325.00	0.56227	
	439869.00	3765325.00	0.56197
439874.00	3765325.00	0.56164	
	439879.00	3765325.00	0.56129
439884.00	3765325.00	0.56090	
	439674.00	3765330.00	0.56770
439679.00	3765330.00	0.56798	
	439684.00	3765330.00	0.56827
439689.00	3765330.00	0.56854	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439694.00	3765330.00	0.56882
439699.00	3765330.00	0.56907
439704.00	3765330.00	0.56933
439709.00	3765330.00	0.56958
439714.00	3765330.00	0.56981
439719.00	3765330.00	0.57004
439729.00	3765330.00	0.57047
439734.00	3765330.00	0.57067
439739.00	3765330.00	0.57087
439744.00	3765330.00	0.57104
439749.00	3765330.00	0.57121
439754.00	3765330.00	0.57138
439774.00	3765330.00	0.57188
439779.00	3765330.00	0.57197
439784.00	3765330.00	0.57205
439789.00	3765330.00	0.57212
439794.00	3765330.00	0.57216
439799.00	3765330.00	0.57218

	439804.00	3765330.00	0.57220
439809.00	3765330.00	0.57219	
	439814.00	3765330.00	0.57216
439819.00	3765330.00	0.57211	
	439824.00	3765330.00	0.57204
439829.00	3765330.00	0.57195	
	439839.00	3765330.00	0.57170
439844.00	3765330.00	0.57154	
	439849.00	3765330.00	0.57136
439854.00	3765330.00	0.57116	
	439859.00	3765330.00	0.57092
439864.00	3765330.00	0.57067	
	439869.00	3765330.00	0.57038
439874.00	3765330.00	0.57007	
	439879.00	3765330.00	0.56974
439884.00	3765330.00	0.56938	
	439674.00	3765335.00	0.57552
439679.00	3765335.00	0.57583	
	439684.00	3765335.00	0.57612
439689.00	3765335.00	0.57643	
	439694.00	3765335.00	0.57670
439699.00	3765335.00	0.57698	
	439704.00	3765335.00	0.57725
439709.00	3765335.00	0.57751	
	439714.00	3765335.00	0.57777
439719.00	3765335.00	0.57801	
	439729.00	3765335.00	0.57848
439734.00	3765335.00	0.57870	
	439739.00	3765335.00	0.57890
439744.00	3765335.00	0.57911	
	439749.00	3765335.00	0.57930
439774.00	3765335.00	0.58006	
	439779.00	3765335.00	0.58018
439784.00	3765335.00	0.58029	
	439789.00	3765335.00	0.58036
439794.00	3765335.00	0.58043	
	439839.00	3765335.00	0.58019
439844.00	3765335.00	0.58005	
	439849.00	3765335.00	0.57990
439854.00	3765335.00	0.57971	
	439859.00	3765335.00	0.57950
439864.00	3765335.00	0.57926	
	439869.00	3765335.00	0.57900
439874.00	3765335.00	0.57871	
	439879.00	3765335.00	0.57840
439884.00	3765335.00	0.57805	
	439674.00	3765340.00	0.58355
439679.00	3765340.00	0.58386	
	439684.00	3765340.00	0.58418
439689.00	3765340.00	0.58448	
	439694.00	3765340.00	0.58478
439699.00	3765340.00	0.58507	

	439704.00	3765340.00	0.58536
439709.00	3765340.00	0.58563	
	439714.00	3765340.00	0.58590
439719.00	3765340.00	0.58617	
	439729.00	3765340.00	0.58667
439734.00	3765340.00	0.58691	
	439739.00	3765340.00	0.58714
439744.00	3765340.00	0.58736	
	439749.00	3765340.00	0.58757
439774.00	3765340.00	0.58845	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439779.00	3765340.00	0.58858
439784.00	3765340.00	0.58870
439789.00	3765340.00	0.58882
439794.00	3765340.00	0.58891
439839.00	3765340.00	0.58887
439844.00	3765340.00	0.58877
439849.00	3765340.00	0.58863
439854.00	3765340.00	0.58847
439859.00	3765340.00	0.58828
439864.00	3765340.00	0.58807
439869.00	3765340.00	0.58783
439874.00	3765340.00	0.58757
439879.00	3765340.00	0.58727
439884.00	3765340.00	0.58694
439674.00	3765345.00	0.59176
439679.00	3765345.00	0.59209
439684.00	3765345.00	0.59242
439689.00	3765345.00	0.59274

	439694.00	3765345.00	0.59305
439699.00	3765345.00	0.59336	
	439704.00	3765345.00	0.59366
439709.00	3765345.00	0.59395	
	439714.00	3765345.00	0.59424
439719.00	3765345.00	0.59452	
	439729.00	3765345.00	0.59506
439734.00	3765345.00	0.59532	
	439739.00	3765345.00	0.59557
439744.00	3765345.00	0.59580	
	439749.00	3765345.00	0.59604
439774.00	3765345.00	0.59702	
	439779.00	3765345.00	0.59719
439784.00	3765345.00	0.59733	
	439789.00	3765345.00	0.59746
439794.00	3765345.00	0.59758	
	439839.00	3765345.00	0.59778
439844.00	3765345.00	0.59770	
	439849.00	3765345.00	0.59758
439854.00	3765345.00	0.59745	
	439859.00	3765345.00	0.59729
439864.00	3765345.00	0.59710	
	439869.00	3765345.00	0.59688
439874.00	3765345.00	0.59664	
	439879.00	3765345.00	0.59636
439884.00	3765345.00	0.59607	
	439674.00	3765350.00	0.60017
439679.00	3765350.00	0.60052	
	439684.00	3765350.00	0.60085
439689.00	3765350.00	0.60120	
	439694.00	3765350.00	0.60152
439699.00	3765350.00	0.60185	
	439704.00	3765350.00	0.60216
439709.00	3765350.00	0.60248	
	439714.00	3765350.00	0.60278
439719.00	3765350.00	0.60308	
	439729.00	3765350.00	0.60365
439734.00	3765350.00	0.60393	
	439739.00	3765350.00	0.60419
439744.00	3765350.00	0.60447	
	439749.00	3765350.00	0.60470
439774.00	3765350.00	0.60581	
	439779.00	3765350.00	0.60600
439784.00	3765350.00	0.60617	
	439789.00	3765350.00	0.60632
439794.00	3765350.00	0.60646	
	439839.00	3765350.00	0.60691
439844.00	3765350.00	0.60684	
	439849.00	3765350.00	0.60677
439854.00	3765350.00	0.60665	
	439859.00	3765350.00	0.60651
439864.00	3765350.00	0.60634	

	439869.00	3765350.00	0.60616
439874.00	3765350.00	0.60593	
	439879.00	3765350.00	0.60570
439884.00	3765350.00	0.60542	
	439674.00	3765355.00	0.60880
439679.00	3765355.00	0.60915	
	439684.00	3765355.00	0.60951
439689.00	3765355.00	0.60985	
	439694.00	3765355.00	0.61021
439699.00	3765355.00	0.61055	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439704.00	3765355.00	0.61088
439709.00	3765355.00	0.61121
439714.00	3765355.00	0.61153
439719.00	3765355.00	0.61185
439729.00	3765355.00	0.61246
439734.00	3765355.00	0.61275
439739.00	3765355.00	0.61305
439744.00	3765355.00	0.61331
439749.00	3765355.00	0.61360
439774.00	3765355.00	0.61481
439779.00	3765355.00	0.61502
439784.00	3765355.00	0.61522
439789.00	3765355.00	0.61540
439794.00	3765355.00	0.61557
439839.00	3765355.00	0.61625
439844.00	3765355.00	0.61623
439849.00	3765355.00	0.61616
439854.00	3765355.00	0.61609

	439859.00	3765355.00	0.61597
439864.00	3765355.00	0.61584	
	439869.00	3765355.00	0.61567
439874.00	3765355.00	0.61548	
	439879.00	3765355.00	0.61526
439884.00	3765355.00	0.61501	
	439674.00	3765360.00	0.61763
439679.00	3765360.00	0.61801	
	439684.00	3765360.00	0.61838
439689.00	3765360.00	0.61875	
	439694.00	3765360.00	0.61911
439699.00	3765360.00	0.61946	
	439704.00	3765360.00	0.61981
439709.00	3765360.00	0.62015	
	439714.00	3765360.00	0.62050
439719.00	3765360.00	0.62083	
	439729.00	3765360.00	0.62147
439734.00	3765360.00	0.62180	
	439739.00	3765360.00	0.62210
439744.00	3765360.00	0.62241	
	439749.00	3765360.00	0.62269
439774.00	3765360.00	0.62403	
	439779.00	3765360.00	0.62427
439784.00	3765360.00	0.62449	
	439789.00	3765360.00	0.62471
439794.00	3765360.00	0.62490	
	439799.00	3765360.00	0.62508
439804.00	3765360.00	0.62524	
	439809.00	3765360.00	0.62539
439814.00	3765360.00	0.62551	
	439839.00	3765360.00	0.62586
439844.00	3765360.00	0.62583	
	439849.00	3765360.00	0.62582
439854.00	3765360.00	0.62576	
	439859.00	3765360.00	0.62569
439864.00	3765360.00	0.62557	
	439869.00	3765360.00	0.62543
439874.00	3765360.00	0.62527	
	439879.00	3765360.00	0.62507
439884.00	3765360.00	0.62486	
	439674.00	3765365.00	0.62670
439679.00	3765365.00	0.62709	
	439684.00	3765365.00	0.62748
439689.00	3765365.00	0.62787	
	439694.00	3765365.00	0.62823
439699.00	3765365.00	0.62861	
	439704.00	3765365.00	0.62897
439709.00	3765365.00	0.62934	
	439714.00	3765365.00	0.62969
439719.00	3765365.00	0.63004	
	439729.00	3765365.00	0.63073
439734.00	3765365.00	0.63106	

	439739.00	3765365.00	0.63140
439744.00	3765365.00	0.63171	
	439749.00	3765365.00	0.63203
439774.00	3765365.00	0.63349	
	439779.00	3765365.00	0.63375
439784.00	3765365.00	0.63401	
	439789.00	3765365.00	0.63424
439794.00	3765365.00	0.63446	
	439799.00	3765365.00	0.63467
439804.00	3765365.00	0.63487	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439809.00	3765365.00	0.63503
439814.00	3765365.00	0.63521
439839.00	3765365.00	0.63568
439844.00	3765365.00	0.63572
439849.00	3765365.00	0.63572
439854.00	3765365.00	0.63569
439859.00	3765365.00	0.63564
439864.00	3765365.00	0.63556
439869.00	3765365.00	0.63546
439874.00	3765365.00	0.63531
439879.00	3765365.00	0.63516
439884.00	3765365.00	0.63494
439674.00	3765370.00	0.63601
439679.00	3765370.00	0.63641
439684.00	3765370.00	0.63682
439689.00	3765370.00	0.63720
439694.00	3765370.00	0.63761
439699.00	3765370.00	0.63798

	439704.00	3765370.00	0.63837
439709.00	3765370.00	0.63875	
	439714.00	3765370.00	0.63912
439719.00	3765370.00	0.63949	
	439729.00	3765370.00	0.64022
439734.00	3765370.00	0.64057	
	439739.00	3765370.00	0.64092
439744.00	3765370.00	0.64126	
	439749.00	3765370.00	0.64160
439774.00	3765370.00	0.64318	
	439779.00	3765370.00	0.64348
439784.00	3765370.00	0.64374	
	439789.00	3765370.00	0.64402
439794.00	3765370.00	0.64427	
	439799.00	3765370.00	0.64451
439804.00	3765370.00	0.64473	
	439809.00	3765370.00	0.64494
439814.00	3765370.00	0.64513	
	439839.00	3765370.00	0.64578
439844.00	3765370.00	0.64584	
	439849.00	3765370.00	0.64587
439854.00	3765370.00	0.64589	
	439859.00	3765370.00	0.64586
439864.00	3765370.00	0.64582	
	439869.00	3765370.00	0.64573
439874.00	3765370.00	0.64564	
	439879.00	3765370.00	0.64548
439884.00	3765370.00	0.64533	
	439674.00	3765375.00	0.64555
439679.00	3765375.00	0.64599	
	439684.00	3765375.00	0.64639
439689.00	3765375.00	0.64681	
	439694.00	3765375.00	0.64720
439699.00	3765375.00	0.64761	
	439704.00	3765375.00	0.64801
439709.00	3765375.00	0.64841	
	439714.00	3765375.00	0.64880
439719.00	3765375.00	0.64917	
	439729.00	3765375.00	0.64994
439734.00	3765375.00	0.65034	
	439739.00	3765375.00	0.65068
439744.00	3765375.00	0.65106	
	439749.00	3765375.00	0.65141
439754.00	3765375.00	0.65179	
	439774.00	3765375.00	0.65314
439779.00	3765375.00	0.65345	
	439784.00	3765375.00	0.65376
439789.00	3765375.00	0.65405	
	439794.00	3765375.00	0.65433
439799.00	3765375.00	0.65461	
	439804.00	3765375.00	0.65486
439809.00	3765375.00	0.65510	

	439814.00	3765375.00	0.65531
439839.00	3765375.00	0.65614	
	439844.00	3765375.00	0.65623
439849.00	3765375.00	0.65632	
	439854.00	3765375.00	0.65634
439859.00	3765375.00	0.65636	
	439864.00	3765375.00	0.65634
439869.00	3765375.00	0.65631	
	439874.00	3765375.00	0.65623
439879.00	3765375.00	0.65612	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439884.00	3765375.00	0.65598
439774.00	3765380.00	0.66333
439779.00	3765380.00	0.66369
439784.00	3765380.00	0.66402
439789.00	3765380.00	0.66433
439794.00	3765380.00	0.66467
439799.00	3765380.00	0.66496
439804.00	3765380.00	0.66526
439809.00	3765380.00	0.66551
439814.00	3765380.00	0.66580
439769.00	3765385.00	0.67343
439819.00	3765385.00	0.67681
439769.00	3765400.00	0.70652
439844.00	3765400.00	0.71263
439849.00	3765400.00	0.71291
439674.00	3765405.00	0.70872
439714.00	3765405.00	0.71266
439719.00	3765405.00	0.71317

	439734.00	3765405.00	0.71465
439749.00	3765405.00	0.71616	
	439754.00	3765405.00	0.71665
439774.00	3765405.00	0.71866	
	439779.00	3765405.00	0.71918
439784.00	3765405.00	0.71967	
	439789.00	3765405.00	0.72016
439794.00	3765405.00	0.72065	
	439799.00	3765405.00	0.72115
439804.00	3765405.00	0.72161	
	439809.00	3765405.00	0.72207
439814.00	3765405.00	0.72254	
	439819.00	3765405.00	0.72296
439824.00	3765405.00	0.72340	
	439829.00	3765405.00	0.72379
439834.00	3765405.00	0.72419	
	439839.00	3765405.00	0.72454
439844.00	3765405.00	0.72490	
	439849.00	3765405.00	0.72521
439854.00	3765405.00	0.72550	
	439859.00	3765405.00	0.72576
439674.00	3765410.00	0.72034	
	439679.00	3765410.00	0.72085
439684.00	3765410.00	0.72136	
	439689.00	3765410.00	0.72186
439694.00	3765410.00	0.72238	
	439699.00	3765410.00	0.72287
439704.00	3765410.00	0.72338	
	439709.00	3765410.00	0.72389
439714.00	3765410.00	0.72440	
	439719.00	3765410.00	0.72490
439729.00	3765410.00	0.72594	
	439734.00	3765410.00	0.72646
439739.00	3765410.00	0.72697	
	439744.00	3765410.00	0.72751
439749.00	3765410.00	0.72803	
	439774.00	3765410.00	0.73070
439779.00	3765410.00	0.73122	
	439784.00	3765410.00	0.73175
439789.00	3765410.00	0.73229	
	439794.00	3765410.00	0.73282
439799.00	3765410.00	0.73334	
	439804.00	3765410.00	0.73385
439809.00	3765410.00	0.73438	
	439814.00	3765410.00	0.73484
439819.00	3765410.00	0.73535	
	439824.00	3765410.00	0.73581
439829.00	3765410.00	0.73628	
	439834.00	3765410.00	0.73668
439839.00	3765410.00	0.73713	
	439844.00	3765410.00	0.73750
439849.00	3765410.00	0.73788	

	439854.00	3765410.00	0.73822
439859.00	3765410.00	0.73854	
	439674.00	3765415.00	0.73231
439679.00	3765415.00	0.73284	
	439684.00	3765415.00	0.73335
439689.00	3765415.00	0.73389	
	439694.00	3765415.00	0.73438
439699.00	3765415.00	0.73492	
	439704.00	3765415.00	0.73544
439709.00	3765415.00	0.73596	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439714.00	3765415.00	0.73648
439719.00	3765415.00	0.73703
439729.00	3765415.00	0.73809
439734.00	3765415.00	0.73861
439739.00	3765415.00	0.73917
439744.00	3765415.00	0.73970
439749.00	3765415.00	0.74026
439774.00	3765415.00	0.74306
439779.00	3765415.00	0.74363
439784.00	3765415.00	0.74421
439789.00	3765415.00	0.74477
439794.00	3765415.00	0.74534
439799.00	3765415.00	0.74590
439804.00	3765415.00	0.74646
439809.00	3765415.00	0.74699
439814.00	3765415.00	0.74757
439819.00	3765415.00	0.74807
439824.00	3765415.00	0.74861

	439829.00	3765415.00	0.74909
439834.00	3765415.00	0.74961	
	439839.00	3765415.00	0.75004
439844.00	3765415.00	0.75051	
	439849.00	3765415.00	0.75092
439854.00	3765415.00	0.75132	
	439859.00	3765415.00	0.75169
439674.00	3765420.00	0.74468	
	439679.00	3765420.00	0.74520
439684.00	3765420.00	0.74574	
	439689.00	3765420.00	0.74625
439694.00	3765420.00	0.74682	
	439699.00	3765420.00	0.74732
439704.00	3765420.00	0.74786	
	439709.00	3765420.00	0.74839
439714.00	3765420.00	0.74895	
	439719.00	3765420.00	0.74948
439729.00	3765420.00	0.75058	
	439734.00	3765420.00	0.75115
439739.00	3765420.00	0.75171	
	439744.00	3765420.00	0.75228
439749.00	3765420.00	0.75285	
	439774.00	3765420.00	0.75581
439779.00	3765420.00	0.75641	
	439784.00	3765420.00	0.75701
439789.00	3765420.00	0.75763	
	439794.00	3765420.00	0.75822
439799.00	3765420.00	0.75883	
	439804.00	3765420.00	0.75942
439809.00	3765420.00	0.76005	
	439814.00	3765420.00	0.76060
439819.00	3765420.00	0.76121	
	439824.00	3765420.00	0.76176
439829.00	3765420.00	0.76234	
	439834.00	3765420.00	0.76285
439839.00	3765420.00	0.76341	
	439844.00	3765420.00	0.76388
439849.00	3765420.00	0.76437	
	439854.00	3765420.00	0.76482
439859.00	3765420.00	0.76525	
	439674.00	3765425.00	0.75740
439679.00	3765425.00	0.75796	
	439684.00	3765425.00	0.75849
439689.00	3765425.00	0.75905	
	439694.00	3765425.00	0.75957
439699.00	3765425.00	0.76014	
	439704.00	3765425.00	0.76068
439709.00	3765425.00	0.76125	
	439714.00	3765425.00	0.76177
439719.00	3765425.00	0.76236	
	439729.00	3765425.00	0.76349
439734.00	3765425.00	0.76406	

	439739.00	3765425.00	0.76464
439744.00	3765425.00	0.76523	
	439749.00	3765425.00	0.76584
439774.00	3765425.00	0.76893	
	439779.00	3765425.00	0.76957
439784.00	3765425.00	0.77022	
	439789.00	3765425.00	0.77084
439794.00	3765425.00	0.77151	
	439799.00	3765425.00	0.77215
439804.00	3765425.00	0.77281	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439809.00	3765425.00	0.77343
439814.00	3765425.00	0.77410
439819.00	3765425.00	0.77470
439824.00	3765425.00	0.77535
439829.00	3765425.00	0.77594
439834.00	3765425.00	0.77656
439839.00	3765425.00	0.77711
439844.00	3765425.00	0.77770
439849.00	3765425.00	0.77823
439854.00	3765425.00	0.77874
439859.00	3765425.00	0.77922
439674.00	3765430.00	0.77057
439679.00	3765430.00	0.77112
439684.00	3765430.00	0.77168
439689.00	3765430.00	0.77222
439694.00	3765430.00	0.77280
439699.00	3765430.00	0.77333
439704.00	3765430.00	0.77391

	439709.00	3765430.00	0.77446
439714.00	3765430.00	0.77505	
	439719.00	3765430.00	0.77561
439729.00	3765430.00	0.77678	
	439734.00	3765430.00	0.77738
439739.00	3765430.00	0.77798	
	439744.00	3765430.00	0.77860
439749.00	3765430.00	0.77923	
	439774.00	3765430.00	0.78246
439779.00	3765430.00	0.78313	
	439784.00	3765430.00	0.78381
439789.00	3765430.00	0.78451	
	439794.00	3765430.00	0.78519
439799.00	3765430.00	0.78588	
	439804.00	3765430.00	0.78657
439809.00	3765430.00	0.78729	
	439814.00	3765430.00	0.78795
439819.00	3765430.00	0.78866	
	439824.00	3765430.00	0.78932
439829.00	3765430.00	0.79001	
	439834.00	3765430.00	0.79064
439839.00	3765430.00	0.79131	
	439844.00	3765430.00	0.79191
439849.00	3765430.00	0.79252	
	439854.00	3765430.00	0.79309
439859.00	3765430.00	0.79365	
	439674.00	3765435.00	0.78415
439679.00	3765435.00	0.78472	
	439684.00	3765435.00	0.78528
439689.00	3765435.00	0.78586	
	439694.00	3765435.00	0.78640
439699.00	3765435.00	0.78700	
	439704.00	3765435.00	0.78755
439709.00	3765435.00	0.78814	
	439714.00	3765435.00	0.78872
439719.00	3765435.00	0.78932	
	439729.00	3765435.00	0.79052
439734.00	3765435.00	0.79113	
	439739.00	3765435.00	0.79176
439744.00	3765435.00	0.79239	
	439749.00	3765435.00	0.79303
439774.00	3765435.00	0.79642	
	439779.00	3765435.00	0.79713
439784.00	3765435.00	0.79785	
	439789.00	3765435.00	0.79857
439794.00	3765435.00	0.79931	
	439799.00	3765435.00	0.80004
439804.00	3765435.00	0.80079	
	439809.00	3765435.00	0.80153
439814.00	3765435.00	0.80229	
	439819.00	3765435.00	0.80301
439824.00	3765435.00	0.80377	

	439829.00	3765435.00	0.80448
439834.00	3765435.00	0.80522	
	439839.00	3765435.00	0.80590
439844.00	3765435.00	0.80661	
	439849.00	3765435.00	0.80726
439854.00	3765435.00	0.80792	
	439859.00	3765435.00	0.80853
439674.00	3765440.00	0.79819	
	439679.00	3765440.00	0.79877
439684.00	3765440.00	0.79935	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439689.00	3765440.00	0.79991
439694.00	3765440.00	0.80051
439699.00	3765440.00	0.80107
439704.00	3765440.00	0.80168
439709.00	3765440.00	0.80226
439714.00	3765440.00	0.80286
439719.00	3765440.00	0.80346
439729.00	3765440.00	0.80470
439734.00	3765440.00	0.80533
439739.00	3765440.00	0.80597
439744.00	3765440.00	0.80663
439749.00	3765440.00	0.80730
439774.00	3765440.00	0.81082
439779.00	3765440.00	0.81157
439784.00	3765440.00	0.81232
439789.00	3765440.00	0.81309
439794.00	3765440.00	0.81387
439799.00	3765440.00	0.81466

	439804.00	3765440.00	0.81545
439809.00	3765440.00	0.81625	
	439814.00	3765440.00	0.81703
439819.00	3765440.00	0.81786	
	439824.00	3765440.00	0.81864
439829.00	3765440.00	0.81945	
	439834.00	3765440.00	0.82021
439839.00	3765440.00	0.82101	
	439844.00	3765440.00	0.82175
439849.00	3765440.00	0.82250	
	439854.00	3765440.00	0.82321
439859.00	3765440.00	0.82390	
	439674.00	3765445.00	0.81272
439679.00	3765445.00	0.81331	
	439684.00	3765445.00	0.81388
439689.00	3765445.00	0.81448	
	439694.00	3765445.00	0.81506
439699.00	3765445.00	0.81566	
	439704.00	3765445.00	0.81625
439709.00	3765445.00	0.81686	
	439714.00	3765445.00	0.81747
439719.00	3765445.00	0.81809	
	439729.00	3765445.00	0.81936
439734.00	3765445.00	0.82000	
	439739.00	3765445.00	0.82067
439744.00	3765445.00	0.82134	
	439749.00	3765445.00	0.82203
439774.00	3765445.00	0.82571	
	439779.00	3765445.00	0.82648
439784.00	3765445.00	0.82728	
	439789.00	3765445.00	0.82809
439794.00	3765445.00	0.82892	
	439799.00	3765445.00	0.82974
439804.00	3765445.00	0.83059	
	439809.00	3765445.00	0.83143
439814.00	3765445.00	0.83231	
	439819.00	3765445.00	0.83315
439824.00	3765445.00	0.83402	
	439829.00	3765445.00	0.83487
439834.00	3765445.00	0.83574	
	439839.00	3765445.00	0.83657
439844.00	3765445.00	0.83741	
	439849.00	3765445.00	0.83821
439854.00	3765445.00	0.83902	
	439859.00	3765445.00	0.83978
439674.00	3765450.00	0.82775	
	439679.00	3765450.00	0.82834
439684.00	3765450.00	0.82894	
	439689.00	3765450.00	0.82953
439694.00	3765450.00	0.83014	
	439699.00	3765450.00	0.83074
439704.00	3765450.00	0.83135	

	439709.00	3765450.00	0.83196
439714.00	3765450.00	0.83259	
	439719.00	3765450.00	0.83322
439729.00	3765450.00	0.83451	
	439734.00	3765450.00	0.83518
439739.00	3765450.00	0.83586	
	439744.00	3765450.00	0.83656
439749.00	3765450.00	0.83727	
	439774.00	3765450.00	0.84107
439844.00	3765450.00	0.85358	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439849.00	3765450.00	0.85449
439854.00	3765450.00	0.85535
439859.00	3765450.00	0.85622
439674.00	3765455.00	0.84331
439679.00	3765455.00	0.84392
439684.00	3765455.00	0.84453
439689.00	3765455.00	0.84514
439694.00	3765455.00	0.84574
439699.00	3765455.00	0.84636
439704.00	3765455.00	0.84697
439709.00	3765455.00	0.84760
439714.00	3765455.00	0.84824
439719.00	3765455.00	0.84888
439729.00	3765455.00	0.85021
439734.00	3765455.00	0.85089
439739.00	3765455.00	0.85158
439744.00	3765455.00	0.85230
439749.00	3765455.00	0.85303

	439844.00	3765455.00	0.87032
439849.00	3765455.00	0.87129	
	439854.00	3765455.00	0.87226
439859.00	3765455.00	0.87320	
	439674.00	3765460.00	0.85945
439679.00	3765460.00	0.86007	
	439684.00	3765460.00	0.86068
439689.00	3765460.00	0.86129	
	439694.00	3765460.00	0.86192
439699.00	3765460.00	0.86253	
	439704.00	3765460.00	0.86317
439709.00	3765460.00	0.86380	
	439714.00	3765460.00	0.86445
439719.00	3765460.00	0.86510	
	439729.00	3765460.00	0.86646
439734.00	3765460.00	0.86715	
	439739.00	3765460.00	0.86788
439744.00	3765460.00	0.86861	
	439749.00	3765460.00	0.86936
439789.00	3765460.00	0.87618	
	439794.00	3765460.00	0.87714
439799.00	3765460.00	0.87812	
	439804.00	3765460.00	0.87912
439809.00	3765460.00	0.88014	
	439814.00	3765460.00	0.88118
439819.00	3765460.00	0.88224	
	439824.00	3765460.00	0.88330
439829.00	3765460.00	0.88439	
	439844.00	3765460.00	0.88763
439849.00	3765460.00	0.88869	
	439854.00	3765460.00	0.88976
439859.00	3765460.00	0.89080	
	439674.00	3765465.00	0.87619
439679.00	3765465.00	0.87682	
	439684.00	3765465.00	0.87743
439689.00	3765465.00	0.87807	
	439694.00	3765465.00	0.87868
439699.00	3765465.00	0.87932	
	439704.00	3765465.00	0.87996
439709.00	3765465.00	0.88061	
	439714.00	3765465.00	0.88126
439719.00	3765465.00	0.88193	
	439729.00	3765465.00	0.88330
439734.00	3765465.00	0.88403	
	439739.00	3765465.00	0.88475
439744.00	3765465.00	0.88550	
	439749.00	3765465.00	0.88627
439789.00	3765465.00	0.89334	
	439794.00	3765465.00	0.89435
439799.00	3765465.00	0.89538	
	439804.00	3765465.00	0.89644
439809.00	3765465.00	0.89752	

	439814.00	3765465.00	0.89862
439819.00	3765465.00	0.89975	
	439824.00	3765465.00	0.90089
439829.00	3765465.00	0.90204	
	439844.00	3765465.00	0.90554
439849.00	3765465.00	0.90672	
	439854.00	3765465.00	0.90787
439859.00	3765465.00	0.90902	
	439674.00	3765470.00	0.89358
439679.00	3765470.00	0.89419	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439684.00	3765470.00	0.89484
439689.00	3765470.00	0.89545
439694.00	3765470.00	0.89610
439699.00	3765470.00	0.89674
439704.00	3765470.00	0.89739
439709.00	3765470.00	0.89804
439714.00	3765470.00	0.89871
439719.00	3765470.00	0.89939
439729.00	3765470.00	0.90080
439734.00	3765470.00	0.90151
439739.00	3765470.00	0.90227
439744.00	3765470.00	0.90303
439749.00	3765470.00	0.90383
439789.00	3765470.00	0.91113
439794.00	3765470.00	0.91219
439799.00	3765470.00	0.91326
439804.00	3765470.00	0.91438
439809.00	3765470.00	0.91552

	439814.00	3765470.00	0.91669
439819.00	3765470.00	0.91788	
	439824.00	3765470.00	0.91910
439829.00	3765470.00	0.92033	
	439844.00	3765470.00	0.92412
439849.00	3765470.00	0.92538	
	439854.00	3765470.00	0.92665
439859.00	3765470.00	0.92789	
	439674.00	3765475.00	0.91159
439679.00	3765475.00	0.91226	
	439684.00	3765475.00	0.91288
439689.00	3765475.00	0.91354	
	439694.00	3765475.00	0.91417
439699.00	3765475.00	0.91484	
	439704.00	3765475.00	0.91549
439709.00	3765475.00	0.91616	
	439714.00	3765475.00	0.91683
439719.00	3765475.00	0.91752	
	439729.00	3765475.00	0.91894
439734.00	3765475.00	0.91968	
	439739.00	3765475.00	0.92045
439744.00	3765475.00	0.92124	
	439749.00	3765475.00	0.92203
439754.00	3765475.00	0.92288	
	439789.00	3765475.00	0.92958
439794.00	3765475.00	0.93067	
	439799.00	3765475.00	0.93181
439804.00	3765475.00	0.93297	
	439809.00	3765475.00	0.93418
439814.00	3765475.00	0.93542	
	439819.00	3765475.00	0.93668
439824.00	3765475.00	0.93798	
	439829.00	3765475.00	0.93930
439269.00	3764900.00	0.23287	
	439369.00	3764900.00	0.23596
439469.00	3764900.00	0.23666	
	439569.00	3764900.00	0.23487
439669.00	3764900.00	0.23049	
	439769.00	3764900.00	0.22349
439869.00	3764900.00	0.21392	
	439969.00	3764900.00	0.20201
440069.00	3764900.00	0.18818	
	440169.00	3764900.00	0.17312
440269.00	3764900.00	0.15767	
	439269.00	3765000.00	0.27095
439369.00	3765000.00	0.27637	
	439469.00	3765000.00	0.27898
439569.00	3765000.00	0.27869	
	439669.00	3765000.00	0.27538
439769.00	3765000.00	0.26878	
	439869.00	3765000.00	0.25862
439969.00	3765000.00	0.24502	

	440069.00	3765000.00	0.22839
440169.00	3765000.00	0.20957	
	440269.00	3765000.00	0.18971
439269.00	3765100.00	0.31939	
	439369.00	3765100.00	0.32800
439469.00	3765100.00	0.33326	
	439569.00	3765100.00	0.33523
439669.00	3765100.00	0.33386	
	439769.00	3765100.00	0.32859
439869.00	3765100.00	0.31861	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439969.00	3765100.00	0.30367
440069.00	3765100.00	0.28402
440169.00	3765100.00	0.26055
440269.00	3765100.00	0.23472
439269.00	3765200.00	0.38343
439369.00	3765200.00	0.39668
439469.00	3765200.00	0.40568
439569.00	3765200.00	0.41085
439669.00	3765200.00	0.41253
439769.00	3765200.00	0.41003
439869.00	3765200.00	0.40173
439969.00	3765200.00	0.38655
440069.00	3765200.00	0.36419
440169.00	3765200.00	0.33524
440269.00	3765200.00	0.30127
439269.00	3765300.00	0.47255
439369.00	3765300.00	0.49353
439469.00	3765300.00	0.50839

	439569.00	3765300.00	0.51804
439669.00	3765300.00	0.52405	
	439769.00	3765300.00	0.52646
439869.00	3765300.00	0.52273	
	439969.00	3765300.00	0.50970
440069.00	3765300.00	0.48594	
	440169.00	3765300.00	0.45117
440269.00	3765300.00	0.40624	
	439269.00	3765400.00	0.60597
439369.00	3765400.00	0.64201	
	439469.00	3765400.00	0.66855
439569.00	3765400.00	0.68565	
	439669.00	3765400.00	0.69695
439769.00	3765400.00	0.70652	
	439869.00	3765400.00	0.71371
439969.00	3765400.00	0.70865	
	440069.00	3765400.00	0.68661
440169.00	3765400.00	0.64653	
	440269.00	3765400.00	0.58737
439269.00	3765500.00	0.83327	
	439369.00	3765500.00	0.90310
439469.00	3765500.00	0.95989	
	439569.00	3765500.00	0.99459
439669.00	3765500.00	1.01288	
	439769.00	3765500.00	1.02874
439869.00	3765500.00	1.06171	
	439969.00	3765500.00	1.08877
440069.00	3765500.00	1.07473	
	440169.00	3765500.00	1.02830
440269.00	3765500.00	0.95087	
	439269.00	3765600.00	1.36500
439369.00	3765600.00	1.51590	
	439469.00	3765600.00	1.68432
439569.00	3765600.00	1.78162	
	439669.00	3765600.00	1.82944
439769.00	3765600.00	1.87113	
	439869.00	3765600.00	1.94297
439969.00	3765600.00	2.28307	
	440069.00	3765600.00	2.25139
440169.00	3765600.00	2.13470	
	440269.00	3765600.00	1.99139
439269.00	3765700.00	7.25416	
	439369.00	3765700.00	7.82253
439469.00	3765700.00	11.15521	
	439569.00	3765700.00	11.90380
439669.00	3765700.00	10.94120	
	439769.00	3765700.00	10.50967
439869.00	3765700.00	10.06488	
	439969.00	3765700.00	10.05430
440069.00	3765700.00	11.14977	
	440169.00	3765700.00	12.61795
440269.00	3765700.00	15.51813	

	439269.00	3765800.00	2.99077
439369.00	3765800.00	3.19606	
	439469.00	3765800.00	3.61311
439569.00	3765800.00	4.28926	
	439669.00	3765800.00	4.89092
439769.00	3765800.00	5.87121	
	439869.00	3765800.00	8.05806
439969.00	3765800.00	4.94313	
	440069.00	3765800.00	4.28344
440169.00	3765800.00	4.13698	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
440269.00	3765800.00	4.13966
439269.00	3765900.00	0.98221
439369.00	3765900.00	1.14760
439469.00	3765900.00	1.29578
439569.00	3765900.00	1.45052
439669.00	3765900.00	1.61656
439769.00	3765900.00	1.77799
439869.00	3765900.00	1.91522
439969.00	3765900.00	1.98210
440069.00	3765900.00	1.94850
440169.00	3765900.00	1.89475
440269.00	3765900.00	1.86543
439649.00	3765310.00	0.53681
439679.00	3765310.00	0.53834
439709.00	3765310.00	0.53957
439739.00	3765310.00	0.54045
439769.00	3765310.00	0.54090
439799.00	3765310.00	0.54082

	439829.00	3765310.00	0.54009
439859.00	3765310.00	0.53858	
	439889.00	3765310.00	0.53621
439649.00	3765340.00	0.58184	
	439679.00	3765340.00	0.58386
439709.00	3765340.00	0.58563	
	439739.00	3765340.00	0.58714
439769.00	3765340.00	0.58830	
	439799.00	3765340.00	0.58898
439829.00	3765340.00	0.58903	
	439859.00	3765340.00	0.58828
439889.00	3765340.00	0.58660	
	439649.00	3765370.00	0.63390
439679.00	3765370.00	0.63641	
	439709.00	3765370.00	0.63875
439739.00	3765370.00	0.64092	
	439769.00	3765370.00	0.64289
439799.00	3765370.00	0.64451	
	439829.00	3765370.00	0.64558
439859.00	3765370.00	0.64586	
	439889.00	3765370.00	0.64512
439649.00	3765400.00	0.69496	
	439679.00	3765400.00	0.69792
439709.00	3765400.00	0.70079	
	439739.00	3765400.00	0.70365
439769.00	3765400.00	0.70652	
	439799.00	3765400.00	0.70927
439829.00	3765400.00	0.71168	
	439859.00	3765400.00	0.71336
439889.00	3765400.00	0.71398	
	439649.00	3765430.00	0.76775
439679.00	3765430.00	0.77112	
	439709.00	3765430.00	0.77446
439739.00	3765430.00	0.77798	
	439769.00	3765430.00	0.78180
439799.00	3765430.00	0.78588	
	439829.00	3765430.00	0.79001
439859.00	3765430.00	0.79365	
	439889.00	3765430.00	0.79621
439649.00	3765460.00	0.85632	
	439679.00	3765460.00	0.86007
439709.00	3765460.00	0.86380	
	439739.00	3765460.00	0.86788
439769.00	3765460.00	0.87258	
	439799.00	3765460.00	0.87812
439829.00	3765460.00	0.88439	
	439859.00	3765460.00	0.89080
439889.00	3765460.00	0.89635	
	439649.00	3765490.00	0.96681
439679.00	3765490.00	0.97094	
	439709.00	3765490.00	0.97497
439739.00	3765490.00	0.97946	

	439769.00	3765490.00	0.98493
439799.00	3765490.00	0.99188	
	439829.00	3765490.00	1.00065
439859.00	3765490.00	1.01090	
	439889.00	3765490.00	1.02117

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439674.00	3765310.00	4.80622	(12010217)
439679.00	3765310.00	4.79062	(12010217)
439684.00	3765310.00	4.77559	(12010217)
439689.00	3765310.00	4.75935	(12010217)
439694.00	3765310.00	4.74398	(12010217)
439699.00	3765310.00	4.72759	(12010217)
439704.00	3765310.00	4.71189	(12010217)
439709.00	3765310.00	4.69850	(13121718)
439714.00	3765310.00	4.69178	(13121718)
439719.00	3765310.00	4.68119	(13121718)
439729.00	3765310.00	4.66061	(13121718)
439734.00	3765310.00	4.65045	(13121718)
439739.00	3765310.00	4.63862	(13121718)
439744.00	3765310.00	4.62535	(13121718)
439749.00	3765310.00	4.61261	(12011808)
439764.00	3765310.00	4.60027	(15010717)
439769.00	3765310.00	4.62296	(15010717)

439774.00	3765310.00	4.64394	(15010717)
	439779.00	3765310.00	4.66491 (15010717)
439784.00	3765310.00	4.68481	(15010717)
	439789.00	3765310.00	4.70391 (15010717)
439794.00	3765310.00	4.72243	(15010717)
	439799.00	3765310.00	4.73988 (15010717)
439804.00	3765310.00	4.75670	(15010717)
	439809.00	3765310.00	4.77290 (15010717)
439814.00	3765310.00	4.78799	(15010717)
	439819.00	3765310.00	4.80271 (15010717)
439824.00	3765310.00	4.81596	(15010717)
	439829.00	3765310.00	4.83014 (15010717)
439839.00	3765310.00	4.85418	(15010717)
	439844.00	3765310.00	4.86513 (15010717)
439849.00	3765310.00	4.87620	(15010717)
	439854.00	3765310.00	4.88503 (15010717)
439859.00	3765310.00	4.89602	(15010717)
	439864.00	3765310.00	4.90426 (15010717)
439869.00	3765310.00	4.91305	(15010717)
	439874.00	3765310.00	4.92030 (15010717)
439879.00	3765310.00	4.92816	(15010717)
	439884.00	3765310.00	4.93499 (15010717)
439674.00	3765315.00	4.85276	(12010217)
	439679.00	3765315.00	4.83691 (12010217)
439684.00	3765315.00	4.82170	(12010217)
	439689.00	3765315.00	4.80536 (12010217)
439694.00	3765315.00	4.78990	(12010217)
	439699.00	3765315.00	4.77303 (12010217)
439704.00	3765315.00	4.76368	(13121718)
	439709.00	3765315.00	4.75553 (13121718)
439714.00	3765315.00	4.74835	(13121718)
	439719.00	3765315.00	4.74074 (13121718)
439729.00	3765315.00	4.72200	(13121718)
	439734.00	3765315.00	4.71092 (13121718)
439739.00	3765315.00	4.70041	(13121718)
	439744.00	3765315.00	4.68859 (13121718)
439749.00	3765315.00	4.67621	(13121718)
	439764.00	3765315.00	4.65516 (15010717)
439769.00	3765315.00	4.67741	(15010717)
	439774.00	3765315.00	4.69854 (15010717)
439779.00	3765315.00	4.71890	(15010717)
	439784.00	3765315.00	4.73931 (15010717)
439789.00	3765315.00	4.75727	(15010717)
	439794.00	3765315.00	4.77545 (15010717)
439799.00	3765315.00	4.79306	(15010717)
	439804.00	3765315.00	4.80917 (15010717)
439809.00	3765315.00	4.82493	(15010717)
	439814.00	3765315.00	4.83983 (15010717)
439819.00	3765315.00	4.85416	(15010717)
	439824.00	3765315.00	4.86772 (15010717)
439829.00	3765315.00	4.88038	(15010717)
	439839.00	3765315.00	4.90373 (15010717)

439844.00	3765315.00	4.91513	(15010717)
	439849.00	3765315.00	4.92499 (15010717)
439854.00	3765315.00	4.93506	(15010717)
	439859.00	3765315.00	4.94381 (15010717)
439864.00	3765315.00	4.95333	(15010717)
	439869.00	3765315.00	4.96070 (15010717)
439874.00	3765315.00	4.96809	(15010717)
	439879.00	3765315.00	4.97601 (15010717)
439884.00	3765315.00	4.98284	(15010717)
	439674.00	3765320.00	4.90035 (12010217)
439679.00	3765320.00	4.88586	(12010217)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439684.00	3765320.00	4.86914	(12010217)
439689.00	3765320.00	4.85374	(12010217)
439694.00	3765320.00	4.83675	(12010217)
439699.00	3765320.00	4.82488	(13121718)
439704.00	3765320.00	4.81978	(13121718)
439709.00	3765320.00	4.81509	(13121718)
439714.00	3765320.00	4.80637	(13121718)
439719.00	3765320.00	4.79943	(13121718)
439729.00	3765320.00	4.78318	(13121718)
439734.00	3765320.00	4.77404	(13121718)
439739.00	3765320.00	4.76187	(13121718)
439744.00	3765320.00	4.75238	(13121718)
439749.00	3765320.00	4.73871	(13121718)
439764.00	3765320.00	4.71141	(15010717)
439769.00	3765320.00	4.73226	(15010717)
439774.00	3765320.00	4.75425	(15010717)
439779.00	3765320.00	4.77418	(15010717)

439784.00	3765320.00	4.79366	(15010717)
	439789.00	3765320.00	4.81182 (15010717)
439794.00	3765320.00	4.82967	(15010717)
	439799.00	3765320.00	4.84681 (15010717)
439804.00	3765320.00	4.86291	(15010717)
	439809.00	3765320.00	4.87805 (15010717)
439814.00	3765320.00	4.89281	(15010717)
	439819.00	3765320.00	4.90667 (15010717)
439824.00	3765320.00	4.91997	(15010717)
	439829.00	3765320.00	4.93195 (15010717)
439839.00	3765320.00	4.95494	(15010717)
	439844.00	3765320.00	4.96584 (15010717)
439849.00	3765320.00	4.97560	(15010717)
	439854.00	3765320.00	4.98578 (15010717)
439859.00	3765320.00	4.99363	(15010717)
	439864.00	3765320.00	5.00238 (15010717)
439869.00	3765320.00	5.01029	(15010717)
	439874.00	3765320.00	5.01804 (15010717)
439879.00	3765320.00	5.02389	(15010717)
	439884.00	3765320.00	5.03125 (15010717)
439674.00	3765325.00	4.94954	(12010217)
	439679.00	3765325.00	4.93405 (12010217)
439684.00	3765325.00	4.91797	(12010217)
	439689.00	3765325.00	4.90220 (12010217)
439694.00	3765325.00	4.88543	(13121718)
	439699.00	3765325.00	4.87990 (13121718)
439704.00	3765325.00	4.87569	(13121718)
	439709.00	3765325.00	4.87054 (13121718)
439714.00	3765325.00	4.86643	(13121718)
	439719.00	3765325.00	4.85876 (13121718)
439729.00	3765325.00	4.84329	(13121718)
	439734.00	3765325.00	4.83443 (13121718)
439739.00	3765325.00	4.82682	(13121718)
	439744.00	3765325.00	4.81402 (13121718)
439749.00	3765325.00	4.80516	(13121718)
	439754.00	3765325.00	4.79035 (13121718)
439769.00	3765325.00	4.78928	(15010717)
	439774.00	3765325.00	4.81010 (15010717)
439779.00	3765325.00	4.83052	(15010717)
	439784.00	3765325.00	4.84892 (15010717)
439789.00	3765325.00	4.86746	(15010717)
	439794.00	3765325.00	4.88471 (15010717)
439799.00	3765325.00	4.90127	(15010717)
	439804.00	3765325.00	4.91748 (15010717)
439809.00	3765325.00	4.93165	(15010717)
	439814.00	3765325.00	4.94632 (15010717)
439819.00	3765325.00	4.95949	(15010717)
	439824.00	3765325.00	4.97253 (15010717)
439829.00	3765325.00	4.98461	(15010717)
	439839.00	3765325.00	5.00671 (15010717)
439844.00	3765325.00	5.01687	(15010717)
	439849.00	3765325.00	5.02674 (15010717)

439854.00	3765325.00	5.03569	(15010717)
	439859.00	3765325.00	5.04473 (15010717)
439864.00	3765325.00	5.05179	(15010717)
	439869.00	3765325.00	5.06029 (15010717)
439874.00	3765325.00	5.06708	(15010717)
	439879.00	3765325.00	5.07333 (15010717)
439884.00	3765325.00	5.07951	(15010717)
	439674.00	3765330.00	4.99987 (12010217)
439679.00	3765330.00	4.98352	(12010217)
	439684.00	3765330.00	4.96823 (12010217)
439689.00	3765330.00	4.95164	(12010217)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439694.00	3765330.00	4.93755	(13121718)
439699.00	3765330.00	4.93661	(13121718)
439704.00	3765330.00	4.93307	(13121718)
439709.00	3765330.00	4.92805	(13121718)
439714.00	3765330.00	4.92277	(13121718)
439719.00	3765330.00	4.91817	(13121718)
439729.00	3765330.00	4.90459	(13121718)
439734.00	3765330.00	4.89623	(13121718)
439739.00	3765330.00	4.88742	(13121718)
439744.00	3765330.00	4.87954	(13121718)
439749.00	3765330.00	4.86820	(13121718)
439754.00	3765330.00	4.85827	(13121718)
439774.00	3765330.00	4.86691	(15010717)
439779.00	3765330.00	4.88764	(15010717)
439784.00	3765330.00	4.90559	(15010717)
439789.00	3765330.00	4.92354	(15010717)
439794.00	3765330.00	4.94046	(15010717)

439799.00	3765330.00	4.95710	(15010717)
	439804.00	3765330.00	4.97191 (15010717)
439809.00	3765330.00	4.98673	(15010717)
	439814.00	3765330.00	5.00037 (15010717)
439819.00	3765330.00	5.01391	(15010717)
	439824.00	3765330.00	5.02625 (15010717)
439829.00	3765330.00	5.03826	(15010717)
	439839.00	3765330.00	5.05950 (15010717)
439844.00	3765330.00	5.06939	(15010717)
	439849.00	3765330.00	5.07876 (15010717)
439854.00	3765330.00	5.08718	(15010717)
	439859.00	3765330.00	5.09607 (15010717)
439864.00	3765330.00	5.10341	(15010717)
	439869.00	3765330.00	5.11029 (15010717)
439874.00	3765330.00	5.11754	(15010717)
	439879.00	3765330.00	5.12426 (15010717)
439884.00	3765330.00	5.12868	(15010717)
	439674.00	3765335.00	5.05096 (12010217)
439679.00	3765335.00	5.03514	(12010217)
	439684.00	3765335.00	5.01899 (12010217)
439689.00	3765335.00	5.00269	(12010217)
	439694.00	3765335.00	4.99205 (13121718)
439699.00	3765335.00	4.99055	(13121718)
	439704.00	3765335.00	4.98819 (13121718)
439709.00	3765335.00	4.98671	(13121718)
	439714.00	3765335.00	4.98197 (13121718)
439719.00	3765335.00	4.97617	(13121718)
	439729.00	3765335.00	4.96550 (13121718)
439734.00	3765335.00	4.95975	(13121718)
	439739.00	3765335.00	4.95021 (13121718)
439744.00	3765335.00	4.94226	(13121718)
	439749.00	3765335.00	4.93274 (13121718)
439774.00	3765335.00	4.92605	(15010717)
	439779.00	3765335.00	4.94451 (15010717)
439784.00	3765335.00	4.96343	(15010717)
	439789.00	3765335.00	4.98029 (15010717)
439794.00	3765335.00	4.99757	(15010717)
	439839.00	3765335.00	5.11250 (15010717)
439844.00	3765335.00	5.12202	(15010717)
	439849.00	3765335.00	5.13147 (15010717)
439854.00	3765335.00	5.13957	(15010717)
	439859.00	3765335.00	5.14723 (15010717)
439864.00	3765335.00	5.15585	(15010717)
	439869.00	3765335.00	5.16158 (15010717)
439874.00	3765335.00	5.16863	(15010717)
	439879.00	3765335.00	5.17483 (15010717)
439884.00	3765335.00	5.18047	(15010717)
	439674.00	3765340.00	5.10336 (12010217)
439679.00	3765340.00	5.08731	(12010217)
	439684.00	3765340.00	5.07149 (12010217)
439689.00	3765340.00	5.05468	(12010217)
	439694.00	3765340.00	5.04964 (13121718)

439699.00	3765340.00	5.04635	(13121718)
	439704.00	3765340.00	5.04478 (13121718)
439709.00	3765340.00	5.04222	(13121718)
	439714.00	3765340.00	5.04031 (13121718)
439719.00	3765340.00	5.03791	(13121718)
	439729.00	3765340.00	5.02674 (13121718)
439734.00	3765340.00	5.01959	(13121718)
	439739.00	3765340.00	5.01535 (13121718)
439744.00	3765340.00	5.00580	(13121718)
	439749.00	3765340.00	4.99820 (13121718)
439774.00	3765340.00	4.98533	(15010717)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439779.00	3765340.00	5.00343	(15010717)
439784.00	3765340.00	5.02156	(15010717)
439789.00	3765340.00	5.03873	(15010717)
439794.00	3765340.00	5.05532	(15010717)
439839.00	3765340.00	5.16672	(15010717)
439844.00	3765340.00	5.17605	(15010717)
439849.00	3765340.00	5.18495	(15010717)
439854.00	3765340.00	5.19314	(15010717)
439859.00	3765340.00	5.20046	(15010717)
439864.00	3765340.00	5.20779	(15010717)
439869.00	3765340.00	5.21508	(15010717)
439874.00	3765340.00	5.22016	(15010717)
439879.00	3765340.00	5.22614	(15010717)
439884.00	3765340.00	5.23273	(15010717)
439674.00	3765345.00	5.15677	(12010217)
439679.00	3765345.00	5.14093	(12010217)
439684.00	3765345.00	5.12501	(12010217)

439689.00	3765345.00	5.10765	(12010217)
	439694.00	3765345.00	5.10064 (13121718)
439699.00	3765345.00	5.10258	(13121718)
	439704.00	3765345.00	5.10257 (13121718)
439709.00	3765345.00	5.09988	(13121718)
	439714.00	3765345.00	5.09779 (13121718)
439719.00	3765345.00	5.09458	(13121718)
	439729.00	3765345.00	5.08758 (13121718)
439734.00	3765345.00	5.08297	(13121718)
	439739.00	3765345.00	5.07569 (13121718)
439744.00	3765345.00	5.07142	(13121718)
	439749.00	3765345.00	5.06283 (13121718)
439774.00	3765345.00	5.04421	(15010717)
	439779.00	3765345.00	5.06417 (15010717)
439784.00	3765345.00	5.08038	(15010717)
	439789.00	3765345.00	5.09809 (15010717)
439794.00	3765345.00	5.11320	(15010717)
	439839.00	3765345.00	5.22204 (15010717)
439844.00	3765345.00	5.23112	(15010717)
	439849.00	3765345.00	5.23885 (15010717)
439854.00	3765345.00	5.24747	(15010717)
	439859.00	3765345.00	5.25437 (15010717)
439864.00	3765345.00	5.26074	(15010717)
	439869.00	3765345.00	5.26791 (15010717)
439874.00	3765345.00	5.27356	(15010717)
	439879.00	3765345.00	5.27921 (15010717)
439884.00	3765345.00	5.28417	(15010717)
	439674.00	3765350.00	5.21159 (12010217)
439679.00	3765350.00	5.19634	(12010217)
	439684.00	3765350.00	5.17922 (12010217)
439689.00	3765350.00	5.16256	(12010217)
	439694.00	3765350.00	5.15650 (13121718)
439699.00	3765350.00	5.15658	(13121718)
	439704.00	3765350.00	5.15673 (13121718)
439709.00	3765350.00	5.15857	(13121718)
	439714.00	3765350.00	5.15689 (13121718)
439719.00	3765350.00	5.15478	(13121718)
	439729.00	3765350.00	5.14986 (13121718)
439734.00	3765350.00	5.14512	(13121718)
	439739.00	3765350.00	5.14095 (13121718)
439744.00	3765350.00	5.13309	(13121718)
	439749.00	3765350.00	5.12912 (13121718)
439774.00	3765350.00	5.10656	(15010717)
	439779.00	3765350.00	5.12370 (15010717)
439784.00	3765350.00	5.14189	(15010717)
	439789.00	3765350.00	5.15728 (15010717)
439794.00	3765350.00	5.17310	(15010717)
	439839.00	3765350.00	5.27801 (15010717)
439844.00	3765350.00	5.28638	(15010717)
	439849.00	3765350.00	5.29461 (15010717)
439854.00	3765350.00	5.30177	(15010717)
	439859.00	3765350.00	5.30965 (15010717)

439864.00	3765350.00	5.31546	(15010717)
	439869.00	3765350.00	5.32136 (15010717)
439874.00	3765350.00	5.32871	(15010717)
	439879.00	3765350.00	5.33271 (15010717)
439884.00	3765350.00	5.33775	(15010717)
	439674.00	3765355.00	5.26807 (12010217)
439679.00	3765355.00	5.25214	(12010217)
	439684.00	3765355.00	5.23554 (12010217)
439689.00	3765355.00	5.21871	(12010217)
	439694.00	3765355.00	5.21097 (13121718)
439699.00	3765355.00	5.21384	(13121718)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439704.00	3765355.00	5.21382	(13121718)
439709.00	3765355.00	5.21316	(13121718)
439714.00	3765355.00	5.21486	(13121718)
439719.00	3765355.00	5.21488	(13121718)
439729.00	3765355.00	5.20928	(13121718)
439734.00	3765355.00	5.20761	(13121718)
439739.00	3765355.00	5.20307	(13121718)
439744.00	3765355.00	5.20074	(13121718)
439749.00	3765355.00	5.19161	(13121718)
439774.00	3765355.00	5.16837	(15010717)
439779.00	3765355.00	5.18572	(15010717)
439784.00	3765355.00	5.20316	(15010717)
439789.00	3765355.00	5.21842	(15010717)
439794.00	3765355.00	5.23379	(15010717)
439839.00	3765355.00	5.33438	(15010717)
439844.00	3765355.00	5.34321	(15010717)
439849.00	3765355.00	5.35133	(15010717)

439854.00	3765355.00	5.35760	(15010717)
	439859.00	3765355.00	5.36517 (15010717)
439864.00	3765355.00	5.37124	(15010717)
	439869.00	3765355.00	5.37702 (15010717)
439874.00	3765355.00	5.38211	(15010717)
	439879.00	3765355.00	5.38793 (15010717)
439884.00	3765355.00	5.39246	(15010717)
	439674.00	3765360.00	5.35165 (12011417)
439679.00	3765360.00	5.33658	(12011417)
	439684.00	3765360.00	5.32170 (12011417)
439689.00	3765360.00	5.30373	(12011417)
	439694.00	3765360.00	5.28669 (12011417)
439699.00	3765360.00	5.26723	(12011417)
	439704.00	3765360.00	5.27108 (13121718)
439709.00	3765360.00	5.27282	(13121718)
	439714.00	3765360.00	5.27178 (13121718)
439719.00	3765360.00	5.27291	(13121718)
	439729.00	3765360.00	5.27327 (13121718)
439734.00	3765360.00	5.26929	(13121718)
	439739.00	3765360.00	5.26706 (13121718)
439744.00	3765360.00	5.26213	(13121718)
	439749.00	3765360.00	5.26043 (13121718)
439774.00	3765360.00	5.23100	(15010717)
	439779.00	3765360.00	5.24969 (15010717)
439784.00	3765360.00	5.26454	(15010717)
	439789.00	3765360.00	5.28152 (15010717)
439794.00	3765360.00	5.29429	(15010717)
	439799.00	3765360.00	5.30906 (15010717)
439804.00	3765360.00	5.32148	(15010717)
	439809.00	3765360.00	5.33417 (15010717)
439814.00	3765360.00	5.34496	(15010717)
	439839.00	3765360.00	5.39270 (15010717)
439844.00	3765360.00	5.40098	(15010717)
	439849.00	3765360.00	5.40842 (15010717)
439854.00	3765360.00	5.41538	(15010717)
	439859.00	3765360.00	5.42100 (15010717)
439864.00	3765360.00	5.42810	(15010717)
	439869.00	3765360.00	5.43335 (15010717)
439874.00	3765360.00	5.43829	(15010717)
	439879.00	3765360.00	5.44337 (15010717)
439884.00	3765360.00	5.44815	(15010717)
	439674.00	3765365.00	5.44073 (12011417)
439679.00	3765365.00	5.42622	(12011417)
	439684.00	3765365.00	5.41159 (12011417)
439689.00	3765365.00	5.39656	(12011417)
	439694.00	3765365.00	5.38023 (12011417)
439699.00	3765365.00	5.36344	(12011417)
	439704.00	3765365.00	5.34403 (12011417)
439709.00	3765365.00	5.32890	(13121718)
	439714.00	3765365.00	5.33272 (13121718)
439719.00	3765365.00	5.33250	(13121718)
	439729.00	3765365.00	5.33271 (13121718)

439734.00	3765365.00	5.33328	(13121718)
	439739.00	3765365.00	5.33168 (13121718)
439744.00	3765365.00	5.32787	(13121718)
	439749.00	3765365.00	5.32403 (13121718)
439774.00	3765365.00	5.29627	(15010717)
	439779.00	3765365.00	5.31208 (15010717)
439784.00	3765365.00	5.32935	(15010717)
	439789.00	3765365.00	5.34283 (15010717)
439794.00	3765365.00	5.35804	(15010717)
	439799.00	3765365.00	5.37086 (15010717)
439804.00	3765365.00	5.38344	(15010717)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439809.00	3765365.00	5.39522	(15010717)
439814.00	3765365.00	5.40561	(15010717)
439839.00	3765365.00	5.45198	(15010717)
439844.00	3765365.00	5.45900	(15010717)
439849.00	3765365.00	5.46624	(15010717)
439854.00	3765365.00	5.47288	(15010717)
439859.00	3765365.00	5.47922	(15010717)
439864.00	3765365.00	5.48511	(15010717)
439869.00	3765365.00	5.49030	(15010717)
439874.00	3765365.00	5.49621	(15010717)
439879.00	3765365.00	5.49977	(15010717)
439884.00	3765365.00	5.50476	(15010717)
439674.00	3765370.00	5.52913	(12011417)
439679.00	3765370.00	5.51709	(12011417)
439684.00	3765370.00	5.50310	(12011417)
439689.00	3765370.00	5.48819	(12011417)
439694.00	3765370.00	5.47358	(12011417)

439699.00	3765370.00	5.45728	(12011417)
	439704.00	3765370.00	5.44217 (12011417)
439709.00	3765370.00	5.42264	(12011417)
	439714.00	3765370.00	5.40367 (12011417)
439719.00	3765370.00	5.39224	(13121718)
	439729.00	3765370.00	5.39377 (13121718)
439734.00	3765370.00	5.39486	(13121718)
	439739.00	3765370.00	5.39378 (13121718)
439744.00	3765370.00	5.39489	(13121718)
	439749.00	3765370.00	5.39053 (13121718)
439774.00	3765370.00	5.36546	(13121718)
	439779.00	3765370.00	5.37776 (15010717)
439784.00	3765370.00	5.39305	(15010717)
	439789.00	3765370.00	5.40736 (15010717)
439794.00	3765370.00	5.42154	(15010717)
	439799.00	3765370.00	5.43404 (15010717)
439804.00	3765370.00	5.44658	(15010717)
	439809.00	3765370.00	5.45652 (15010717)
439814.00	3765370.00	5.46844	(15010717)
	439839.00	3765370.00	5.51175 (15010717)
439844.00	3765370.00	5.51960	(15010717)
	439849.00	3765370.00	5.52549 (15010717)
439854.00	3765370.00	5.53239	(15010717)
	439859.00	3765370.00	5.53871 (15010717)
439864.00	3765370.00	5.54365	(15010717)
	439869.00	3765370.00	5.54931 (15010717)
439874.00	3765370.00	5.55377	(15010717)
	439879.00	3765370.00	5.55903 (15010717)
439884.00	3765370.00	5.56206	(15010717)
	439674.00	3765375.00	5.61757 (12011417)
439679.00	3765375.00	5.60613	(12011417)
	439684.00	3765375.00	5.59447 (12011417)
439689.00	3765375.00	5.58212	(12011417)
	439694.00	3765375.00	5.56715 (12011417)
439699.00	3765375.00	5.55218	(12011417)
	439704.00	3765375.00	5.53612 (12011417)
439709.00	3765375.00	5.52089	(12011417)
	439714.00	3765375.00	5.50271 (12011417)
439719.00	3765375.00	5.48447	(12011417)
	439729.00	3765375.00	5.45843 (13121718)
439734.00	3765375.00	5.45736	(13121718)
	439739.00	3765375.00	5.45895 (13121718)
439744.00	3765375.00	5.45641	(13121718)
	439749.00	3765375.00	5.45877 (13121718)
439754.00	3765375.00	5.45501	(13121718)
	439774.00	3765375.00	5.43743 (13121718)
439779.00	3765375.00	5.44502	(15010717)
	439784.00	3765375.00	5.45778 (15010717)
439789.00	3765375.00	5.47380	(15010717)
	439794.00	3765375.00	5.48536 (15010717)
439799.00	3765375.00	5.49953	(15010717)
	439804.00	3765375.00	5.50913 (15010717)

439809.00	3765375.00	5.52140	(15010717)
	439814.00	3765375.00	5.53054 (15010717)
439839.00	3765375.00	5.57340	(15010717)
	439844.00	3765375.00	5.58020 (15010717)
439849.00	3765375.00	5.58669	(15010717)
	439854.00	3765375.00	5.59302 (15010717)
439859.00	3765375.00	5.59833	(15010717)
	439864.00	3765375.00	5.60393 (15010717)
439869.00	3765375.00	5.60834	(15010717)
	439874.00	3765375.00	5.61336 (15010717)
439879.00	3765375.00	5.61762	(15010717)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_2.5 IN  
 MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439884.00	3765375.00	5.62143	(15010717)
439774.00	3765380.00	5.50932	(13121718)
439779.00	3765380.00	5.51090	(15010717)
439784.00	3765380.00	5.52701	(15010717)
439789.00	3765380.00	5.53798	(15010717)
439794.00	3765380.00	5.55308	(15010717)
439799.00	3765380.00	5.56306	(15010717)
439804.00	3765380.00	5.57511	(15010717)
439809.00	3765380.00	5.58508	(15010717)
439814.00	3765380.00	5.59547	(15010717)
439769.00	3765385.00	5.58677	(13121718)
439819.00	3765385.00	5.66851	(15010717)
439769.00	3765400.00	5.81101	(12011417)
439844.00	3765400.00	5.90403	(15010717)
439849.00	3765400.00	5.90818	(15010717)
439674.00	3765405.00	6.14460	(12011417)
439714.00	3765405.00	6.09757	(12011417)

439719.00	3765405.00	6.08786	(12011417)
	439734.00	3765405.00	6.05022 (12011417)
439749.00	3765405.00	6.00486	(12011417)
	439754.00	3765405.00	5.98650 (12011417)
439774.00	3765405.00	5.90468	(12011417)
	439779.00	3765405.00	5.88021 (12011417)
439784.00	3765405.00	5.87970	(15010717)
	439789.00	3765405.00	5.89034 (15010717)
439794.00	3765405.00	5.90112	(15010717)
	439799.00	3765405.00	5.91050 (15010717)
439804.00	3765405.00	5.91864	(15010717)
	439809.00	3765405.00	5.92784 (15010717)
439814.00	3765405.00	5.93456	(15010717)
	439819.00	3765405.00	5.94402 (15010717)
439824.00	3765405.00	5.94848	(15010717)
	439829.00	3765405.00	5.95649 (15010717)
439834.00	3765405.00	5.96027	(15010717)
	439839.00	3765405.00	5.96884 (15010717)
439844.00	3765405.00	5.97177	(15010717)
	439849.00	3765405.00	5.97863 (15010717)
439854.00	3765405.00	5.98121	(15010717)
	439859.00	3765405.00	5.98816 (15010717)
439674.00	3765410.00	6.23092	(12011417)
	439679.00	3765410.00	6.22950 (12011417)
439684.00	3765410.00	6.22873	(12011417)
	439689.00	3765410.00	6.22494 (12011417)
439694.00	3765410.00	6.22138	(12011417)
	439699.00	3765410.00	6.21571 (12011417)
439704.00	3765410.00	6.21171	(12011417)
	439709.00	3765410.00	6.20509 (12011417)
439714.00	3765410.00	6.19748	(12011417)
	439719.00	3765410.00	6.18798 (12011417)
439729.00	3765410.00	6.16940	(12011417)
	439734.00	3765410.00	6.15796 (12011417)
439739.00	3765410.00	6.14370	(12011417)
	439744.00	3765410.00	6.12923 (12011417)
439749.00	3765410.00	6.11459	(12011417)
	439774.00	3765410.00	6.02213 (12011417)
439779.00	3765410.00	6.00027	(12011417)
	439784.00	3765410.00	5.97619 (12011417)
439789.00	3765410.00	5.96450	(15010717)
	439794.00	3765410.00	5.97625 (15010717)
439799.00	3765410.00	5.98347	(15010717)
	439804.00	3765410.00	5.99380 (15010717)
439809.00	3765410.00	5.99889	(15010717)
	439814.00	3765410.00	6.00914 (15010717)
439819.00	3765410.00	6.01345	(15010717)
	439824.00	3765410.00	6.02266 (15010717)
439829.00	3765410.00	6.02601	(15010717)
	439834.00	3765410.00	6.03430 (15010717)
439839.00	3765410.00	6.03672	(15010717)
	439844.00	3765410.00	6.04460 (15010717)

439849.00	3765410.00	6.04693	(15010717)
	439854.00	3765410.00	6.05372 (15010717)
439859.00	3765410.00	6.05638	(15010717)
	439674.00	3765415.00	6.31834 (12011417)
439679.00	3765415.00	6.31813	(12011417)
	439684.00	3765415.00	6.31661 (12011417)
439689.00	3765415.00	6.31672	(12011417)
	439694.00	3765415.00	6.31429 (12011417)
439699.00	3765415.00	6.31171	(12011417)
	439704.00	3765415.00	6.30649 (12011417)
439709.00	3765415.00	6.30220	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439714.00	3765415.00	6.29665	(12011417)
439719.00	3765415.00	6.29028	(12011417)
439729.00	3765415.00	6.27248	(12011417)
439734.00	3765415.00	6.26267	(12011417)
439739.00	3765415.00	6.25205	(12011417)
439744.00	3765415.00	6.23986	(12011417)
439749.00	3765415.00	6.22617	(12011417)
439774.00	3765415.00	6.13941	(12011417)
439779.00	3765415.00	6.11892	(12011417)
439784.00	3765415.00	6.09798	(12011417)
439789.00	3765415.00	6.07491	(12011417)
439794.00	3765415.00	6.04996	(12011417)
439799.00	3765415.00	6.06049	(15010717)
439804.00	3765415.00	6.06579	(15010717)
439809.00	3765415.00	6.07651	(15010717)
439814.00	3765415.00	6.08004	(15010717)
439819.00	3765415.00	6.08903	(15010717)

439824.00	3765415.00	6.09291	(15010717)
	439829.00	3765415.00	6.10121 (15010717)
439834.00	3765415.00	6.10498	(15010717)
	439839.00	3765415.00	6.11137 (15010717)
439844.00	3765415.00	6.11472	(15010717)
	439849.00	3765415.00	6.12053 (15010717)
439854.00	3765415.00	6.12473	(15010717)
	439859.00	3765415.00	6.12908 (15010717)
439674.00	3765420.00	6.40360	(12011417)
	439679.00	3765420.00	6.40630 (12011417)
439684.00	3765420.00	6.40704	(12011417)
	439689.00	3765420.00	6.40671 (12011417)
439694.00	3765420.00	6.40558	(12011417)
	439699.00	3765420.00	6.40522 (12011417)
439704.00	3765420.00	6.40338	(12011417)
	439709.00	3765420.00	6.40001 (12011417)
439714.00	3765420.00	6.39576	(12011417)
	439719.00	3765420.00	6.39004 (12011417)
439729.00	3765420.00	6.37827	(12011417)
	439734.00	3765420.00	6.36957 (12011417)
439739.00	3765420.00	6.35857	(12011417)
	439744.00	3765420.00	6.34822 (12011417)
439749.00	3765420.00	6.33777	(12011417)
	439774.00	3765420.00	6.25975 (12011417)
439779.00	3765420.00	6.24000	(12011417)
	439784.00	3765420.00	6.21832 (12011417)
439789.00	3765420.00	6.19764	(12011417)
	439794.00	3765420.00	6.17583 (12011417)
439799.00	3765420.00	6.15117	(12011417)
	439804.00	3765420.00	6.14414 (15010717)
439809.00	3765420.00	6.15013	(15010717)
	439814.00	3765420.00	6.15823 (15010717)
439819.00	3765420.00	6.16292	(15010717)
	439824.00	3765420.00	6.16931 (15010717)
439829.00	3765420.00	6.17509	(15010717)
	439834.00	3765420.00	6.18011 (15010717)
439839.00	3765420.00	6.18520	(15010717)
	439844.00	3765420.00	6.18983 (15010717)
439849.00	3765420.00	6.19474	(15010717)
	439854.00	3765420.00	6.19846 (15010717)
439859.00	3765420.00	6.20386	(15010717)
	439674.00	3765425.00	6.49080 (12011417)
439679.00	3765425.00	6.49246	(12011417)
	439684.00	3765425.00	6.49584 (12011417)
439689.00	3765425.00	6.49831	(12011417)
	439694.00	3765425.00	6.49916 (12011417)
439699.00	3765425.00	6.49855	(12011417)
	439704.00	3765425.00	6.49749 (12011417)
439709.00	3765425.00	6.49730	(12011417)
	439714.00	3765425.00	6.49520 (12011417)
439719.00	3765425.00	6.49195	(12011417)
	439729.00	3765425.00	6.48145 (12011417)

439734.00	3765425.00	6.47546	(12011417)
	439739.00	3765425.00	6.46881 (12011417)
439744.00	3765425.00	6.45858	(12011417)
	439749.00	3765425.00	6.44816 (12011417)
439774.00	3765425.00	6.37867	(12011417)
	439779.00	3765425.00	6.36177 (12011417)
439784.00	3765425.00	6.34259	(12011417)
	439789.00	3765425.00	6.32205 (12011417)
439794.00	3765425.00	6.29951	(12011417)
	439799.00	3765425.00	6.27808 (12011417)
439804.00	3765425.00	6.25437	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_2.5 IN  
 MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439809.00	3765425.00	6.22939	(12011417)
439814.00	3765425.00	6.23534	(15010717)
439819.00	3765425.00	6.24064	(15010717)
439824.00	3765425.00	6.24735	(15010717)
439829.00	3765425.00	6.25107	(15010717)
439834.00	3765425.00	6.25782	(15010717)
439839.00	3765425.00	6.26035	(15010717)
439844.00	3765425.00	6.26730	(15010717)
439849.00	3765425.00	6.26981	(15010717)
439854.00	3765425.00	6.27599	(15010717)
439859.00	3765425.00	6.27784	(15010717)
439674.00	3765430.00	6.57625	(12011417)
439679.00	3765430.00	6.58147	(12011417)
439684.00	3765430.00	6.58408	(12011417)
439689.00	3765430.00	6.58727	(12011417)
439694.00	3765430.00	6.59009	(12011417)
439699.00	3765430.00	6.59307	(12011417)

439704.00	3765430.00	6.59401	(12011417)
	439709.00	3765430.00	6.59378 (12011417)
439714.00	3765430.00	6.59284	(12011417)
	439719.00	3765430.00	6.59225 (12011417)
439729.00	3765430.00	6.58658	(12011417)
	439734.00	3765430.00	6.58122 (12011417)
439739.00	3765430.00	6.57493	(12011417)
	439744.00	3765430.00	6.56913 (12011417)
439749.00	3765430.00	6.56167	(12011417)
	439774.00	3765430.00	6.50073 (12011417)
439779.00	3765430.00	6.48349	(12011417)
	439784.00	3765430.00	6.46604 (12011417)
439789.00	3765430.00	6.44764	(12011417)
	439794.00	3765430.00	6.42851 (12011417)
439799.00	3765430.00	6.40583	(12011417)
	439804.00	3765430.00	6.38289 (12011417)
439809.00	3765430.00	6.36009	(12011417)
	439814.00	3765430.00	6.33531 (12011417)
439819.00	3765430.00	6.32120	(15010717)
	439824.00	3765430.00	6.32419 (15010717)
439829.00	3765430.00	6.33159	(15010717)
	439834.00	3765430.00	6.33392 (15010717)
439839.00	3765430.00	6.34162	(15010717)
	439844.00	3765430.00	6.34234 (15010717)
439849.00	3765430.00	6.34992	(15010717)
	439854.00	3765430.00	6.35133 (15010717)
439859.00	3765430.00	6.35829	(15010717)
	439674.00	3765435.00	6.66228 (12011417)
439679.00	3765435.00	6.66723	(12011417)
	439684.00	3765435.00	6.67384 (12011417)
439689.00	3765435.00	6.67883	(12011417)
	439694.00	3765435.00	6.68258 (12011417)
439699.00	3765435.00	6.68507	(12011417)
	439704.00	3765435.00	6.68849 (12011417)
439709.00	3765435.00	6.69137	(12011417)
	439714.00	3765435.00	6.69275 (12011417)
439719.00	3765435.00	6.69216	(12011417)
	439729.00	3765435.00	6.69046 (12011417)
439734.00	3765435.00	6.68862	(12011417)
	439739.00	3765435.00	6.68422 (12011417)
439744.00	3765435.00	6.67817	(12011417)
	439749.00	3765435.00	6.67283 (12011417)
439774.00	3765435.00	6.62163	(12011417)
	439779.00	3765435.00	6.60812 (12011417)
439784.00	3765435.00	6.59220	(12011417)
	439789.00	3765435.00	6.57370 (12011417)
439794.00	3765435.00	6.55525	(12011417)
	439799.00	3765435.00	6.53637 (12011417)
439804.00	3765435.00	6.51518	(12011417)
	439809.00	3765435.00	6.49160 (12011417)
439814.00	3765435.00	6.46758	(12011417)
	439819.00	3765435.00	6.44365 (12011417)

439824.00	3765435.00	6.41879	(12011417)
	439829.00	3765435.00	6.40929 (15010717)
439834.00	3765435.00	6.41688	(15010717)
	439839.00	3765435.00	6.41875 (15010717)
439844.00	3765435.00	6.42605	(15010717)
	439849.00	3765435.00	6.42710 (15010717)
439854.00	3765435.00	6.43413	(15010717)
	439859.00	3765435.00	6.43616 (15010717)
439674.00	3765440.00	6.74892	(12011417)
	439679.00	3765440.00	6.75625 (12011417)
439684.00	3765440.00	6.76115	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439689.00	3765440.00	6.76730	(12011417)
439694.00	3765440.00	6.77402	(12011417)
439699.00	3765440.00	6.77963	(12011417)
439704.00	3765440.00	6.78377	(12011417)
439709.00	3765440.00	6.78642	(12011417)
439714.00	3765440.00	6.79054	(12011417)
439719.00	3765440.00	6.79298	(12011417)
439729.00	3765440.00	6.79439	(12011417)
439734.00	3765440.00	6.79359	(12011417)
439739.00	3765440.00	6.79194	(12011417)
439744.00	3765440.00	6.78975	(12011417)
439749.00	3765440.00	6.78566	(12011417)
439774.00	3765440.00	6.74417	(12011417)
439779.00	3765440.00	6.73102	(12011417)
439784.00	3765440.00	6.71758	(12011417)
439789.00	3765440.00	6.70300	(12011417)
439794.00	3765440.00	6.68590	(12011417)

439799.00	3765440.00	6.66619	(12011417)
	439804.00	3765440.00	6.64708 (12011417)
439809.00	3765440.00	6.62688	(12011417)
	439814.00	3765440.00	6.60437 (12011417)
439819.00	3765440.00	6.57960	(12011417)
	439824.00	3765440.00	6.55446 (12011417)
439829.00	3765440.00	6.53009	(12011417)
	439834.00	3765440.00	6.50369 (12011417)
439839.00	3765440.00	6.50375	(15010717)
	439844.00	3765440.00	6.50635 (15010717)
439849.00	3765440.00	6.51193	(15010717)
	439854.00	3765440.00	6.51552 (15010717)
439859.00	3765440.00	6.52029	(15010717)
	439674.00	3765445.00	6.83390 (12011417)
439679.00	3765445.00	6.84328	(12011417)
	439684.00	3765445.00	6.85139 (12011417)
439689.00	3765445.00	6.85920	(12011417)
	439694.00	3765445.00	6.86420 (12011417)
439699.00	3765445.00	6.87147	(12011417)
	439704.00	3765445.00	6.87863 (12011417)
439709.00	3765445.00	6.88495	(12011417)
	439714.00	3765445.00	6.88835 (12011417)
439719.00	3765445.00	6.89201	(12011417)
	439729.00	3765445.00	6.89867 (12011417)
439734.00	3765445.00	6.90115	(12011417)
	439739.00	3765445.00	6.89962 (12011417)
439744.00	3765445.00	6.89931	(12011417)
	439749.00	3765445.00	6.89731 (12011417)
439774.00	3765445.00	6.86760	(12011417)
	439779.00	3765445.00	6.85745 (12011417)
439784.00	3765445.00	6.84499	(12011417)
	439789.00	3765445.00	6.83024 (12011417)
439794.00	3765445.00	6.81661	(12011417)
	439799.00	3765445.00	6.80000 (12011417)
439804.00	3765445.00	6.78183	(12011417)
	439809.00	3765445.00	6.76092 (12011417)
439814.00	3765445.00	6.74113	(12011417)
	439819.00	3765445.00	6.71921 (12011417)
439824.00	3765445.00	6.69633	(12011417)
	439829.00	3765445.00	6.66946 (12011417)
439834.00	3765445.00	6.64389	(12011417)
	439839.00	3765445.00	6.61852 (12011417)
439844.00	3765445.00	6.59247	(15010717)
	439849.00	3765445.00	6.59669 (15010717)
439854.00	3765445.00	6.60119	(15010717)
	439859.00	3765445.00	6.60545 (15010717)
439674.00	3765450.00	6.92216	(12011417)
	439679.00	3765450.00	6.93016 (12011417)
439684.00	3765450.00	6.93884	(12011417)
	439689.00	3765450.00	6.94834 (12011417)
439694.00	3765450.00	6.95762	(12011417)
	439699.00	3765450.00	6.96523 (12011417)

439704.00	3765450.00	6.97227	(12011417)
	439709.00	3765450.00	6.97907 (12011417)
439714.00	3765450.00	6.98754	(12011417)
	439719.00	3765450.00	6.99276 (12011417)
439729.00	3765450.00	7.00146	(12011417)
	439734.00	3765450.00	7.00595 (12011417)
439739.00	3765450.00	7.00880	(12011417)
	439744.00	3765450.00	7.01041 (12011417)
439749.00	3765450.00	7.01003	(12011417)
	439774.00	3765450.00	6.99008 (12011417)
439844.00	3765450.00	6.73600	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439849.00	3765450.00	6.70820	(12011417)
439854.00	3765450.00	6.68941	(15010717)
439859.00	3765450.00	6.69138	(15010717)
439674.00	3765455.00	7.00704	(12011417)
439679.00	3765455.00	7.01906	(12011417)
439684.00	3765455.00	7.02899	(12011417)
439689.00	3765455.00	7.03913	(12011417)
439694.00	3765455.00	7.04727	(12011417)
439699.00	3765455.00	7.05830	(12011417)
439704.00	3765455.00	7.06787	(12011417)
439709.00	3765455.00	7.07701	(12011417)
439714.00	3765455.00	7.08421	(12011417)
439719.00	3765455.00	7.09183	(12011417)
439729.00	3765455.00	7.10633	(12011417)
439734.00	3765455.00	7.11201	(12011417)
439739.00	3765455.00	7.11507	(12011417)
439744.00	3765455.00	7.12035	(12011417)

439749.00	3765455.00	7.12245	(12011417)
	439844.00	3765455.00	6.88554 (12011417)
439849.00	3765455.00	6.85741	(12011417)
	439854.00	3765455.00	6.82910 (12011417)
439859.00	3765455.00	6.80196	(12011417)
	439674.00	3765460.00	7.09678 (12011417)
439679.00	3765460.00	7.10569	(12011417)
	439684.00	3765460.00	7.11790 (12011417)
439689.00	3765460.00	7.12893	(12011417)
	439694.00	3765460.00	7.14162 (12011417)
439699.00	3765460.00	7.15096	(12011417)
	439704.00	3765460.00	7.16099 (12011417)
439709.00	3765460.00	7.17247	(12011417)
	439714.00	3765460.00	7.18331 (12011417)
439719.00	3765460.00	7.19314	(12011417)
	439729.00	3765460.00	7.20872 (12011417)
439734.00	3765460.00	7.21721	(12011417)
	439739.00	3765460.00	7.22458 (12011417)
439744.00	3765460.00	7.22983	(12011417)
	439749.00	3765460.00	7.23440 (12011417)
439789.00	3765460.00	7.22474	(12011417)
	439794.00	3765460.00	7.21538 (12011417)
439799.00	3765460.00	7.20505	(12011417)
	439804.00	3765460.00	7.19341 (12011417)
439809.00	3765460.00	7.17972	(12011417)
	439814.00	3765460.00	7.16330 (12011417)
439819.00	3765460.00	7.14505	(12011417)
	439824.00	3765460.00	7.12749 (12011417)
439829.00	3765460.00	7.10695	(12011417)
	439844.00	3765460.00	7.03641 (12011417)
439849.00	3765460.00	7.01063	(12011417)
	439854.00	3765460.00	6.98501 (12011417)
439859.00	3765460.00	6.95384	(12011417)
	439674.00	3765465.00	7.18306 (12011417)
439679.00	3765465.00	7.19686	(12011417)
	439684.00	3765465.00	7.20832 (12011417)
439689.00	3765465.00	7.22047	(12011417)
	439694.00	3765465.00	7.23177 (12011417)
439699.00	3765465.00	7.24607	(12011417)
	439704.00	3765465.00	7.25777 (12011417)
439709.00	3765465.00	7.26888	(12011417)
	439714.00	3765465.00	7.27932 (12011417)
439719.00	3765465.00	7.29183	(12011417)
	439729.00	3765465.00	7.31355 (12011417)
439734.00	3765465.00	7.32204	(12011417)
	439739.00	3765465.00	7.33024 (12011417)
439744.00	3765465.00	7.34044	(12011417)
	439749.00	3765465.00	7.34673 (12011417)
439789.00	3765465.00	7.35675	(12011417)
	439794.00	3765465.00	7.35138 (12011417)
439799.00	3765465.00	7.34321	(12011417)
	439804.00	3765465.00	7.33247 (12011417)

439809.00	3765465.00	7.32088	(12011417)
	439814.00	3765465.00	7.30807 (12011417)
439819.00	3765465.00	7.29300	(12011417)
	439824.00	3765465.00	7.27532 (12011417)
439829.00	3765465.00	7.25501	(12011417)
	439844.00	3765465.00	7.19085 (12011417)
439849.00	3765465.00	7.16399	(12011417)
	439854.00	3765465.00	7.13949 (12011417)
439859.00	3765465.00	7.11335	(12011417)
	439674.00	3765470.00	7.27547 (12011417)
439679.00	3765470.00	7.28567	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439684.00	3765470.00	7.29965	(12011417)
439689.00	3765470.00	7.31276	(12011417)
439694.00	3765470.00	7.32699	(12011417)
439699.00	3765470.00	7.33847	(12011417)
439704.00	3765470.00	7.35199	(12011417)
439709.00	3765470.00	7.36583	(12011417)
439714.00	3765470.00	7.37924	(12011417)
439719.00	3765470.00	7.39130	(12011417)
439729.00	3765470.00	7.41558	(12011417)
439734.00	3765470.00	7.42855	(12011417)
439739.00	3765470.00	7.43892	(12011417)
439744.00	3765470.00	7.44937	(12011417)
439749.00	3765470.00	7.45779	(12011417)
439789.00	3765470.00	7.48991	(12011417)
439794.00	3765470.00	7.48687	(12011417)
439799.00	3765470.00	7.48153	(12011417)
439804.00	3765470.00	7.47488	(12011417)

439809.00	3765470.00	7.46599	(12011417)
	439814.00	3765470.00	7.45289 (12011417)
439819.00	3765470.00	7.44105	(12011417)
	439824.00	3765470.00	7.42564 (12011417)
439829.00	3765470.00	7.41016	(12011417)
	439844.00	3765470.00	7.34728 (12011417)
439849.00	3765470.00	7.32520	(12011417)
	439854.00	3765470.00	7.29919 (12011417)
439859.00	3765470.00	7.27173	(12011417)
	439674.00	3765475.00	7.36588 (12011417)
439679.00	3765475.00	7.37894	(12011417)
	439684.00	3765475.00	7.39379 (12011417)
439689.00	3765475.00	7.40499	(12011417)
	439694.00	3765475.00	7.42040 (12011417)
439699.00	3765475.00	7.43450	(12011417)
	439704.00	3765475.00	7.44969 (12011417)
439709.00	3765475.00	7.46235	(12011417)
	439714.00	3765475.00	7.47638 (12011417)
439719.00	3765475.00	7.49174	(12011417)
	439729.00	3765475.00	7.52011 (12011417)
439734.00	3765475.00	7.53115	(12011417)
	439739.00	3765475.00	7.54691 (12011417)
439744.00	3765475.00	7.55783	(12011417)
	439749.00	3765475.00	7.57207 (12011417)
439754.00	3765475.00	7.58080	(12011417)
	439789.00	3765475.00	7.62507 (12011417)
439794.00	3765475.00	7.62430	(12011417)
	439799.00	3765475.00	7.62225 (12011417)
439804.00	3765475.00	7.61713	(12011417)
	439809.00	3765475.00	7.61095 (12011417)
439814.00	3765475.00	7.60333	(12011417)
	439819.00	3765475.00	7.59158 (12011417)
439824.00	3765475.00	7.57872	(12011417)
	439829.00	3765475.00	7.56238 (12011417)
439269.00	3764900.00	2.97087	(12010217)
	439369.00	3764900.00	3.07668 (12010217)
439469.00	3764900.00	3.04623	(12010217)
	439569.00	3764900.00	2.95377 (12010217)
439669.00	3764900.00	2.88814	(12010217)
	439769.00	3764900.00	2.88485 (12010217)
439869.00	3764900.00	2.88747	(12010217)
	439969.00	3764900.00	2.81715 (12010217)
440069.00	3764900.00	2.89558	(15010717)
	440169.00	3764900.00	2.99345 (15010717)
440269.00	3764900.00	3.00251	(15010717)
	439269.00	3765000.00	3.25836 (13120808)
439369.00	3765000.00	3.36620	(12010217)
	439469.00	3765000.00	3.36719 (12010217)
439569.00	3765000.00	3.26121	(12010217)
	439669.00	3765000.00	3.15697 (12010217)
439769.00	3765000.00	3.14168	(12010217)
	439869.00	3765000.00	3.17226 (12010217)

439969.00	3765000.00	3.14178	(12010217)
	440069.00	3765000.00	3.26769 (15010717)
440169.00	3765000.00	3.30441	(15010717)
	440269.00	3765000.00	3.26504 (15010717)
439269.00	3765100.00	3.67937	(13120808)
	439369.00	3765100.00	3.71144 (12010217)
439469.00	3765100.00	3.76894	(12010217)
	439569.00	3765100.00	3.66393 (12010217)
439669.00	3765100.00	3.51008	(12010217)
	439769.00	3765100.00	3.48842 (13120808)
439869.00	3765100.00	3.51503	(12010217)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439969.00	3765100.00	3.59595	(15010717)
440069.00	3765100.00	3.68584	(15010717)
440169.00	3765100.00	3.64905	(15010717)
440269.00	3765100.00	3.59995	(13121617)
439269.00	3765200.00	4.17879	(13120808)
439369.00	3765200.00	4.13881	(13120808)
439469.00	3765200.00	4.28020	(12010217)
439569.00	3765200.00	4.20085	(12010217)
439669.00	3765200.00	4.00256	(12010217)
439769.00	3765200.00	3.97139	(13120808)
439869.00	3765200.00	3.99629	(15010717)
439969.00	3765200.00	4.17378	(15010717)
440069.00	3765200.00	4.16495	(15010717)
440169.00	3765200.00	4.09008	(13121617)
440269.00	3765200.00	4.00315	(13121617)
439269.00	3765300.00	5.02021	(12011417)
439369.00	3765300.00	4.93067	(12011417)

439469.00	3765300.00	4.96615	(12010217)
	439569.00	3765300.00	4.93597 (12010217)
439669.00	3765300.00	4.73012	(12010217)
	439769.00	3765300.00	4.53191 (13120808)
439869.00	3765300.00	4.81818	(15010717)
	439969.00	3765300.00	4.88794 (15010717)
440069.00	3765300.00	4.78366	(13121617)
	440169.00	3765300.00	4.65320 (13121617)
440269.00	3765300.00	4.74019	(15113017)
	439269.00	3765400.00	6.28944 (12011417)
439369.00	3765400.00	6.11194	(12011417)
	439469.00	3765400.00	6.01219 (12011417)
439569.00	3765400.00	6.03626	(12011417)
	439669.00	3765400.00	6.06112 (12011417)
439769.00	3765400.00	5.81101	(12011417)
	439869.00	3765400.00	5.92634 (15010717)
439969.00	3765400.00	5.86005	(15010717)
	440069.00	3765400.00	5.74292 (15113017)
440169.00	3765400.00	5.80414	(15113017)
	440269.00	3765400.00	5.77875 (15113017)
439269.00	3765500.00	8.37509	(12011417)
	439369.00	3765500.00	8.28211 (12011417)
439469.00	3765500.00	7.98044	(12011417)
	439569.00	3765500.00	7.80175 (12010217)
439669.00	3765500.00	7.84573	(12011417)
	439769.00	3765500.00	8.21963 (12011417)
439869.00	3765500.00	8.27613	(12011417)
	439969.00	3765500.00	7.70639 (15113017)
440069.00	3765500.00	7.56986	(15113017)
	440169.00	3765500.00	7.68656 (12011608)
440269.00	3765500.00	7.69585	(12011608)
	439269.00	3765600.00	11.93099 (12101307)
439369.00	3765600.00	12.78097	(12011417)
	439469.00	3765600.00	12.90728 (12011417)
439569.00	3765600.00	12.48171	(12011417)
	439669.00	3765600.00	12.08891 (12010217)
439769.00	3765600.00	12.14326	(12111318)
	439869.00	3765600.00	13.07918 (12111318)
439969.00	3765600.00	14.34372	(12011417)
	440069.00	3765600.00	13.45690 (14101107)
440169.00	3765600.00	13.61672	(14101107)
	440269.00	3765600.00	13.49207 (15112218)
439269.00	3765700.00	38.72172	(14012908)
	439369.00	3765700.00	41.71967 (14012908)
439469.00	3765700.00	64.80176	(14012908)
	439569.00	3765700.00	45.37790 (14120118)
439669.00	3765700.00	43.65966	(14101107)
	439769.00	3765700.00	43.36961 (14101107)
439869.00	3765700.00	43.00590	(14101107)
	439969.00	3765700.00	42.99646 (14101107)
440069.00	3765700.00	42.79688	(12101207)
	440169.00	3765700.00	43.88667 (12101207)

440269.00	3765700.00	47.73044	(12101207)
	439269.00	3765800.00	18.24251 (12111317)
439369.00	3765800.00	19.16371	(12111317)
	439469.00	3765800.00	19.00569 (15120818)
439569.00	3765800.00	18.86644	(15120818)
	439669.00	3765800.00	19.46034 (13111217)
439769.00	3765800.00	21.82387	(13111217)
	439869.00	3765800.00	27.48026 (13111217)
439969.00	3765800.00	19.36738	(15120418)
	440069.00	3765800.00	17.00581 (15120418)
440169.00	3765800.00	16.25707	(15120418)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_2.5 IN  
 MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
440269.00	3765800.00	16.24944	(15120418)
439269.00	3765900.00	10.25288	(15120818)
439369.00	3765900.00	10.15744	(15120818)
439469.00	3765900.00	9.93477	(15120818)
439569.00	3765900.00	9.68519	(15120818)
439669.00	3765900.00	9.46283	(15112217)
439769.00	3765900.00	9.81099	(13111217)
439869.00	3765900.00	10.50865	(13111217)
439969.00	3765900.00	10.64239	(13111217)
440069.00	3765900.00	10.28217	(12011717)
440169.00	3765900.00	9.80618	(12011717)
440269.00	3765900.00	9.41116	(12011717)
439649.00	3765310.00	4.87629	(12010217)
439679.00	3765310.00	4.79062	(12010217)
439709.00	3765310.00	4.69850	(13121718)
439739.00	3765310.00	4.63862	(13121718)
439769.00	3765310.00	4.62296	(15010717)

439799.00	3765310.00	4.73988	(15010717)
	439829.00	3765310.00	4.83014 (15010717)
439859.00	3765310.00	4.89602	(15010717)
	439889.00	3765310.00	4.94112 (15010717)
439649.00	3765340.00	5.17460	(12010217)
	439679.00	3765340.00	5.08731 (12010217)
439709.00	3765340.00	5.04222	(13121718)
	439739.00	3765340.00	5.01535 (13121718)
439769.00	3765340.00	4.96480	(15010717)
	439799.00	3765340.00	5.07010 (15010717)
439829.00	3765340.00	5.14669	(15010717)
	439859.00	3765340.00	5.20046 (15010717)
439889.00	3765340.00	5.23656	(15010717)
	439649.00	3765370.00	5.57992 (12011417)
439679.00	3765370.00	5.51709	(12011417)
	439709.00	3765370.00	5.42264 (12011417)
439739.00	3765370.00	5.39378	(13121718)
	439769.00	3765370.00	5.37300 (13121718)
439799.00	3765370.00	5.43404	(15010717)
	439829.00	3765370.00	5.49535 (15010717)
439859.00	3765370.00	5.53871	(15010717)
	439889.00	3765370.00	5.56558 (15010717)
439649.00	3765400.00	6.06862	(12011417)
	439679.00	3765400.00	6.05206 (12011417)
439709.00	3765400.00	6.00934	(12011417)
	439739.00	3765400.00	5.92967 (12011417)
439769.00	3765400.00	5.81101	(12011417)
	439799.00	3765400.00	5.83919 (15010717)
439829.00	3765400.00	5.88509	(15010717)
	439859.00	3765400.00	5.91806 (15010717)
439889.00	3765400.00	5.93992	(15010717)
	439649.00	3765430.00	6.54926 (12011417)
439679.00	3765430.00	6.58147	(12011417)
	439709.00	3765430.00	6.59378 (12011417)
439739.00	3765430.00	6.57493	(12011417)
	439769.00	3765430.00	6.51528 (12011417)
439799.00	3765430.00	6.40583	(12011417)
	439829.00	3765430.00	6.33159 (15010717)
439859.00	3765430.00	6.35829	(15010717)
	439889.00	3765430.00	6.37641 (15010717)
439649.00	3765460.00	7.04202	(12011417)
	439679.00	3765460.00	7.10569 (12011417)
439709.00	3765460.00	7.17247	(12011417)
	439739.00	3765460.00	7.22458 (12011417)
439769.00	3765460.00	7.24141	(12011417)
	439799.00	3765460.00	7.20505 (12011417)
439829.00	3765460.00	7.10695	(12011417)
	439859.00	3765460.00	6.95384 (12011417)
439889.00	3765460.00	6.89519	(15010717)
	439649.00	3765490.00	7.59356 (12011417)
439679.00	3765490.00	7.66667	(12011417)
	439709.00	3765490.00	7.76249 (12011417)

439739.00	3765490.00	7.87108	(12011417)
439769.00	3765490.00	7.97472	(12011417)
439799.00	3765490.00	8.04495	(12011417)
439829.00	3765490.00	8.04340	(12011417)
439859.00	3765490.00	7.94983	(12011417)
439889.00	3765490.00	7.79856	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439674.00	3765310.00	4.20365	(13121718)
439679.00	3765310.00	4.20586	(13121718)
439684.00	3765310.00	4.20572	(13121718)
439689.00	3765310.00	4.20698	(13121718)
439694.00	3765310.00	4.20522	(13121718)
439699.00	3765310.00	4.20166	(13121718)
439704.00	3765310.00	4.19804	(13121718)
439709.00	3765310.00	4.19288	(13121718)
439714.00	3765310.00	4.18822	(13121718)
439719.00	3765310.00	4.17941	(13121718)
439729.00	3765310.00	4.16201	(13121718)
439734.00	3765310.00	4.15263	(13121718)
439739.00	3765310.00	4.14087	(13121718)
439744.00	3765310.00	4.12844	(13121718)
439749.00	3765310.00	4.11495	(13121718)
439764.00	3765310.00	4.11098	(15111218)
439769.00	3765310.00	4.11152	(15111218)

439774.00	3765310.00	4.11402	(15111218)
	439779.00	3765310.00	4.11315 (15111218)
439784.00	3765310.00	4.11225	(15111218)
	439789.00	3765310.00	4.10945 (15111218)
439794.00	3765310.00	4.10622	(15111218)
	439799.00	3765310.00	4.10787 (13121618)
439804.00	3765310.00	4.11639	(13121618)
	439809.00	3765310.00	4.12406 (13121618)
439814.00	3765310.00	4.13011	(13121618)
	439819.00	3765310.00	4.13515 (13121618)
439824.00	3765310.00	4.13952	(13120808)
	439829.00	3765310.00	4.15061 (13120808)
439839.00	3765310.00	4.16869	(13120808)
	439844.00	3765310.00	4.17567 (13120808)
439849.00	3765310.00	4.18052	(13120808)
	439854.00	3765310.00	4.18527 (13120808)
439859.00	3765310.00	4.18703	(13120808)
	439864.00	3765310.00	4.18872 (13120808)
439869.00	3765310.00	4.19015	(13120808)
	439874.00	3765310.00	4.18892 (13120808)
439879.00	3765310.00	4.18816	(13120808)
	439884.00	3765310.00	4.18626 (13120808)
439674.00	3765315.00	4.24842	(13121718)
	439679.00	3765315.00	4.25053 (13121718)
439684.00	3765315.00	4.25269	(13121718)
	439689.00	3765315.00	4.25226 (13121718)
439694.00	3765315.00	4.25381	(13121718)
	439699.00	3765315.00	4.25250 (13121718)
439704.00	3765315.00	4.24979	(13121718)
	439709.00	3765315.00	4.24515 (13121718)
439714.00	3765315.00	4.24066	(13121718)
	439719.00	3765315.00	4.23539 (13121718)
439729.00	3765315.00	4.21988	(13121718)
	439734.00	3765315.00	4.20994 (13121718)
439739.00	3765315.00	4.20046	(13121718)
	439744.00	3765315.00	4.18843 (13121718)
439749.00	3765315.00	4.17653	(13121718)
	439764.00	3765315.00	4.14808 (15111218)
439769.00	3765315.00	4.15324	(15111218)
	439774.00	3765315.00	4.15380 (15111218)
439779.00	3765315.00	4.15588	(15111218)
	439784.00	3765315.00	4.15460 (15111218)
439789.00	3765315.00	4.15398	(15111218)
	439794.00	3765315.00	4.15033 (15111218)
439799.00	3765315.00	4.14726	(15111218)
	439804.00	3765315.00	4.15119 (13121618)
439809.00	3765315.00	4.15929	(13121618)
	439814.00	3765315.00	4.16669 (13121618)
439819.00	3765315.00	4.17195	(13121618)
	439824.00	3765315.00	4.17623 (13121618)
439829.00	3765315.00	4.18442	(13120808)
	439839.00	3765315.00	4.20451 (13120808)

439844.00	3765315.00	4.21105	(13120808)
	439849.00	3765315.00	4.21905 (13120808)
439854.00	3765315.00	4.22200	(13120808)
	439859.00	3765315.00	4.22609 (13120808)
439864.00	3765315.00	4.22793	(13120808)
	439869.00	3765315.00	4.22910 (13120808)
439874.00	3765315.00	4.22902	(13120808)
	439879.00	3765315.00	4.22856 (13120808)
439884.00	3765315.00	4.22689	(13120808)
	439674.00	3765320.00	4.28852 (13121718)
439679.00	3765320.00	4.29466	(13121718)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439684.00	3765320.00	4.29789	(13121718)
439689.00	3765320.00	4.30105	(13121718)
439694.00	3765320.00	4.30029	(13121718)
439699.00	3765320.00	4.30173	(13121718)
439704.00	3765320.00	4.30060	(13121718)
439709.00	3765320.00	4.29902	(13121718)
439714.00	3765320.00	4.29375	(13121718)
439719.00	3765320.00	4.28953	(13121718)
439729.00	3765320.00	4.27704	(13121718)
439734.00	3765320.00	4.26945	(13121718)
439739.00	3765320.00	4.25863	(13121718)
439744.00	3765320.00	4.24995	(13121718)
439749.00	3765320.00	4.23653	(13121718)
439764.00	3765320.00	4.19770	(13121718)
439769.00	3765320.00	4.19159	(15111218)
439774.00	3765320.00	4.19596	(15111218)
439779.00	3765320.00	4.19710	(15111218)

439784.00	3765320.00	4.19811	(15111218)
	439789.00	3765320.00	4.19698 (15111218)
439794.00	3765320.00	4.19617	(15111218)
	439799.00	3765320.00	4.19252 (15111218)
439804.00	3765320.00	4.18845	(15111218)
	439809.00	3765320.00	4.19508 (13121618)
439814.00	3765320.00	4.20273	(13121618)
	439819.00	3765320.00	4.20914 (13121618)
439824.00	3765320.00	4.21536	(13121618)
	439829.00	3765320.00	4.21826 (13120808)
439839.00	3765320.00	4.23989	(13120808)
	439844.00	3765320.00	4.24933 (13120808)
439849.00	3765320.00	4.25501	(13120808)
	439854.00	3765320.00	4.26121 (13120808)
439859.00	3765320.00	4.26492	(13120808)
	439864.00	3765320.00	4.26813 (13120808)
439869.00	3765320.00	4.26860	(13120808)
	439874.00	3765320.00	4.27091 (13120808)
439879.00	3765320.00	4.26895	(13120808)
	439884.00	3765320.00	4.26775 (13120808)
439674.00	3765325.00	4.33186	(13121718)
	439679.00	3765325.00	4.33651 (13121718)
439684.00	3765325.00	4.34229	(13121718)
	439689.00	3765325.00	4.34565 (13121718)
439694.00	3765325.00	4.35020	(13121718)
	439699.00	3765325.00	4.34971 (13121718)
439704.00	3765325.00	4.35060	(13121718)
	439709.00	3765325.00	4.34934 (13121718)
439714.00	3765325.00	4.34862	(13121718)
	439719.00	3765325.00	4.34380 (13121718)
439729.00	3765325.00	4.33365	(13121718)
	439734.00	3765325.00	4.32672 (13121718)
439739.00	3765325.00	4.31955	(13121718)
	439744.00	3765325.00	4.30847 (13121718)
439749.00	3765325.00	4.30020	(13121718)
	439754.00	3765325.00	4.28605 (13121718)
439769.00	3765325.00	4.24767	(13121718)
	439774.00	3765325.00	4.23609 (15111218)
439779.00	3765325.00	4.23928	(15111218)
	439784.00	3765325.00	4.24094 (15111218)
439789.00	3765325.00	4.24165	(15111218)
	439794.00	3765325.00	4.24015 (15111218)
439799.00	3765325.00	4.23895	(15111218)
	439804.00	3765325.00	4.23533 (15111218)
439809.00	3765325.00	4.23104	(15111218)
	439814.00	3765325.00	4.23975 (13121618)
439819.00	3765325.00	4.24790	(13121618)
	439824.00	3765325.00	4.25349 (13121618)
439829.00	3765325.00	4.25857	(13121618)
	439839.00	3765325.00	4.27687 (13120808)
439844.00	3765325.00	4.28588	(13120808)
	439849.00	3765325.00	4.29341 (13120808)

439854.00	3765325.00	4.30012	(13120808)
	439859.00	3765325.00	4.30486 (13120808)
439864.00	3765325.00	4.30728	(13120808)
	439869.00	3765325.00	4.31079 (13120808)
439874.00	3765325.00	4.31041	(13120808)
	439879.00	3765325.00	4.31151 (13120808)
439884.00	3765325.00	4.30997	(13120808)
	439674.00	3765330.00	4.37197 (13121718)
439679.00	3765330.00	4.38039	(13121718)
	439684.00	3765330.00	4.38604 (13121718)
439689.00	3765330.00	4.39100	(13121718)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439694.00	3765330.00	4.39476	(13121718)
439699.00	3765330.00	4.39971	(13121718)
439704.00	3765330.00	4.40046	(13121718)
439709.00	3765330.00	4.40107	(13121718)
439714.00	3765330.00	4.39931	(13121718)
439719.00	3765330.00	4.39900	(13121718)
439729.00	3765330.00	4.39069	(13121718)
439734.00	3765330.00	4.38416	(13121718)
439739.00	3765330.00	4.37783	(13121718)
439744.00	3765330.00	4.37024	(13121718)
439749.00	3765330.00	4.36005	(13121718)
439754.00	3765330.00	4.35080	(13121718)
439774.00	3765330.00	4.29822	(13121718)
439779.00	3765330.00	4.28179	(13121718)
439784.00	3765330.00	4.28396	(15111218)
439789.00	3765330.00	4.28577	(15111218)
439794.00	3765330.00	4.28616	(15111218)

439799.00	3765330.00	4.28454	(15111218)
	439804.00	3765330.00	4.28291 (15111218)
439809.00	3765330.00	4.27889	(15111218)
	439814.00	3765330.00	4.27743 (13121618)
439819.00	3765330.00	4.28542	(13121618)
	439824.00	3765330.00	4.29262 (13121618)
439829.00	3765330.00	4.29860	(13121618)
	439839.00	3765330.00	4.31378 (13120808)
439844.00	3765330.00	4.32316	(13120808)
	439849.00	3765330.00	4.33314 (13120808)
439854.00	3765330.00	4.33895	(13120808)
	439859.00	3765330.00	4.34504 (13120808)
439864.00	3765330.00	4.34890	(13120808)
	439869.00	3765330.00	4.35080 (13120808)
439874.00	3765330.00	4.35338	(13120808)
	439879.00	3765330.00	4.35314 (13120808)
439884.00	3765330.00	4.35376	(13120808)
	439674.00	3765335.00	4.41245 (12011417)
439679.00	3765335.00	4.42082	(13121718)
	439684.00	3765335.00	4.42900 (13121718)
439689.00	3765335.00	4.43722	(13121718)
	439694.00	3765335.00	4.44109 (13121718)
439699.00	3765335.00	4.44538	(13121718)
	439704.00	3765335.00	4.44967 (13121718)
439709.00	3765335.00	4.45191	(13121718)
	439714.00	3765335.00	4.45287 (13121718)
439719.00	3765335.00	4.45061	(13121718)
	439729.00	3765335.00	4.44639 (13121718)
439734.00	3765335.00	4.44350	(13121718)
	439739.00	3765335.00	4.43593 (13121718)
439744.00	3765335.00	4.43019	(13121718)
	439749.00	3765335.00	4.42180 (13121718)
439774.00	3765335.00	4.36372	(13121718)
	439779.00	3765335.00	4.34994 (13121718)
439784.00	3765335.00	4.33365	(13121718)
	439789.00	3765335.00	4.33002 (15111218)
439794.00	3765335.00	4.33154	(15111218)
	439839.00	3765335.00	4.34994 (13120808)
439844.00	3765335.00	4.36253	(13120808)
	439849.00	3765335.00	4.37115 (13120808)
439854.00	3765335.00	4.38008	(13120808)
	439859.00	3765335.00	4.38507 (13120808)
439864.00	3765335.00	4.39133	(13120808)
	439869.00	3765335.00	4.39350 (13120808)
439874.00	3765335.00	4.39578	(13120808)
	439879.00	3765335.00	4.39710 (13120808)
439884.00	3765335.00	4.39628	(13120808)
	439674.00	3765340.00	4.49676 (12011417)
439679.00	3765340.00	4.47831	(12011417)
	439684.00	3765340.00	4.47132 (13121718)
439689.00	3765340.00	4.47865	(13121718)
	439694.00	3765340.00	4.48858 (13121718)

439699.00	3765340.00	4.49308	(13121718)
	439704.00	3765340.00	4.49748 (13121718)
439709.00	3765340.00	4.50141	(13121718)
	439714.00	3765340.00	4.50405 (13121718)
439719.00	3765340.00	4.50627	(13121718)
	439729.00	3765340.00	4.50348 (13121718)
439734.00	3765340.00	4.49905	(13121718)
	439739.00	3765340.00	4.49684 (13121718)
439744.00	3765340.00	4.48948	(13121718)
	439749.00	3765340.00	4.48372 (13121718)
439774.00	3765340.00	4.43115	(13121718)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_2.5 IN  
 MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439779.00	3765340.00	4.41652	(13121718)
439784.00	3765340.00	4.40266	(13121718)
439789.00	3765340.00	4.38670	(13121718)
439794.00	3765340.00	4.37703	(15111218)
439839.00	3765340.00	4.39042	(13121618)
439844.00	3765340.00	4.40037	(13120808)
439849.00	3765340.00	4.41192	(13120808)
439854.00	3765340.00	4.41960	(13120808)
439859.00	3765340.00	4.42823	(13120808)
439864.00	3765340.00	4.43218	(13120808)
439869.00	3765340.00	4.43770	(13120808)
439874.00	3765340.00	4.43881	(13120808)
439879.00	3765340.00	4.44123	(13120808)
439884.00	3765340.00	4.44059	(13120808)
439674.00	3765345.00	4.57888	(12011417)
439679.00	3765345.00	4.56386	(12011417)
439684.00	3765345.00	4.54591	(12011417)

439689.00	3765345.00	4.52790	(12011417)
	439694.00	3765345.00	4.53033 (13121718)
439699.00	3765345.00	4.53986	(13121718)
	439704.00	3765345.00	4.54668 (13121718)
439709.00	3765345.00	4.55080	(13121718)
	439714.00	3765345.00	4.55462 (13121718)
439719.00	3765345.00	4.55691	(13121718)
	439729.00	3765345.00	4.55795 (13121718)
439734.00	3765345.00	4.55740	(13121718)
	439739.00	3765345.00	4.55327 (13121718)
439744.00	3765345.00	4.55110	(13121718)
	439749.00	3765345.00	4.54417 (13121718)
439774.00	3765345.00	4.49795	(13121718)
	439779.00	3765345.00	4.48554 (13121718)
439784.00	3765345.00	4.47103	(13121718)
	439789.00	3765345.00	4.45613 (13121718)
439794.00	3765345.00	4.44092	(13121718)
	439839.00	3765345.00	4.43409 (13121618)
439844.00	3765345.00	4.43996	(13120808)
	439849.00	3765345.00	4.45131 (13120808)
439854.00	3765345.00	4.46221	(13120808)
	439859.00	3765345.00	4.46905 (13120808)
439864.00	3765345.00	4.47620	(13120808)
	439869.00	3765345.00	4.47970 (13120808)
439874.00	3765345.00	4.48512	(13120808)
	439879.00	3765345.00	4.48475 (13120808)
439884.00	3765345.00	4.48751	(13120808)
	439674.00	3765350.00	4.66167 (12011417)
439679.00	3765350.00	4.64671	(12011417)
	439684.00	3765350.00	4.63217 (12011417)
439689.00	3765350.00	4.61460	(12011417)
	439694.00	3765350.00	4.59709 (12011417)
439699.00	3765350.00	4.58362	(13121718)
	439704.00	3765350.00	4.59228 (13121718)
439709.00	3765350.00	4.60057	(13121718)
	439714.00	3765350.00	4.60565 (13121718)
439719.00	3765350.00	4.60943	(13121718)
	439729.00	3765350.00	4.61469 (13121718)
439734.00	3765350.00	4.61353	(13121718)
	439739.00	3765350.00	4.61315 (13121718)
439744.00	3765350.00	4.60875	(13121718)
	439749.00	3765350.00	4.60703 (13121718)
439774.00	3765350.00	4.56482	(13121718)
	439779.00	3765350.00	4.55378 (13121718)
439784.00	3765350.00	4.54094	(13121718)
	439789.00	3765350.00	4.52703 (13121718)
439794.00	3765350.00	4.51134	(13121718)
	439839.00	3765350.00	4.47714 (13121618)
439844.00	3765350.00	4.48285	(13121618)
	439849.00	3765350.00	4.49223 (13120808)
439854.00	3765350.00	4.50344	(13120808)
	439859.00	3765350.00	4.51249 (13120808)

439864.00	3765350.00	4.51924	(13120808)
	439869.00	3765350.00	4.52572 (13120808)
439874.00	3765350.00	4.52836	(13120808)
	439879.00	3765350.00	4.53258 (13120808)
439884.00	3765350.00	4.53227	(13120808)
	439674.00	3765355.00	4.74435 (12011417)
439679.00	3765355.00	4.73131	(12011417)
	439684.00	3765355.00	4.71616 (12011417)
439689.00	3765355.00	4.70164	(12011417)
	439694.00	3765355.00	4.68465 (12011417)
439699.00	3765355.00	4.66771	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439704.00	3765355.00	4.64772	(12011417)
439709.00	3765355.00	4.64661	(13121718)
439714.00	3765355.00	4.65504	(13121718)
439719.00	3765355.00	4.66174	(13121718)
439729.00	3765355.00	4.66779	(13121718)
439734.00	3765355.00	4.67054	(13121718)
439739.00	3765355.00	4.67011	(13121718)
439744.00	3765355.00	4.67038	(13121718)
439749.00	3765355.00	4.66522	(13121718)
439774.00	3765355.00	4.63379	(13121718)
439779.00	3765355.00	4.62200	(13121718)
439784.00	3765355.00	4.61041	(13121718)
439789.00	3765355.00	4.59784	(13121718)
439794.00	3765355.00	4.58365	(13121718)
439839.00	3765355.00	4.52190	(13121618)
439844.00	3765355.00	4.52740	(13121618)
439849.00	3765355.00	4.53398	(13120808)

439854.00	3765355.00	4.54559	(13120808)
	439859.00	3765355.00	4.55639 (13120808)
439864.00	3765355.00	4.56438	(13120808)
	439869.00	3765355.00	4.57047 (13120808)
439874.00	3765355.00	4.57496	(13120808)
	439879.00	3765355.00	4.57807 (13120808)
439884.00	3765355.00	4.58032	(13120808)
	439674.00	3765360.00	4.82576 (12011417)
439679.00	3765360.00	4.81431	(12011417)
	439684.00	3765360.00	4.80254 (12011417)
439689.00	3765360.00	4.78762	(12011417)
	439694.00	3765360.00	4.77308 (12011417)
439699.00	3765360.00	4.75572	(12011417)
	439704.00	3765360.00	4.73954 (12011417)
439709.00	3765360.00	4.71990	(12011417)
	439714.00	3765360.00	4.70317 (13121718)
439719.00	3765360.00	4.71088	(13121718)
	439729.00	3765360.00	4.72343 (13121718)
439734.00	3765360.00	4.72595	(13121718)
	439739.00	3765360.00	4.72779 (13121718)
439744.00	3765360.00	4.72789	(13121718)
	439749.00	3765360.00	4.72838 (13121718)
439774.00	3765360.00	4.70075	(13121718)
	439779.00	3765360.00	4.69158 (13121718)
439784.00	3765360.00	4.68090	(13121718)
	439789.00	3765360.00	4.66811 (13121718)
439794.00	3765360.00	4.65584	(13121718)
	439799.00	3765360.00	4.64166 (13121718)
439804.00	3765360.00	4.62628	(13121718)
	439809.00	3765360.00	4.60930 (13121718)
439814.00	3765360.00	4.59241	(13121718)
	439839.00	3765360.00	4.56650 (13121618)
439844.00	3765360.00	4.57345	(13121618)
	439849.00	3765360.00	4.57964 (13121618)
439854.00	3765360.00	4.58945	(13120808)
	439859.00	3765360.00	4.59965 (13120808)
439864.00	3765360.00	4.60976	(13120808)
	439869.00	3765360.00	4.61615 (13120808)
439874.00	3765360.00	4.62258	(13120808)
	439879.00	3765360.00	4.62560 (13120808)
439884.00	3765360.00	4.62881	(13120808)
	439674.00	3765365.00	4.90670 (12011417)
439679.00	3765365.00	4.89686	(12011417)
	439684.00	3765365.00	4.88603 (12011417)
439689.00	3765365.00	4.87434	(12011417)
	439694.00	3765365.00	4.86074 (12011417)
439699.00	3765365.00	4.84646	(12011417)
	439704.00	3765365.00	4.82923 (12011417)
439709.00	3765365.00	4.81254	(12011417)
	439714.00	3765365.00	4.79372 (12011417)
439719.00	3765365.00	4.77469	(12011417)
	439729.00	3765365.00	4.77631 (13121718)

439734.00	3765365.00	4.78195	(13121718)
	439739.00	3765365.00	4.78603 (13121718)
439744.00	3765365.00	4.78681	(13121718)
	439749.00	3765365.00	4.78754 (13121718)
439774.00	3765365.00	4.76930	(13121718)
	439779.00	3765365.00	4.76076 (13121718)
439784.00	3765365.00	4.75122	(13121718)
	439789.00	3765365.00	4.74054 (13121718)
439794.00	3765365.00	4.72800	(13121718)
	439799.00	3765365.00	4.71506 (13121718)
439804.00	3765365.00	4.70075	(13121718)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439809.00	3765365.00	4.68558	(13121718)
439814.00	3765365.00	4.66883	(13121718)
439839.00	3765365.00	4.61652	(15111218)
439844.00	3765365.00	4.62075	(13121618)
439849.00	3765365.00	4.62586	(13121618)
439854.00	3765365.00	4.63204	(13121618)
439859.00	3765365.00	4.64585	(13120808)
439864.00	3765365.00	4.65486	(13120808)
439869.00	3765365.00	4.66468	(13120808)
439874.00	3765365.00	4.66944	(13120808)
439879.00	3765365.00	4.67552	(13120808)
439884.00	3765365.00	4.67710	(13120808)
439674.00	3765370.00	4.98691	(12011417)
439679.00	3765370.00	4.97953	(12011417)
439684.00	3765370.00	4.97011	(12011417)
439689.00	3765370.00	4.95927	(12011417)
439694.00	3765370.00	4.94812	(12011417)

439699.00	3765370.00	4.93460	(12011417)
	439704.00	3765370.00	4.92175 (12011417)
439709.00	3765370.00	4.90464	(12011417)
	439714.00	3765370.00	4.88761 (12011417)
439719.00	3765370.00	4.86861	(12011417)
	439729.00	3765370.00	4.82862 (12011417)
439734.00	3765370.00	4.83620	(13121718)
	439739.00	3765370.00	4.84129 (13121718)
439744.00	3765370.00	4.84711	(13121718)
	439749.00	3765370.00	4.84784 (13121718)
439774.00	3765370.00	4.83619	(13121718)
	439779.00	3765370.00	4.83061 (13121718)
439784.00	3765370.00	4.82175	(13121718)
	439789.00	3765370.00	4.81210 (13121718)
439794.00	3765370.00	4.80155	(13121718)
	439799.00	3765370.00	4.78935 (13121718)
439804.00	3765370.00	4.77552	(13121718)
	439809.00	3765370.00	4.76132 (13121718)
439814.00	3765370.00	4.74609	(13121718)
	439839.00	3765370.00	4.67537 (15111218)
439844.00	3765370.00	4.66911	(15111218)
	439849.00	3765370.00	4.67516 (13121618)
439854.00	3765370.00	4.68020	(13121618)
	439859.00	3765370.00	4.68980 (13120808)
439864.00	3765370.00	4.70336	(13120808)
	439869.00	3765370.00	4.71011 (13120808)
439874.00	3765370.00	4.72014	(13120808)
	439879.00	3765370.00	4.72325 (13120808)
439884.00	3765370.00	4.72855	(13120808)
	439674.00	3765375.00	5.06589 (12011417)
439679.00	3765375.00	5.06013	(12011417)
	439684.00	3765375.00	5.05351 (12011417)
439689.00	3765375.00	5.04554	(12011417)
	439694.00	3765375.00	5.03482 (12011417)
439699.00	3765375.00	5.02345	(12011417)
	439704.00	3765375.00	5.01043 (12011417)
439709.00	3765375.00	4.99754	(12011417)
	439714.00	3765375.00	4.98148 (12011417)
439719.00	3765375.00	4.96512	(12011417)
	439729.00	3765375.00	4.92723 (12011417)
439734.00	3765375.00	4.90627	(12011417)
	439739.00	3765375.00	4.89818 (13121718)
439744.00	3765375.00	4.90231	(13121718)
	439749.00	3765375.00	4.90931 (13121718)
439754.00	3765375.00	4.91050	(13121718)
	439774.00	3765375.00	4.90516 (13121718)
439779.00	3765375.00	4.89931	(13121718)
	439784.00	3765375.00	4.89313 (13121718)
439789.00	3765375.00	4.88463	(13121718)
	439794.00	3765375.00	4.87467 (13121718)
439799.00	3765375.00	4.86375	(13121718)
	439804.00	3765375.00	4.85198 (13121718)

439809.00	3765375.00	4.83828	(13121718)
	439814.00	3765375.00	4.82338 (13121718)
439839.00	3765375.00	4.73454	(13121718)
	439844.00	3765375.00	4.72832 (15111218)
439849.00	3765375.00	4.72343	(13121618)
	439854.00	3765375.00	4.73084 (13121618)
439859.00	3765375.00	4.73680	(13120808)
	439864.00	3765375.00	4.74857 (13120808)
439869.00	3765375.00	4.76177	(13120808)
	439874.00	3765375.00	4.76760 (13120808)
439879.00	3765375.00	4.77595	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439884.00	3765375.00	4.77871	(13120808)
439774.00	3765380.00	4.97278	(13121718)
439779.00	3765380.00	4.96938	(13121718)
439784.00	3765380.00	4.96396	(13121718)
439789.00	3765380.00	4.95725	(13121718)
439794.00	3765380.00	4.94868	(13121718)
439799.00	3765380.00	4.93889	(13121718)
439804.00	3765380.00	4.92754	(13121718)
439809.00	3765380.00	4.91614	(13121718)
439814.00	3765380.00	4.90186	(13121718)
439769.00	3765385.00	5.04212	(13121718)
439819.00	3765385.00	4.96693	(13121718)
439769.00	3765400.00	5.27891	(12011417)
439844.00	3765400.00	5.14042	(13121718)
439849.00	3765400.00	5.12475	(13121718)
439674.00	3765405.00	5.51188	(12011417)
439714.00	3765405.00	5.53580	(12011417)

439719.00	3765405.00	5.53136	(12011417)
	439734.00	3765405.00	5.50662 (12011417)
439749.00	3765405.00	5.46756	(12011417)
	439754.00	3765405.00	5.45097 (12011417)
439774.00	3765405.00	5.36931	(12011417)
	439779.00	3765405.00	5.34440 (12011417)
439784.00	3765405.00	5.32228	(13121718)
	439789.00	3765405.00	5.32320 (13121718)
439794.00	3765405.00	5.32453	(13121718)
	439799.00	3765405.00	5.32123 (13121718)
439804.00	3765405.00	5.31863	(13121718)
	439809.00	3765405.00	5.31180 (13121718)
439814.00	3765405.00	5.30572	(13121718)
	439819.00	3765405.00	5.29540 (13121718)
439824.00	3765405.00	5.28573	(13121718)
	439829.00	3765405.00	5.27295 (13121718)
439834.00	3765405.00	5.26097	(13121718)
	439839.00	3765405.00	5.24505 (13121718)
439844.00	3765405.00	5.22960	(13121718)
	439849.00	3765405.00	5.21202 (13121718)
439854.00	3765405.00	5.19645	(13121718)
	439859.00	3765405.00	5.17528 (13121718)
439674.00	3765410.00	5.57975	(12011417)
	439679.00	3765410.00	5.59097 (12011417)
439684.00	3765410.00	5.60162	(12011417)
	439689.00	3765410.00	5.60897 (12011417)
439694.00	3765410.00	5.61617	(12011417)
	439699.00	3765410.00	5.62040 (12011417)
439704.00	3765410.00	5.62486	(12011417)
	439709.00	3765410.00	5.62605 (12011417)
439714.00	3765410.00	5.62588	(12011417)
	439719.00	3765410.00	5.62317 (12011417)
439729.00	3765410.00	5.61455	(12011417)
	439734.00	3765410.00	5.60721 (12011417)
439739.00	3765410.00	5.59738	(12011417)
	439744.00	3765410.00	5.58556 (12011417)
439749.00	3765410.00	5.57312	(12011417)
	439774.00	3765410.00	5.48415 (12011417)
439779.00	3765410.00	5.46159	(12011417)
	439784.00	3765410.00	5.43734 (12011417)
439789.00	3765410.00	5.41182	(12011417)
	439794.00	3765410.00	5.39887 (13121718)
439799.00	3765410.00	5.40049	(13121718)
	439804.00	3765410.00	5.39710 (13121718)
439809.00	3765410.00	5.39407	(13121718)
	439814.00	3765410.00	5.38716 (13121718)
439819.00	3765410.00	5.38098	(13121718)
	439824.00	3765410.00	5.37070 (13121718)
439829.00	3765410.00	5.36057	(13121718)
	439834.00	3765410.00	5.34783 (13121718)
439839.00	3765410.00	5.33509	(13121718)
	439844.00	3765410.00	5.31940 (13121718)

439849.00	3765410.00	5.30376	(13121718)
	439854.00	3765410.00	5.28555 (13121718)
439859.00	3765410.00	5.26956	(13121718)
	439674.00	3765415.00	5.64534 (12011417)
439679.00	3765415.00	5.65959	(12011417)
	439684.00	3765415.00	5.67187 (12011417)
439689.00	3765415.00	5.68404	(12011417)
	439694.00	3765415.00	5.69318 (12011417)
439699.00	3765415.00	5.70115	(12011417)
	439704.00	3765415.00	5.70654 (12011417)
439709.00	3765415.00	5.71143	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_2.5 IN  
 MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439714.00	3765415.00	5.71389	(12011417)
439719.00	3765415.00	5.71505	(12011417)
439729.00	3765415.00	5.71038	(12011417)
439734.00	3765415.00	5.70524	(12011417)
439739.00	3765415.00	5.69860	(12011417)
439744.00	3765415.00	5.69039	(12011417)
439749.00	3765415.00	5.67986	(12011417)
439774.00	3765415.00	5.59919	(12011417)
439779.00	3765415.00	5.57827	(12011417)
439784.00	3765415.00	5.55650	(12011417)
439789.00	3765415.00	5.53247	(12011417)
439794.00	3765415.00	5.50674	(12011417)
439799.00	3765415.00	5.47984	(12011417)
439804.00	3765415.00	5.47803	(13121718)
439809.00	3765415.00	5.47477	(13121718)
439814.00	3765415.00	5.47178	(13121718)
439819.00	3765415.00	5.46530	(13121718)

439824.00	3765415.00	5.45754	(13121718)
	439829.00	3765415.00	5.44853 (13121718)
439834.00	3765415.00	5.43780	(13121718)
	439839.00	3765415.00	5.42450 (13121718)
439844.00	3765415.00	5.41126	(13121718)
	439849.00	3765415.00	5.39576 (13121718)
439854.00	3765415.00	5.38019	(13121718)
	439859.00	3765415.00	5.36136 (13121718)
439674.00	3765420.00	5.70825	(12011417)
	439679.00	3765420.00	5.72605 (12011417)
439684.00	3765420.00	5.74101	(12011417)
	439689.00	3765420.00	5.75515 (12011417)
439694.00	3765420.00	5.76730	(12011417)
	439699.00	3765420.00	5.77908 (12011417)
439704.00	3765420.00	5.78794	(12011417)
	439709.00	3765420.00	5.79525 (12011417)
439714.00	3765420.00	5.80077	(12011417)
	439719.00	3765420.00	5.80393 (12011417)
439729.00	3765420.00	5.80631	(12011417)
	439734.00	3765420.00	5.80415 (12011417)
439739.00	3765420.00	5.79899	(12011417)
	439744.00	3765420.00	5.79233 (12011417)
439749.00	3765420.00	5.78555	(12011417)
	439774.00	3765420.00	5.71632 (12011417)
439779.00	3765420.00	5.69707	(12011417)
	439784.00	3765420.00	5.67538 (12011417)
439789.00	3765420.00	5.65355	(12011417)
	439794.00	3765420.00	5.63026 (12011417)
439799.00	3765420.00	5.60450	(12011417)
	439804.00	3765420.00	5.57737 (12011417)
439809.00	3765420.00	5.55807	(13121718)
	439814.00	3765420.00	5.55497 (13121718)
439819.00	3765420.00	5.55194	(13121718)
	439824.00	3765420.00	5.54540 (13121718)
439829.00	3765420.00	5.53747	(13121718)
	439834.00	3765420.00	5.52796 (13121718)
439839.00	3765420.00	5.51670	(13121718)
	439844.00	3765420.00	5.50406 (13121718)
439849.00	3765420.00	5.48939	(13121718)
	439854.00	3765420.00	5.47398 (13121718)
439859.00	3765420.00	5.45867	(13121718)
	439674.00	3765425.00	5.76923 (12011417)
439679.00	3765425.00	5.78832	(12011417)
	439684.00	3765425.00	5.80799 (12011417)
439689.00	3765425.00	5.82518	(12011417)
	439694.00	3765425.00	5.84050 (12011417)
439699.00	3765425.00	5.85384	(12011417)
	439704.00	3765425.00	5.86605 (12011417)
439709.00	3765425.00	5.87704	(12011417)
	439714.00	3765425.00	5.88589 (12011417)
439719.00	3765425.00	5.89266	(12011417)
	439729.00	3765425.00	5.89972 (12011417)

439734.00	3765425.00	5.90029	(12011417)
	439739.00	3765425.00	5.90010 (12011417)
439744.00	3765425.00	5.89587	(12011417)
	439749.00	3765425.00	5.89018 (12011417)
439774.00	3765425.00	5.83252	(12011417)
	439779.00	3765425.00	5.81583 (12011417)
439784.00	3765425.00	5.79670	(12011417)
	439789.00	3765425.00	5.77633 (12011417)
439794.00	3765425.00	5.75305	(12011417)
	439799.00	3765425.00	5.72996 (12011417)
439804.00	3765425.00	5.70466	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439809.00	3765425.00	5.67801	(12011417)
439814.00	3765425.00	5.64927	(12011417)
439819.00	3765425.00	5.63779	(13121718)
439824.00	3765425.00	5.63373	(13121718)
439829.00	3765425.00	5.62789	(13121718)
439834.00	3765425.00	5.61966	(13121718)
439839.00	3765425.00	5.60988	(13121718)
439844.00	3765425.00	5.59843	(13121718)
439849.00	3765425.00	5.58539	(13121718)
439854.00	3765425.00	5.57030	(13121718)
439859.00	3765425.00	5.55429	(13121718)
439674.00	3765430.00	5.82689	(12011417)
439679.00	3765430.00	5.85031	(12011417)
439684.00	3765430.00	5.87056	(12011417)
439689.00	3765430.00	5.89136	(12011417)
439694.00	3765430.00	5.91011	(12011417)
439699.00	3765430.00	5.92800	(12011417)

439704.00	3765430.00	5.94270	(12011417)
	439709.00	3765430.00	5.95652 (12011417)
439714.00	3765430.00	5.96790	(12011417)
	439719.00	3765430.00	5.97860 (12011417)
439729.00	3765430.00	5.99284	(12011417)
	439734.00	3765430.00	5.99631 (12011417)
439739.00	3765430.00	5.99728	(12011417)
	439744.00	3765430.00	5.99768 (12011417)
439749.00	3765430.00	5.99563	(12011417)
	439774.00	3765430.00	5.95108 (12011417)
439779.00	3765430.00	5.93540	(12011417)
	439784.00	3765430.00	5.91801 (12011417)
439789.00	3765430.00	5.89958	(12011417)
	439794.00	3765430.00	5.87959 (12011417)
439799.00	3765430.00	5.85677	(12011417)
	439804.00	3765430.00	5.83244 (12011417)
439809.00	3765430.00	5.80773	(12011417)
	439814.00	3765430.00	5.78087 (12011417)
439819.00	3765430.00	5.75285	(12011417)
	439824.00	3765430.00	5.72353 (13121718)
439829.00	3765430.00	5.71872	(13121718)
	439834.00	3765430.00	5.71277 (13121718)
439839.00	3765430.00	5.70393	(13121718)
	439844.00	3765430.00	5.69409 (13121718)
439849.00	3765430.00	5.68189	(13121718)
	439854.00	3765430.00	5.66891 (13121718)
439859.00	3765430.00	5.65392	(13121718)
	439674.00	3765435.00	5.88193 (12011417)
439679.00	3765435.00	5.90738	(12011417)
	439684.00	3765435.00	5.93280 (12011417)
439689.00	3765435.00	5.95600	(12011417)
	439694.00	3765435.00	5.97762 (12011417)
439699.00	3765435.00	5.99752	(12011417)
	439704.00	3765435.00	6.01669 (12011417)
439709.00	3765435.00	6.03417	(12011417)
	439714.00	3765435.00	6.04928 (12011417)
439719.00	3765435.00	6.06209	(12011417)
	439729.00	3765435.00	6.08311 (12011417)
439734.00	3765435.00	6.09082	(12011417)
	439739.00	3765435.00	6.09584 (12011417)
439744.00	3765435.00	6.09787	(12011417)
	439749.00	3765435.00	6.09895 (12011417)
439774.00	3765435.00	6.06816	(12011417)
	439779.00	3765435.00	6.05600 (12011417)
439784.00	3765435.00	6.04163	(12011417)
	439789.00	3765435.00	6.02379 (12011417)
439794.00	3765435.00	6.00507	(12011417)
	439799.00	3765435.00	5.98516 (12011417)
439804.00	3765435.00	5.96305	(12011417)
	439809.00	3765435.00	5.93834 (12011417)
439814.00	3765435.00	5.91304	(12011417)
	439819.00	3765435.00	5.88653 (12011417)

439824.00	3765435.00	5.85894	(12011417)
	439829.00	3765435.00	5.82893 (12011417)
439834.00	3765435.00	5.80691	(13121718)
	439839.00	3765435.00	5.79993 (13121718)
439844.00	3765435.00	5.79121	(13121718)
	439849.00	3765435.00	5.78096 (13121718)
439854.00	3765435.00	5.76791	(13121718)
	439859.00	3765435.00	5.75447 (13121718)
439674.00	3765440.00	5.93455	(12011417)
	439679.00	3765440.00	5.96319 (12011417)
439684.00	3765440.00	5.98984	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439689.00	3765440.00	6.01639	(12011417)
439694.00	3765440.00	6.04240	(12011417)
439699.00	3765440.00	6.06591	(12011417)
439704.00	3765440.00	6.08795	(12011417)
439709.00	3765440.00	6.10771	(12011417)
439714.00	3765440.00	6.12741	(12011417)
439719.00	3765440.00	6.14397	(12011417)
439729.00	3765440.00	6.17181	(12011417)
439734.00	3765440.00	6.18255	(12011417)
439739.00	3765440.00	6.19094	(12011417)
439744.00	3765440.00	6.19777	(12011417)
439749.00	3765440.00	6.20203	(12011417)
439774.00	3765440.00	6.18665	(12011417)
439779.00	3765440.00	6.17613	(12011417)
439784.00	3765440.00	6.16382	(12011417)
439789.00	3765440.00	6.15018	(12011417)
439794.00	3765440.00	6.13342	(12011417)

439799.00	3765440.00	6.11412	(12011417)
	439804.00	3765440.00	6.09394 (12011417)
439809.00	3765440.00	6.07235	(12011417)
	439814.00	3765440.00	6.04822 (12011417)
439819.00	3765440.00	6.02225	(12011417)
	439824.00	3765440.00	5.99506 (12011417)
439829.00	3765440.00	5.96771	(12011417)
	439834.00	3765440.00	5.93846 (12011417)
439839.00	3765440.00	5.90717	(12011417)
	439844.00	3765440.00	5.89046 (13121718)
439849.00	3765440.00	5.88102	(13121718)
	439854.00	3765440.00	5.87085 (13121718)
439859.00	3765440.00	5.85697	(13121718)
	439674.00	3765445.00	5.98289 (12011417)
439679.00	3765445.00	6.01541	(12011417)
	439684.00	3765445.00	6.04569 (12011417)
439689.00	3765445.00	6.07544	(12011417)
	439694.00	3765445.00	6.10216 (12011417)
439699.00	3765445.00	6.13026	(12011417)
	439704.00	3765445.00	6.15624 (12011417)
439709.00	3765445.00	6.18089	(12011417)
	439714.00	3765445.00	6.20193 (12011417)
439719.00	3765445.00	6.22269	(12011417)
	439729.00	3765445.00	6.25831 (12011417)
439734.00	3765445.00	6.27352	(12011417)
	439739.00	3765445.00	6.28479 (12011417)
439744.00	3765445.00	6.29520	(12011417)
	439749.00	3765445.00	6.30226 (12011417)
439774.00	3765445.00	6.30431	(12011417)
	439779.00	3765445.00	6.29724 (12011417)
439784.00	3765445.00	6.28820	(12011417)
	439789.00	3765445.00	6.27505 (12011417)
439794.00	3765445.00	6.26212	(12011417)
	439799.00	3765445.00	6.24551 (12011417)
439804.00	3765445.00	6.22745	(12011417)
	439809.00	3765445.00	6.20598 (12011417)
439814.00	3765445.00	6.18473	(12011417)
	439819.00	3765445.00	6.16068 (12011417)
439824.00	3765445.00	6.13569	(12011417)
	439829.00	3765445.00	6.10710 (12011417)
439834.00	3765445.00	6.07916	(12011417)
	439839.00	3765445.00	6.05053 (12011417)
439844.00	3765445.00	6.01950	(12011417)
	439849.00	3765445.00	5.98718 (12011417)
439854.00	3765445.00	5.97249	(13121718)
	439859.00	3765445.00	5.96290 (13121718)
439674.00	3765450.00	6.02985	(12011417)
	439679.00	3765450.00	6.06333 (12011417)
439684.00	3765450.00	6.09684	(12011417)
	439689.00	3765450.00	6.12991 (12011417)
439694.00	3765450.00	6.16185	(12011417)
	439699.00	3765450.00	6.19147 (12011417)

439704.00	3765450.00	6.22056	(12011417)
	439709.00	3765450.00	6.24778 (12011417)
439714.00	3765450.00	6.27552	(12011417)
	439719.00	3765450.00	6.29886 (12011417)
439729.00	3765450.00	6.34148	(12011417)
	439734.00	3765450.00	6.36066 (12011417)
439739.00	3765450.00	6.37694	(12011417)
	439744.00	3765450.00	6.39110 (12011417)
439749.00	3765450.00	6.40238	(12011417)
	439774.00	3765450.00	6.42159 (12011417)
439844.00	3765450.00	6.16562	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439849.00	3765450.00	6.13443	(12011417)
439854.00	3765450.00	6.10321	(12011417)
439859.00	3765450.00	6.06899	(13121718)
439674.00	3765455.00	6.07155	(12011417)
439679.00	3765455.00	6.10951	(12011417)
439684.00	3765455.00	6.14564	(12011417)
439689.00	3765455.00	6.18133	(12011417)
439694.00	3765455.00	6.21529	(12011417)
439699.00	3765455.00	6.24991	(12011417)
439704.00	3765455.00	6.28283	(12011417)
439709.00	3765455.00	6.31394	(12011417)
439714.00	3765455.00	6.34332	(12011417)
439719.00	3765455.00	6.37158	(12011417)
439729.00	3765455.00	6.42289	(12011417)
439734.00	3765455.00	6.44573	(12011417)
439739.00	3765455.00	6.46503	(12011417)
439744.00	3765455.00	6.48428	(12011417)

439749.00	3765455.00	6.49911	(12011417)
	439844.00	3765455.00	6.31450 (12011417)
439849.00	3765455.00	6.28403	(12011417)
	439854.00	3765455.00	6.25275 (12011417)
439859.00	3765455.00	6.22182	(12011417)
	439674.00	3765460.00	6.11230 (12011417)
439679.00	3765460.00	6.15062	(12011417)
	439684.00	3765460.00	6.19059 (12011417)
439689.00	3765460.00	6.22896	(12011417)
	439694.00	3765460.00	6.26800 (12011417)
439699.00	3765460.00	6.30396	(12011417)
	439704.00	3765460.00	6.33972 (12011417)
439709.00	3765460.00	6.37573	(12011417)
	439714.00	3765460.00	6.40968 (12011417)
439719.00	3765460.00	6.44186	(12011417)
	439729.00	3765460.00	6.50021 (12011417)
439734.00	3765460.00	6.52701	(12011417)
	439739.00	3765460.00	6.55221 (12011417)
439744.00	3765460.00	6.57399	(12011417)
	439749.00	3765460.00	6.59433 (12011417)
439789.00	3765460.00	6.65676	(12011417)
	439794.00	3765460.00	6.65209 (12011417)
439799.00	3765460.00	6.64348	(12011417)
	439804.00	3765460.00	6.63370 (12011417)
439809.00	3765460.00	6.62028	(12011417)
	439814.00	3765460.00	6.60497 (12011417)
439819.00	3765460.00	6.58581	(12011417)
	439824.00	3765460.00	6.56700 (12011417)
439829.00	3765460.00	6.54414	(12011417)
	439844.00	3765460.00	6.46677 (12011417)
439849.00	3765460.00	6.43723	(12011417)
	439854.00	3765460.00	6.40850 (12011417)
439859.00	3765460.00	6.37422	(12011417)
	439674.00	3765465.00	6.14745 (12011417)
439679.00	3765465.00	6.19088	(12011417)
	439684.00	3765465.00	6.23202 (12011417)
439689.00	3765465.00	6.27394	(12011417)
	439694.00	3765465.00	6.31448 (12011417)
439699.00	3765465.00	6.35606	(12011417)
	439704.00	3765465.00	6.39560 (12011417)
439709.00	3765465.00	6.43301	(12011417)
	439714.00	3765465.00	6.47033 (12011417)
439719.00	3765465.00	6.50685	(12011417)
	439729.00	3765465.00	6.57450 (12011417)
439734.00	3765465.00	6.60550	(12011417)
	439739.00	3765465.00	6.63332 (12011417)
439744.00	3765465.00	6.66236	(12011417)
	439749.00	3765465.00	6.68532 (12011417)
439789.00	3765465.00	6.78330	(12011417)
	439794.00	3765465.00	6.78211 (12011417)
439799.00	3765465.00	6.77822	(12011417)
	439804.00	3765465.00	6.77034 (12011417)

439809.00	3765465.00	6.76046	(12011417)
	439814.00	3765465.00	6.74782 (12011417)
439819.00	3765465.00	6.73289	(12011417)
	439824.00	3765465.00	6.71469 (12011417)
439829.00	3765465.00	6.69350	(12011417)
	439844.00	3765465.00	6.62156 (12011417)
439849.00	3765465.00	6.59270	(12011417)
	439854.00	3765465.00	6.56412 (12011417)
439859.00	3765465.00	6.53488	(12011417)
	439674.00	3765470.00	6.18344 (12011417)
439679.00	3765470.00	6.22594	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_2.5 IN  
 MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439684.00	3765470.00	6.27100	(12011417)
439689.00	3765470.00	6.31497	(12011417)
439694.00	3765470.00	6.35972	(12011417)
439699.00	3765470.00	6.40214	(12011417)
439704.00	3765470.00	6.44515	(12011417)
439709.00	3765470.00	6.48792	(12011417)
439714.00	3765470.00	6.52880	(12011417)
439719.00	3765470.00	6.56849	(12011417)
439729.00	3765470.00	6.64430	(12011417)
439734.00	3765470.00	6.68049	(12011417)
439739.00	3765470.00	6.71372	(12011417)
439744.00	3765470.00	6.74517	(12011417)
439749.00	3765470.00	6.77412	(12011417)
439789.00	3765470.00	6.90898	(12011417)
439794.00	3765470.00	6.91302	(12011417)
439799.00	3765470.00	6.91166	(12011417)
439804.00	3765470.00	6.90910	(12011417)

439809.00	3765470.00	6.90219	(12011417)
	439814.00	3765470.00	6.89236 (12011417)
439819.00	3765470.00	6.87999	(12011417)
	439824.00	3765470.00	6.86497 (12011417)
439829.00	3765470.00	6.84786	(12011417)
	439844.00	3765470.00	6.77988 (12011417)
439849.00	3765470.00	6.75415	(12011417)
	439854.00	3765470.00	6.72548 (12011417)
439859.00	3765470.00	6.69459	(12011417)
	439674.00	3765475.00	6.21367 (12011417)
439679.00	3765475.00	6.25976	(12011417)
	439684.00	3765475.00	6.30738 (12011417)
439689.00	3765475.00	6.35218	(12011417)
	439694.00	3765475.00	6.40003 (12011417)
439699.00	3765475.00	6.44595	(12011417)
	439704.00	3765475.00	6.49305 (12011417)
439709.00	3765475.00	6.53664	(12011417)
	439714.00	3765475.00	6.58222 (12011417)
439719.00	3765475.00	6.62606	(12011417)
	439729.00	3765475.00	6.71051 (12011417)
439734.00	3765475.00	6.74929	(12011417)
	439739.00	3765475.00	6.78948 (12011417)
439744.00	3765475.00	6.82461	(12011417)
	439749.00	3765475.00	6.86026 (12011417)
439754.00	3765475.00	6.89081	(12011417)
	439789.00	3765475.00	7.03478 (12011417)
439794.00	3765475.00	7.04195	(12011417)
	439799.00	3765475.00	7.04709 (12011417)
439804.00	3765475.00	7.04751	(12011417)
	439809.00	3765475.00	7.04451 (12011417)
439814.00	3765475.00	7.03934	(12011417)
	439819.00	3765475.00	7.02957 (12011417)
439824.00	3765475.00	7.01748	(12011417)
	439829.00	3765475.00	7.00120 (12011417)
439269.00	3764900.00	2.26883	(12010217)
	439369.00	3764900.00	2.32826 (12010217)
439469.00	3764900.00	2.33864	(13121618)
	439569.00	3764900.00	2.40492 (13120808)
439669.00	3764900.00	2.39228	(13120808)
	439769.00	3764900.00	2.49239 (12010217)
439869.00	3764900.00	2.56135	(12010217)
	439969.00	3764900.00	2.49107 (12010217)
440069.00	3764900.00	2.26374	(12010217)
	440169.00	3764900.00	2.29152 (12121717)
440269.00	3764900.00	2.33441	(15010717)
	439269.00	3765000.00	2.52866 (13121718)
439369.00	3765000.00	2.55194	(12010217)
	439469.00	3765000.00	2.55029 (15111218)
439569.00	3765000.00	2.61294	(13121618)
	439669.00	3765000.00	2.69018 (13120808)
439769.00	3765000.00	2.68031	(12010217)
	439869.00	3765000.00	2.81692 (12010217)

439969.00	3765000.00	2.80057	(12010217)
	440069.00	3765000.00	2.62153 (12010217)
440169.00	3765000.00	2.51545	(12121717)
	440269.00	3765000.00	2.60696 (15010717)
439269.00	3765100.00	2.83308	(13121718)
	439369.00	3765100.00	2.88636 (13121718)
439469.00	3765100.00	2.84538	(13121718)
	439569.00	3765100.00	2.90121 (15111218)
439669.00	3765100.00	2.96718	(13121618)
	439769.00	3765100.00	3.03215 (13120808)
439869.00	3765100.00	3.11662	(12010217)



439469.00	3765300.00	4.16100	(12011417)
	439569.00	3765300.00	4.17043 (12011417)
439669.00	3765300.00	4.11482	(13121718)
	439769.00	3765300.00	4.03333 (15111218)
439869.00	3765300.00	4.11281	(13120808)
	439969.00	3765300.00	4.22900 (12010217)
440069.00	3765300.00	4.18335	(12010217)
	440169.00	3765300.00	4.00050 (12010217)
440269.00	3765300.00	4.05902	(15010717)
	439269.00	3765400.00	4.70222 (12011417)
439369.00	3765400.00	4.59715	(12011417)
	439469.00	3765400.00	4.70698 (12011417)
439569.00	3765400.00	5.08080	(12011417)
	439669.00	3765400.00	5.43417 (12011417)
439769.00	3765400.00	5.27891	(12011417)
	439869.00	3765400.00	5.04605 (13121718)
439969.00	3765400.00	5.18170	(12010217)
	440069.00	3765400.00	5.13807 (12010217)
440169.00	3765400.00	5.00741	(12010217)
	440269.00	3765400.00	4.93714 (15010717)
439269.00	3765500.00	6.38059	(12011417)
	439369.00	3765500.00	6.12426 (12011417)
439469.00	3765500.00	5.80236	(12010217)
	439569.00	3765500.00	5.92510 (12111318)
439669.00	3765500.00	6.31511	(12111318)
	439769.00	3765500.00	7.44022 (12011417)
439869.00	3765500.00	7.70848	(12011417)
	439969.00	3765500.00	6.97693 (12010217)
440069.00	3765500.00	6.86275	(12010217)
	440169.00	3765500.00	6.69653 (12010217)
440269.00	3765500.00	6.65742	(15113017)
	439269.00	3765600.00	9.25759 (12011417)
439369.00	3765600.00	9.82959	(12011417)
	439469.00	3765600.00	9.53965 (12011417)
439569.00	3765600.00	8.82329	(12010217)
	439669.00	3765600.00	8.71555 (12010217)
439769.00	3765600.00	9.47435	(12111318)
	439869.00	3765600.00	12.63496 (12111318)
439969.00	3765600.00	14.10435	(12011417)
	440069.00	3765600.00	12.64241 (12011417)
440169.00	3765600.00	11.41122	(15112218)
	440269.00	3765600.00	11.69157 (15112218)
439269.00	3765700.00	33.25245	(14120118)
	439369.00	3765700.00	35.95023 (16121918)
439469.00	3765700.00	41.11105	(12011417)
	439569.00	3765700.00	39.29646 (12011417)
439669.00	3765700.00	37.94666	(12011417)
	439769.00	3765700.00	37.72060 (15112218)
439869.00	3765700.00	37.94103	(14012117)
	439969.00	3765700.00	38.40239 (14120118)
440069.00	3765700.00	39.34749	(14120118)
	440169.00	3765700.00	40.99246 (14120118)

440269.00	3765700.00	44.95572	(14120118)
	439269.00	3765800.00	13.93840 (12111317)
439369.00	3765800.00	15.43680	(12111317)
	439469.00	3765800.00	15.51166 (12111317)
439569.00	3765800.00	15.97378	(12111317)
	439669.00	3765800.00	17.00163 (15120818)
439769.00	3765800.00	19.58230	(15120818)
	439869.00	3765800.00	26.80093 (13111217)
439969.00	3765800.00	16.09687	(14121418)
	440069.00	3765800.00	12.99105 (14121418)
440169.00	3765800.00	12.55724	(15112217)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 , A0000089 , A0000090 ,  
 A0000091 , A0000092 , A0000093 ,  
 A0000094 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
440269.00	3765800.00	13.45956	(13111217)
439269.00	3765900.00	7.94782	(15120818)
439369.00	3765900.00	8.14089	(15120818)
439469.00	3765900.00	8.27114	(15120818)
439569.00	3765900.00	8.32374	(15120818)
439669.00	3765900.00	8.38585	(15112217)
439769.00	3765900.00	7.86510	(13111218)
439869.00	3765900.00	8.50095	(13111217)
439969.00	3765900.00	8.60629	(13111217)
440069.00	3765900.00	8.29356	(12011717)
440169.00	3765900.00	7.52624	(12011717)
440269.00	3765900.00	7.02371	(12011717)
439649.00	3765310.00	4.18052	(13121718)
439679.00	3765310.00	4.20586	(13121718)
439709.00	3765310.00	4.19288	(13121718)
439739.00	3765310.00	4.14087	(13121718)
439769.00	3765310.00	4.11152	(15111218)

439799.00	3765310.00	4.10787	(13121618)
	439829.00	3765310.00	4.15061 (13120808)
439859.00	3765310.00	4.18703	(13120808)
	439889.00	3765310.00	4.18375 (13120808)
439649.00	3765340.00	4.56653	(12011417)
	439679.00	3765340.00	4.47831 (12011417)
439709.00	3765340.00	4.50141	(13121718)
	439739.00	3765340.00	4.49684 (13121718)
439769.00	3765340.00	4.44349	(13121718)
	439799.00	3765340.00	4.37801 (15111218)
439829.00	3765340.00	4.37974	(13121618)
	439859.00	3765340.00	4.42823 (13120808)
439889.00	3765340.00	4.44093	(13120808)
	439649.00	3765370.00	5.00516 (12011417)
439679.00	3765370.00	4.97953	(12011417)
	439709.00	3765370.00	4.90464 (12011417)
439739.00	3765370.00	4.84129	(13121718)
	439769.00	3765370.00	4.84257 (13121718)
439799.00	3765370.00	4.78935	(13121718)
	439829.00	3765370.00	4.69322 (13121718)
439859.00	3765370.00	4.68980	(13120808)
	439889.00	3765370.00	4.72982 (13120808)
439649.00	3765400.00	5.39114	(12011417)
	439679.00	3765400.00	5.44715 (12011417)
439709.00	3765400.00	5.45072	(12011417)
	439739.00	3765400.00	5.39379 (12011417)
439769.00	3765400.00	5.27891	(12011417)
	439799.00	3765400.00	5.24472 (13121718)
439829.00	3765400.00	5.18857	(13121718)
	439859.00	3765400.00	5.08655 (13121718)
439889.00	3765400.00	5.06190	(13120808)
	439649.00	3765430.00	5.69806 (12011417)
439679.00	3765430.00	5.85031	(12011417)
	439709.00	3765430.00	5.95652 (12011417)
439739.00	3765430.00	5.99728	(12011417)
	439769.00	3765430.00	5.96373 (12011417)
439799.00	3765430.00	5.85677	(12011417)
	439829.00	3765430.00	5.71872 (13121718)
439859.00	3765430.00	5.65392	(13121718)
	439889.00	3765430.00	5.54429 (13121718)
439649.00	3765460.00	5.91281	(12011417)
	439679.00	3765460.00	6.15062 (12011417)
439709.00	3765460.00	6.37573	(12011417)
	439739.00	3765460.00	6.55221 (12011417)
439769.00	3765460.00	6.64799	(12011417)
	439799.00	3765460.00	6.64348 (12011417)
439829.00	3765460.00	6.54414	(12011417)
	439859.00	3765460.00	6.37422 (12011417)
439889.00	3765460.00	6.20978	(13121718)
	439649.00	3765490.00	6.06152 (12011417)
439679.00	3765490.00	6.34426	(12011417)
	439709.00	3765490.00	6.66442 (12011417)

439739.00	3765490.00	6.98809	(12011417)
439769.00	3765490.00	7.26624	(12011417)
439799.00	3765490.00	7.44319	(12011417)
439829.00	3765490.00	7.48076	(12011417)
439859.00	3765490.00	7.38232	(12011417)
439889.00	3765490.00	7.20575	(12011417)

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439674.00	3765310.00	3.46749	(13121718)
439679.00	3765310.00	3.46458	(13121718)
439684.00	3765310.00	3.45958	(13121718)
439689.00	3765310.00	3.45775	(13121718)
439694.00	3765310.00	3.45340	(13121718)
439699.00	3765310.00	3.44869	(13121718)
439704.00	3765310.00	3.44389	(13121718)
439709.00	3765310.00	3.43971	(13121718)
439714.00	3765310.00	3.43637	(13121718)
439719.00	3765310.00	3.43602	(12010217)
439729.00	3765310.00	3.43629	(12010217)
439734.00	3765310.00	3.43584	(12010217)
439739.00	3765310.00	3.43657	(12010217)
439744.00	3765310.00	3.43589	(12010217)
439749.00	3765310.00	3.43669	(12010217)
439764.00	3765310.00	3.43602	(12010217)
439769.00	3765310.00	3.43692	(12010217)
439774.00	3765310.00	3.43643	(12010217)
439779.00	3765310.00	3.43712	(12010217)

439784.00	3765310.00	3.43633	(12010217)
	439789.00	3765310.00	3.43722 (12010217)
439794.00	3765310.00	3.43677	(12010217)
	439799.00	3765310.00	3.43708 (12010217)
439804.00	3765310.00	3.43673	(12010217)
	439809.00	3765310.00	3.43731 (12010217)
439814.00	3765310.00	3.43663	(12010217)
	439819.00	3765310.00	3.43714 (12010217)
439824.00	3765310.00	3.43673	(12010217)
	439829.00	3765310.00	3.43700 (12010217)
439839.00	3765310.00	3.43697	(12010217)
	439844.00	3765310.00	3.43694 (12010217)
439849.00	3765310.00	3.43686	(12010217)
	439854.00	3765310.00	3.43732 (12010217)
439859.00	3765310.00	3.43676	(12010217)
	439864.00	3765310.00	3.43713 (12010217)
439869.00	3765310.00	3.43664	(12010217)
	439874.00	3765310.00	3.43744 (12010217)
439879.00	3765310.00	3.43647	(12010217)
	439884.00	3765310.00	3.43762 (12010217)
439674.00	3765315.00	3.50435	(13121718)
	439679.00	3765315.00	3.50016 (13121718)
439684.00	3765315.00	3.49690	(13121718)
	439689.00	3765315.00	3.49139 (13121718)
439694.00	3765315.00	3.48954	(13121718)
	439699.00	3765315.00	3.48560 (13121718)
439704.00	3765315.00	3.48162	(13121718)
	439709.00	3765315.00	3.47608 (13121718)
439714.00	3765315.00	3.47224	(13121718)
	439719.00	3765315.00	3.46818 (13121718)
439729.00	3765315.00	3.46481	(12010217)
	439734.00	3765315.00	3.46520 (12010217)
439739.00	3765315.00	3.46490	(12010217)
	439744.00	3765315.00	3.46529 (12010217)
439749.00	3765315.00	3.46474	(12010217)
	439764.00	3765315.00	3.46515 (12010217)
439769.00	3765315.00	3.46514	(12010217)
	439774.00	3765315.00	3.46519 (12010217)
439779.00	3765315.00	3.46545	(12010217)
	439784.00	3765315.00	3.46479 (12010217)
439789.00	3765315.00	3.46551	(12010217)
	439794.00	3765315.00	3.46514 (12010217)
439799.00	3765315.00	3.46564	(12010217)
	439804.00	3765315.00	3.46511 (12010217)
439809.00	3765315.00	3.46592	(12010217)
	439814.00	3765315.00	3.46514 (12010217)
439819.00	3765315.00	3.46604	(12010217)
	439824.00	3765315.00	3.46537 (12010217)
439829.00	3765315.00	3.46581	(12010217)
	439839.00	3765315.00	3.46588 (12010217)
439844.00	3765315.00	3.46553	(12010217)
	439849.00	3765315.00	3.46574 (12010217)

439854.00	3765315.00	3.46586	(12010217)
	439859.00	3765315.00	3.46581 (12010217)
439864.00	3765315.00	3.46568	(12010217)
	439869.00	3765315.00	3.46576 (12010217)
439874.00	3765315.00	3.46597	(12010217)
	439879.00	3765315.00	3.46543 (12010217)
439884.00	3765315.00	3.46565	(12010217)
	439674.00	3765320.00	3.53780 (13121718)
439679.00	3765320.00	3.53604	(13121718)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439684.00	3765320.00	3.53257	(13121718)
439689.00	3765320.00	3.53026	(13121718)
439694.00	3765320.00	3.52435	(13121718)
439699.00	3765320.00	3.52216	(13121718)
439704.00	3765320.00	3.51812	(13121718)
439709.00	3765320.00	3.51525	(13121718)
439714.00	3765320.00	3.50938	(13121718)
439719.00	3765320.00	3.50548	(13121718)
439729.00	3765320.00	3.49693	(13121718)
439734.00	3765320.00	3.49436	(12010217)
439739.00	3765320.00	3.49378	(12010217)
439744.00	3765320.00	3.49457	(12010217)
439749.00	3765320.00	3.49382	(12010217)
439764.00	3765320.00	3.49463	(12010217)
439769.00	3765320.00	3.49414	(12010217)
439774.00	3765320.00	3.49492	(12010217)
439779.00	3765320.00	3.49452	(12010217)
439784.00	3765320.00	3.49499	(12010217)
439789.00	3765320.00	3.49447	(12010217)

439794.00	3765320.00	3.49512	(12010217)
	439799.00	3765320.00	3.49445 (12010217)
439804.00	3765320.00	3.49502	(12010217)
	439809.00	3765320.00	3.49453 (12010217)
439814.00	3765320.00	3.49491	(12010217)
	439819.00	3765320.00	3.49475 (12010217)
439824.00	3765320.00	3.49482	(12010217)
	439829.00	3765320.00	3.49462 (12010217)
439839.00	3765320.00	3.49510	(12010217)
	439844.00	3765320.00	3.49458 (12010217)
439849.00	3765320.00	3.49512	(12010217)
	439854.00	3765320.00	3.49456 (12010217)
439859.00	3765320.00	3.49532	(12010217)
	439864.00	3765320.00	3.49448 (12010217)
439869.00	3765320.00	3.49538	(12010217)
	439874.00	3765320.00	3.49479 (12010217)
439879.00	3765320.00	3.49528	(12010217)
	439884.00	3765320.00	3.49476 (12010217)
439674.00	3765325.00	3.57611	(13121718)
	439679.00	3765325.00	3.57135 (13121718)
439684.00	3765325.00	3.56884	(13121718)
	439689.00	3765325.00	3.56501 (13121718)
439694.00	3765325.00	3.56375	(13121718)
	439699.00	3765325.00	3.55844 (13121718)
439704.00	3765325.00	3.55501	(13121718)
	439709.00	3765325.00	3.55109 (13121718)
439714.00	3765325.00	3.54852	(13121718)
	439719.00	3765325.00	3.54358 (13121718)
439729.00	3765325.00	3.53489	(13121718)
	439734.00	3765325.00	3.53002 (13121718)
439739.00	3765325.00	3.52704	(13121718)
	439744.00	3765325.00	3.52393 (12010217)
439749.00	3765325.00	3.52444	(12010217)
	439754.00	3765325.00	3.52406 (12010217)
439769.00	3765325.00	3.52412	(12010217)
	439774.00	3765325.00	3.52445 (12010217)
439779.00	3765325.00	3.52405	(12010217)
	439784.00	3765325.00	3.52471 (12010217)
439789.00	3765325.00	3.52420	(12010217)
	439794.00	3765325.00	3.52471 (12010217)
439799.00	3765325.00	3.52449	(12010217)
	439804.00	3765325.00	3.52493 (12010217)
439809.00	3765325.00	3.52439	(12010217)
	439814.00	3765325.00	3.52490 (12010217)
439819.00	3765325.00	3.52483	(12010217)
	439824.00	3765325.00	3.52472 (12010217)
439829.00	3765325.00	3.52466	(12010217)
	439839.00	3765325.00	3.52505 (12010217)
439844.00	3765325.00	3.52464	(12010217)
	439849.00	3765325.00	3.52516 (12010217)
439854.00	3765325.00	3.52493	(12010217)
	439859.00	3765325.00	3.52512 (12010217)

439864.00	3765325.00	3.52481	(12010217)
	439869.00	3765325.00	3.52485 (12010217)
439874.00	3765325.00	3.52471	(12010217)
	439879.00	3765325.00	3.52492 (12010217)
439884.00	3765325.00	3.52467	(12010217)
	439674.00	3765330.00	3.61112 (13121718)
439679.00	3765330.00	3.60972	(13121718)
	439684.00	3765330.00	3.60588 (13121718)
439689.00	3765330.00	3.60204	(13121718)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439694.00	3765330.00	3.59857	(13121718)
439699.00	3765330.00	3.59696	(13121718)
439704.00	3765330.00	3.59337	(13121718)
439709.00	3765330.00	3.58897	(13121718)
439714.00	3765330.00	3.58504	(13121718)
439719.00	3765330.00	3.58184	(13121718)
439729.00	3765330.00	3.57364	(13121718)
439734.00	3765330.00	3.56915	(13121718)
439739.00	3765330.00	3.56443	(13121718)
439744.00	3765330.00	3.56118	(13121718)
439749.00	3765330.00	3.55540	(13121718)
439754.00	3765330.00	3.55452	(12010217)
439774.00	3765330.00	3.55470	(12010217)
439779.00	3765330.00	3.55502	(12010217)
439784.00	3765330.00	3.55499	(12010217)
439789.00	3765330.00	3.55526	(12010217)
439794.00	3765330.00	3.55461	(12010217)
439799.00	3765330.00	3.55558	(12010217)
439804.00	3765330.00	3.55505	(12010217)

439809.00	3765330.00	3.55514	(12010217)
	439814.00	3765330.00	3.55517 (12010217)
439819.00	3765330.00	3.55551	(12010217)
	439824.00	3765330.00	3.55519 (12010217)
439829.00	3765330.00	3.55490	(12010217)
	439839.00	3765330.00	3.55502 (12010217)
439844.00	3765330.00	3.55543	(12010217)
	439849.00	3765330.00	3.55506 (12010217)
439854.00	3765330.00	3.55571	(12010217)
	439859.00	3765330.00	3.55477 (12010217)
439864.00	3765330.00	3.55597	(12010217)
	439869.00	3765330.00	3.55506 (12010217)
439874.00	3765330.00	3.55568	(12010217)
	439879.00	3765330.00	3.55524 (12010217)
439884.00	3765330.00	3.55561	(12010217)
	439674.00	3765335.00	3.64863 (12011417)
439679.00	3765335.00	3.64535	(13121718)
	439684.00	3765335.00	3.64268 (13121718)
439689.00	3765335.00	3.64161	(13121718)
	439694.00	3765335.00	3.63612 (13121718)
439699.00	3765335.00	3.63333	(13121718)
	439704.00	3765335.00	3.63018 (13121718)
439709.00	3765335.00	3.62851	(13121718)
	439714.00	3765335.00	3.62395 (13121718)
439719.00	3765335.00	3.61949	(13121718)
	439729.00	3765335.00	3.61274 (13121718)
439734.00	3765335.00	3.60960	(13121718)
	439739.00	3765335.00	3.60388 (13121718)
439744.00	3765335.00	3.60015	(13121718)
	439749.00	3765335.00	3.59530 (13121718)
439774.00	3765335.00	3.58583	(12010217)
	439779.00	3765335.00	3.58617 (12010217)
439784.00	3765335.00	3.58620	(12010217)
	439789.00	3765335.00	3.58632 (12010217)
439794.00	3765335.00	3.58599	(12010217)
	439839.00	3765335.00	3.58640 (12010217)
439844.00	3765335.00	3.58682	(12010217)
	439849.00	3765335.00	3.58663 (12010217)
439854.00	3765335.00	3.58671	(12010217)
	439859.00	3765335.00	3.58651 (12010217)
439864.00	3765335.00	3.58693	(12010217)
	439869.00	3765335.00	3.58660 (12010217)
439874.00	3765335.00	3.58664	(12010217)
	439879.00	3765335.00	3.58659 (12010217)
439884.00	3765335.00	3.58687	(12010217)
	439674.00	3765340.00	3.70633 (12011417)
439679.00	3765340.00	3.69462	(12011417)
	439684.00	3765340.00	3.68393 (12011417)
439689.00	3765340.00	3.67629	(13121718)
	439694.00	3765340.00	3.67692 (13121718)
439699.00	3765340.00	3.67169	(13121718)
	439704.00	3765340.00	3.66878 (13121718)

439709.00	3765340.00	3.66523	(13121718)
439714.00	3765340.00	3.66316	(13121718)
439719.00	3765340.00	3.66059	(13121718)
439729.00	3765340.00	3.65202	(13121718)
439734.00	3765340.00	3.64745	(13121718)
439739.00	3765340.00	3.64574	(13121718)
439744.00	3765340.00	3.63965	(13121718)
439749.00	3765340.00	3.63630	(13121718)
439774.00	3765340.00	3.61780	(12010217)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439779.00	3765340.00	3.61795	(12010217)
439784.00	3765340.00	3.61822	(12010217)
439789.00	3765340.00	3.61798	(12010217)
439794.00	3765340.00	3.61808	(12010217)
439839.00	3765340.00	3.61861	(12010217)
439844.00	3765340.00	3.61821	(12010217)
439849.00	3765340.00	3.61898	(12010217)
439854.00	3765340.00	3.61811	(12010217)
439859.00	3765340.00	3.61889	(12010217)
439864.00	3765340.00	3.61840	(12010217)
439869.00	3765340.00	3.61873	(12010217)
439874.00	3765340.00	3.61824	(12010217)
439879.00	3765340.00	3.61880	(12010217)
439884.00	3765340.00	3.61843	(12010217)
439674.00	3765345.00	3.76232	(12011417)
439679.00	3765345.00	3.75266	(12011417)
439684.00	3765345.00	3.74124	(12011417)
439689.00	3765345.00	3.73053	(12011417)
439694.00	3765345.00	3.71845	(12011417)

439699.00	3765345.00	3.71125	(13121718)
	439704.00	3765345.00	3.70875 (13121718)
439709.00	3765345.00	3.70453	(13121718)
	439714.00	3765345.00	3.70128 (13121718)
439719.00	3765345.00	3.69786	(13121718)
	439729.00	3765345.00	3.69150 (13121718)
439734.00	3765345.00	3.68833	(13121718)
	439739.00	3765345.00	3.68343 (13121718)
439744.00	3765345.00	3.68183	(13121718)
	439749.00	3765345.00	3.67651 (13121718)
439774.00	3765345.00	3.65465	(13121718)
	439779.00	3765345.00	3.65070 (12010217)
439784.00	3765345.00	3.65060	(12010217)
	439789.00	3765345.00	3.65058 (12010217)
439794.00	3765345.00	3.65052	(12010217)
	439839.00	3765345.00	3.65071 (12010217)
439844.00	3765345.00	3.65131	(12010217)
	439849.00	3765345.00	3.65101 (12010217)
439854.00	3765345.00	3.65089	(12010217)
	439859.00	3765345.00	3.65114 (12010217)
439864.00	3765345.00	3.65134	(12010217)
	439869.00	3765345.00	3.65097 (12010217)
439874.00	3765345.00	3.65125	(12010217)
	439879.00	3765345.00	3.65140 (12010217)
439884.00	3765345.00	3.65097	(12010217)
	439674.00	3765350.00	3.81948 (12011417)
439679.00	3765350.00	3.80907	(12011417)
	439684.00	3765350.00	3.79950 (12011417)
439689.00	3765350.00	3.78852	(12011417)
	439694.00	3765350.00	3.77826 (12011417)
439699.00	3765350.00	3.76640	(12011417)
	439704.00	3765350.00	3.75538 (12011417)
439709.00	3765350.00	3.74522	(13121718)
	439714.00	3765350.00	3.74171 (13121718)
439719.00	3765350.00	3.73828	(13121718)
	439729.00	3765350.00	3.73278 (13121718)
439734.00	3765350.00	3.72866	(13121718)
	439739.00	3765350.00	3.72574 (13121718)
439744.00	3765350.00	3.72010	(13121718)
	439749.00	3765350.00	3.71891 (13121718)
439774.00	3765350.00	3.69593	(13121718)
	439779.00	3765350.00	3.69286 (13121718)
439784.00	3765350.00	3.68674	(13121718)
	439789.00	3765350.00	3.68398 (12010217)
439794.00	3765350.00	3.68428	(12010217)
	439839.00	3765350.00	3.68413 (12010217)
439844.00	3765350.00	3.68489	(12010217)
	439849.00	3765350.00	3.68434 (12010217)
439854.00	3765350.00	3.68461	(12010217)
	439859.00	3765350.00	3.68452 (12010217)
439864.00	3765350.00	3.68474	(12010217)
	439869.00	3765350.00	3.68434 (12010217)

439874.00	3765350.00	3.68485	(12010217)
	439879.00	3765350.00	3.68468 (12010217)
439884.00	3765350.00	3.68465	(12010217)
	439674.00	3765355.00	3.87713 (12011417)
439679.00	3765355.00	3.86760	(12011417)
	439684.00	3765355.00	3.85682 (12011417)
439689.00	3765355.00	3.84729	(12011417)
	439694.00	3765355.00	3.83664 (12011417)
439699.00	3765355.00	3.82688	(12011417)



439864.00	3765355.00	3.71841	(12010217)
	439869.00	3765355.00	3.71872 (12010217)
439874.00	3765355.00	3.71869	(12010217)
	439879.00	3765355.00	3.71863 (12010217)
439884.00	3765355.00	3.71863	(12010217)
	439674.00	3765360.00	3.93439 (12011417)
439679.00	3765360.00	3.92489	(12011417)
	439684.00	3765360.00	3.91642 (12011417)
439689.00	3765360.00	3.90569	(12011417)
	439694.00	3765360.00	3.89602 (12011417)
439699.00	3765360.00	3.88508	(12011417)
	439704.00	3765360.00	3.87564 (12011417)
439709.00	3765360.00	3.86419	(12011417)
	439714.00	3765360.00	3.85355 (12011417)
439719.00	3765360.00	3.84164	(12011417)
	439729.00	3765360.00	3.81800 (12011417)
439734.00	3765360.00	3.81005	(13121718)
	439739.00	3765360.00	3.80783 (13121718)
439744.00	3765360.00	3.80320	(13121718)
	439749.00	3765360.00	3.80268 (13121718)
439774.00	3765360.00	3.78316	(13121718)
	439779.00	3765360.00	3.77811 (13121718)
439784.00	3765360.00	3.77443	(13121718)
	439789.00	3765360.00	3.76855 (13121718)
439794.00	3765360.00	3.76581	(13121718)
	439799.00	3765360.00	3.75991 (13121718)
439804.00	3765360.00	3.75492	(13121718)
	439809.00	3765360.00	3.75359 (12010217)
439814.00	3765360.00	3.75288	(12010217)
	439839.00	3765360.00	3.75355 (12010217)
439844.00	3765360.00	3.75333	(12010217)
	439849.00	3765360.00	3.75340 (12010217)
439854.00	3765360.00	3.75374	(12010217)
	439859.00	3765360.00	3.75351 (12010217)
439864.00	3765360.00	3.75364	(12010217)
	439869.00	3765360.00	3.75372 (12010217)
439874.00	3765360.00	3.75380	(12010217)
	439879.00	3765360.00	3.75347 (12010217)
439884.00	3765360.00	3.75375	(12010217)
	439674.00	3765365.00	3.99249 (12011417)
439679.00	3765365.00	3.98312	(12011417)
	439684.00	3765365.00	3.97393 (12011417)
439689.00	3765365.00	3.96501	(12011417)
	439694.00	3765365.00	3.95544 (12011417)
439699.00	3765365.00	3.94614	(12011417)
	439704.00	3765365.00	3.93502 (12011417)
439709.00	3765365.00	3.92514	(12011417)
	439714.00	3765365.00	3.91435 (12011417)
439719.00	3765365.00	3.90436	(12011417)
	439729.00	3765365.00	3.88087 (12011417)
439734.00	3765365.00	3.86858	(12011417)
	439739.00	3765365.00	3.85716 (12011417)

439744.00	3765365.00	3.84648	(13121718)
	439749.00	3765365.00	3.84290 (13121718)
439774.00	3765365.00	3.82600	(13121718)
	439779.00	3765365.00	3.82308 (13121718)
439784.00	3765365.00	3.81807	(13121718)
	439789.00	3765365.00	3.81452 (13121718)
439794.00	3765365.00	3.80865	(13121718)
	439799.00	3765365.00	3.80536 (13121718)
439804.00	3765365.00	3.80046	(13121718)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_2.5 IN  
 MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439809.00	3765365.00	3.79540	(13121718)
439814.00	3765365.00	3.78954	(13121718)
439839.00	3765365.00	3.78951	(12010217)
439844.00	3765365.00	3.78911	(12010217)
439849.00	3765365.00	3.78953	(12010217)
439854.00	3765365.00	3.78946	(12010217)
439859.00	3765365.00	3.78925	(12010217)
439864.00	3765365.00	3.78937	(12010217)
439869.00	3765365.00	3.78975	(12010217)
439874.00	3765365.00	3.78940	(12010217)
439879.00	3765365.00	3.78928	(12010217)
439884.00	3765365.00	3.78972	(12010217)
439674.00	3765370.00	4.05045	(12011417)
439679.00	3765370.00	4.04228	(12011417)
439684.00	3765370.00	4.03326	(12011417)
439689.00	3765370.00	4.02383	(12011417)
439694.00	3765370.00	4.01522	(12011417)
439699.00	3765370.00	4.00543	(12011417)
439704.00	3765370.00	3.99736	(12011417)

439709.00	3765370.00	3.98616	(12011417)
	439714.00	3765370.00	3.97582 (12011417)
439719.00	3765370.00	3.96506	(12011417)
	439729.00	3765370.00	3.94364 (12011417)
439734.00	3765370.00	3.93241	(12011417)
	439739.00	3765370.00	3.92025 (12011417)
439744.00	3765370.00	3.90882	(12011417)
	439749.00	3765370.00	3.89740 (12011417)
439774.00	3765370.00	3.87018	(13121718)
	439779.00	3765370.00	3.86659 (13121718)
439784.00	3765370.00	3.86319	(13121718)
	439789.00	3765370.00	3.85890 (13121718)
439794.00	3765370.00	3.85532	(13121718)
	439799.00	3765370.00	3.84980 (13121718)
439804.00	3765370.00	3.84571	(13121718)
	439809.00	3765370.00	3.84128 (13121718)
439814.00	3765370.00	3.83694	(13121718)
	439839.00	3765370.00	3.82568 (12010217)
439844.00	3765370.00	3.82587	(12010217)
	439849.00	3765370.00	3.82616 (12010217)
439854.00	3765370.00	3.82589	(12010217)
	439859.00	3765370.00	3.82593 (12010217)
439864.00	3765370.00	3.82599	(12010217)
	439869.00	3765370.00	3.82632 (12010217)
439874.00	3765370.00	3.82596	(12010217)
	439879.00	3765370.00	3.82622 (12010217)
439884.00	3765370.00	3.82609	(12010217)
	439674.00	3765375.00	4.10891 (12011417)
439679.00	3765375.00	4.10083	(12011417)
	439684.00	3765375.00	4.09250 (12011417)
439689.00	3765375.00	4.08480	(12011417)
	439694.00	3765375.00	4.07495 (12011417)
439699.00	3765375.00	4.06620	(12011417)
	439704.00	3765375.00	4.05651 (12011417)
439709.00	3765375.00	4.04820	(12011417)
	439714.00	3765375.00	4.03786 (12011417)
439719.00	3765375.00	4.02819	(12011417)
	439729.00	3765375.00	4.00736 (12011417)
439734.00	3765375.00	3.99642	(12011417)
	439739.00	3765375.00	3.98513 (12011417)
439744.00	3765375.00	3.97311	(12011417)
	439749.00	3765375.00	3.96120 (12011417)
439754.00	3765375.00	3.95050	(12011417)
	439774.00	3765375.00	3.91518 (13121718)
439779.00	3765375.00	3.91192	(13121718)
	439784.00	3765375.00	3.90757 (13121718)
439789.00	3765375.00	3.90456	(13121718)
	439794.00	3765375.00	3.90019 (13121718)
439799.00	3765375.00	3.89720	(13121718)
	439804.00	3765375.00	3.89185 (13121718)
439809.00	3765375.00	3.88770	(13121718)
	439814.00	3765375.00	3.88275 (13121718)

439839.00	3765375.00	3.86311	(12010217)
	439844.00	3765375.00	3.86369 (12010217)
439849.00	3765375.00	3.86344	(12010217)
	439854.00	3765375.00	3.86356 (12010217)
439859.00	3765375.00	3.86328	(12010217)
	439864.00	3765375.00	3.86396 (12010217)
439869.00	3765375.00	3.86338	(12010217)
	439874.00	3765375.00	3.86380 (12010217)
439879.00	3765375.00	3.86366	(12010217)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439884.00	3765375.00	3.86372	(12010217)
439774.00	3765380.00	3.96557	(12011417)
439779.00	3765380.00	3.95687	(13121718)
439784.00	3765380.00	3.95439	(13121718)
439789.00	3765380.00	3.94996	(13121718)
439794.00	3765380.00	3.94659	(13121718)
439799.00	3765380.00	3.94231	(13121718)
439804.00	3765380.00	3.93917	(13121718)
439809.00	3765380.00	3.93550	(13121718)
439814.00	3765380.00	3.92999	(13121718)
439769.00	3765385.00	4.04686	(12011417)
439819.00	3765385.00	3.97372	(13121718)
439769.00	3765400.00	4.25268	(12011417)
439844.00	3765400.00	4.10194	(13121718)
439849.00	3765400.00	4.10007	(13121718)
439674.00	3765405.00	4.47068	(12011417)
439714.00	3765405.00	4.41767	(12011417)
439719.00	3765405.00	4.41040	(12011417)
439734.00	3765405.00	4.38591	(12011417)

439749.00	3765405.00	4.36110	(12011417)
	439754.00	3765405.00	4.35120 (12011417)
439774.00	3765405.00	4.31270	(12011417)
	439779.00	3765405.00	4.30086 (12011417)
439784.00	3765405.00	4.29126	(12011417)
	439789.00	3765405.00	4.28090 (12011417)
439794.00	3765405.00	4.26839	(12011417)
	439799.00	3765405.00	4.25583 (12011417)
439804.00	3765405.00	4.24422	(12011417)
	439809.00	3765405.00	4.23257 (12011417)
439814.00	3765405.00	4.21960	(12011417)
	439819.00	3765405.00	4.20536 (12011417)
439824.00	3765405.00	4.19170	(12011417)
	439829.00	3765405.00	4.17756 (12011417)
439834.00	3765405.00	4.16486	(12011417)
	439839.00	3765405.00	4.15774 (13121718)
439844.00	3765405.00	4.15543	(13121718)
	439849.00	3765405.00	4.15024 (13121718)
439854.00	3765405.00	4.14860	(13121718)
	439859.00	3765405.00	4.14010 (13121718)
439674.00	3765410.00	4.53241	(12011417)
	439679.00	3765410.00	4.52694 (12011417)
439684.00	3765410.00	4.52232	(12011417)
	439689.00	3765410.00	4.51578 (12011417)
439694.00	3765410.00	4.50966	(12011417)
	439699.00	3765410.00	4.50255 (12011417)
439704.00	3765410.00	4.49708	(12011417)
	439709.00	3765410.00	4.49043 (12011417)
439714.00	3765410.00	4.48330	(12011417)
	439719.00	3765410.00	4.47540 (12011417)
439729.00	3765410.00	4.46193	(12011417)
	439734.00	3765410.00	4.45454 (12011417)
439739.00	3765410.00	4.44515	(12011417)
	439744.00	3765410.00	4.43670 (12011417)
439749.00	3765410.00	4.42891	(12011417)
	439774.00	3765410.00	4.38354 (12011417)
439779.00	3765410.00	4.37382	(12011417)
	439784.00	3765410.00	4.36198 (12011417)
439789.00	3765410.00	4.35153	(12011417)
	439794.00	3765410.00	4.34143 (12011417)
439799.00	3765410.00	4.33066	(12011417)
	439804.00	3765410.00	4.31846 (12011417)
439809.00	3765410.00	4.30592	(12011417)
	439814.00	3765410.00	4.29353 (12011417)
439819.00	3765410.00	4.28216	(12011417)
	439824.00	3765410.00	4.26842 (12011417)
439829.00	3765410.00	4.25493	(12011417)
	439834.00	3765410.00	4.24030 (12011417)
439839.00	3765410.00	4.22802	(12011417)
	439844.00	3765410.00	4.21243 (12011417)
439849.00	3765410.00	4.20443	(13121718)
	439854.00	3765410.00	4.19921 (13121718)

439859.00	3765410.00	4.19816	(13121718)
	439674.00	3765415.00	4.59692 (12011417)
439679.00	3765415.00	4.59117	(12011417)
	439684.00	3765415.00	4.58482 (12011417)
439689.00	3765415.00	4.58045	(12011417)
	439694.00	3765415.00	4.57432 (12011417)
439699.00	3765415.00	4.56882	(12011417)
	439704.00	3765415.00	4.56164 (12011417)
439709.00	3765415.00	4.55565	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439714.00	3765415.00	4.54940	(12011417)
439719.00	3765415.00	4.54282	(12011417)
439729.00	3765415.00	4.52779	(12011417)
439734.00	3765415.00	4.52099	(12011417)
439739.00	3765415.00	4.51406	(12011417)
439744.00	3765415.00	4.50617	(12011417)
439749.00	3765415.00	4.49795	(12011417)
439774.00	3765415.00	4.45347	(12011417)
439779.00	3765415.00	4.44451	(12011417)
439784.00	3765415.00	4.43545	(12011417)
439789.00	3765415.00	4.42542	(12011417)
439794.00	3765415.00	4.41376	(12011417)
439799.00	3765415.00	4.40288	(12011417)
439804.00	3765415.00	4.39276	(12011417)
439809.00	3765415.00	4.38245	(12011417)
439814.00	3765415.00	4.36961	(12011417)
439819.00	3765415.00	4.35627	(12011417)
439824.00	3765415.00	4.34517	(12011417)
439829.00	3765415.00	4.33234	(12011417)

439834.00	3765415.00	4.31981	(12011417)
	439839.00	3765415.00	4.30495 (12011417)
439844.00	3765415.00	4.29202	(12011417)
	439849.00	3765415.00	4.27722 (12011417)
439854.00	3765415.00	4.26404	(12011417)
	439859.00	3765415.00	4.24939 (13121718)
439674.00	3765420.00	4.65963	(12011417)
	439679.00	3765420.00	4.65592 (12011417)
439684.00	3765420.00	4.65092	(12011417)
	439689.00	3765420.00	4.64490 (12011417)
439694.00	3765420.00	4.63897	(12011417)
	439699.00	3765420.00	4.63383 (12011417)
439704.00	3765420.00	4.62852	(12011417)
	439709.00	3765420.00	4.62240 (12011417)
439714.00	3765420.00	4.61594	(12011417)
	439719.00	3765420.00	4.60921 (12011417)
439729.00	3765420.00	4.59718	(12011417)
	439734.00	3765420.00	4.58965 (12011417)
439739.00	3765420.00	4.58128	(12011417)
	439744.00	3765420.00	4.57466 (12011417)
439749.00	3765420.00	4.56800	(12011417)
	439774.00	3765420.00	4.52677 (12011417)
439779.00	3765420.00	4.51696	(12011417)
	439784.00	3765420.00	4.50658 (12011417)
439789.00	3765420.00	4.49805	(12011417)
	439794.00	3765420.00	4.48946 (12011417)
439799.00	3765420.00	4.47849	(12011417)
	439804.00	3765420.00	4.46679 (12011417)
439809.00	3765420.00	4.45627	(12011417)
	439814.00	3765420.00	4.44583 (12011417)
439819.00	3765420.00	4.43518	(12011417)
	439824.00	3765420.00	4.42177 (12011417)
439829.00	3765420.00	4.40954	(12011417)
	439834.00	3765420.00	4.39720 (12011417)
439839.00	3765420.00	4.38603	(12011417)
	439844.00	3765420.00	4.37130 (12011417)
439849.00	3765420.00	4.35810	(12011417)
	439854.00	3765420.00	4.34336 (12011417)
439859.00	3765420.00	4.32975	(12011417)
	439674.00	3765425.00	4.72592 (12011417)
439679.00	3765425.00	4.72012	(12011417)
	439684.00	3765425.00	4.71587 (12011417)
439689.00	3765425.00	4.71192	(12011417)
	439694.00	3765425.00	4.70651 (12011417)
439699.00	3765425.00	4.70060	(12011417)
	439704.00	3765425.00	4.69429 (12011417)
439709.00	3765425.00	4.68993	(12011417)
	439714.00	3765425.00	4.68400 (12011417)
439719.00	3765425.00	4.67801	(12011417)
	439729.00	3765425.00	4.66492 (12011417)
439734.00	3765425.00	4.65877	(12011417)
	439739.00	3765425.00	4.65261 (12011417)

439744.00	3765425.00	4.64457	(12011417)
	439749.00	3765425.00	4.63724 (12011417)
439774.00	3765425.00	4.59799	(12011417)
	439779.00	3765425.00	4.59047 (12011417)
439784.00	3765425.00	4.58171	(12011417)
	439789.00	3765425.00	4.57192 (12011417)
439794.00	3765425.00	4.56159	(12011417)
	439799.00	3765425.00	4.55326 (12011417)
439804.00	3765425.00	4.54376	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439809.00	3765425.00	4.53335	(12011417)
439814.00	3765425.00	4.52137	(12011417)
439819.00	3765425.00	4.51064	(12011417)
439824.00	3765425.00	4.50096	(12011417)
439829.00	3765425.00	4.48895	(12011417)
439834.00	3765425.00	4.47668	(12011417)
439839.00	3765425.00	4.46313	(12011417)
439844.00	3765425.00	4.45232	(12011417)
439849.00	3765425.00	4.43872	(12011417)
439854.00	3765425.00	4.42598	(12011417)
439859.00	3765425.00	4.41078	(12011417)
439674.00	3765430.00	4.79161	(12011417)
439679.00	3765430.00	4.78807	(12011417)
439684.00	3765430.00	4.78254	(12011417)
439689.00	3765430.00	4.77745	(12011417)
439694.00	3765430.00	4.77279	(12011417)
439699.00	3765430.00	4.76859	(12011417)
439704.00	3765430.00	4.76360	(12011417)
439709.00	3765430.00	4.75751	(12011417)

439714.00	3765430.00	4.75191	(12011417)
	439719.00	3765430.00	4.74688 (12011417)
439729.00	3765430.00	4.73497	(12011417)
	439734.00	3765430.00	4.72823 (12011417)
439739.00	3765430.00	4.72159	(12011417)
	439744.00	3765430.00	4.71585 (12011417)
439749.00	3765430.00	4.70982	(12011417)
	439774.00	3765430.00	4.67246 (12011417)
439779.00	3765430.00	4.66304	(12011417)
	439784.00	3765430.00	4.65516 (12011417)
439789.00	3765430.00	4.64705	(12011417)
	439794.00	3765430.00	4.63917 (12011417)
439799.00	3765430.00	4.62830	(12011417)
	439804.00	3765430.00	4.61856 (12011417)
439809.00	3765430.00	4.60991	(12011417)
	439814.00	3765430.00	4.60034 (12011417)
439819.00	3765430.00	4.58970	(12011417)
	439824.00	3765430.00	4.57758 (12011417)
439829.00	3765430.00	4.56752	(12011417)
	439834.00	3765430.00	4.55659 (12011417)
439839.00	3765430.00	4.54600	(12011417)
	439844.00	3765430.00	4.53199 (12011417)
439849.00	3765430.00	4.52000	(12011417)
	439854.00	3765430.00	4.50747 (12011417)
439859.00	3765430.00	4.49464	(12011417)
	439674.00	3765435.00	4.85856 (12011417)
439679.00	3765435.00	4.85383	(12011417)
	439684.00	3765435.00	4.85108 (12011417)
439689.00	3765435.00	4.84705	(12011417)
	439694.00	3765435.00	4.84204 (12011417)
439699.00	3765435.00	4.83624	(12011417)
	439704.00	3765435.00	4.83194 (12011417)
439709.00	3765435.00	4.82759	(12011417)
	439714.00	3765435.00	4.82233 (12011417)
439719.00	3765435.00	4.81636	(12011417)
	439729.00	3765435.00	4.80567 (12011417)
439734.00	3765435.00	4.80016	(12011417)
	439739.00	3765435.00	4.79365 (12011417)
439744.00	3765435.00	4.78645	(12011417)
	439749.00	3765435.00	4.78105 (12011417)
439774.00	3765435.00	4.74599	(12011417)
	439779.00	3765435.00	4.73924 (12011417)
439784.00	3765435.00	4.73103	(12011417)
	439789.00	3765435.00	4.72156 (12011417)
439794.00	3765435.00	4.71361	(12011417)
	439799.00	3765435.00	4.70590 (12011417)
439804.00	3765435.00	4.69723	(12011417)
	439809.00	3765435.00	4.68666 (12011417)
439814.00	3765435.00	4.67671	(12011417)
	439819.00	3765435.00	4.66777 (12011417)
439824.00	3765435.00	4.65914	(12011417)
	439829.00	3765435.00	4.64746 (12011417)

439834.00	3765435.00	4.63603	(12011417)
	439839.00	3765435.00	4.62504 (12011417)
439844.00	3765435.00	4.61516	(12011417)
	439849.00	3765435.00	4.60267 (12011417)
439854.00	3765435.00	4.59007	(12011417)
	439859.00	3765435.00	4.57671 (12011417)
439674.00	3765440.00	4.92779	(12011417)
	439679.00	3765440.00	4.92453 (12011417)
439684.00	3765440.00	4.91867	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439689.00	3765440.00	4.91463	(12011417)
439694.00	3765440.00	4.91114	(12011417)
439699.00	3765440.00	4.90752	(12011417)
439704.00	3765440.00	4.90234	(12011417)
439709.00	3765440.00	4.89676	(12011417)
439714.00	3765440.00	4.89269	(12011417)
439719.00	3765440.00	4.88783	(12011417)
439729.00	3765440.00	4.87687	(12011417)
439734.00	3765440.00	4.87148	(12011417)
439739.00	3765440.00	4.86578	(12011417)
439744.00	3765440.00	4.86068	(12011417)
439749.00	3765440.00	4.85455	(12011417)
439774.00	3765440.00	4.82099	(12011417)
439779.00	3765440.00	4.81320	(12011417)
439784.00	3765440.00	4.80639	(12011417)
439789.00	3765440.00	4.79967	(12011417)
439794.00	3765440.00	4.79157	(12011417)
439799.00	3765440.00	4.78202	(12011417)
439804.00	3765440.00	4.77401	(12011417)

439809.00	3765440.00	4.76639	(12011417)
	439814.00	3765440.00	4.75749 (12011417)
439819.00	3765440.00	4.74676	(12011417)
	439824.00	3765440.00	4.73680 (12011417)
439829.00	3765440.00	4.72839	(12011417)
	439834.00	3765440.00	4.71899 (12011417)
439839.00	3765440.00	4.70791	(12011417)
	439844.00	3765440.00	4.69581 (12011417)
439849.00	3765440.00	4.68529	(12011417)
	439854.00	3765440.00	4.67442 (12011417)
439859.00	3765440.00	4.66249	(12011417)
	439674.00	3765445.00	4.99632 (12011417)
439679.00	3765445.00	4.99375	(12011417)
	439684.00	3765445.00	4.99076 (12011417)
439689.00	3765445.00	4.98702	(12011417)
	439694.00	3765445.00	4.98108 (12011417)
439699.00	3765445.00	4.97718	(12011417)
	439704.00	3765445.00	4.97402 (12011417)
439709.00	3765445.00	4.97018	(12011417)
	439714.00	3765445.00	4.96449 (12011417)
439719.00	3765445.00	4.95917	(12011417)
	439729.00	3765445.00	4.95019 (12011417)
439734.00	3765445.00	4.94600	(12011417)
	439739.00	3765445.00	4.93893 (12011417)
439744.00	3765445.00	4.93382	(12011417)
	439749.00	3765445.00	4.92846 (12011417)
439774.00	3765445.00	4.89785	(12011417)
	439779.00	3765445.00	4.89145 (12011417)
439784.00	3765445.00	4.88364	(12011417)
	439789.00	3765445.00	4.87521 (12011417)
439794.00	3765445.00	4.86923	(12011417)
	439799.00	3765445.00	4.86191 (12011417)
439804.00	3765445.00	4.85382	(12011417)
	439809.00	3765445.00	4.84401 (12011417)
439814.00	3765445.00	4.83652	(12011417)
	439819.00	3765445.00	4.82852 (12011417)
439824.00	3765445.00	4.82011	(12011417)
	439829.00	3765445.00	4.80879 (12011417)
439834.00	3765445.00	4.79914	(12011417)
	439839.00	3765445.00	4.79070 (12011417)
439844.00	3765445.00	4.78059	(12011417)
	439849.00	3765445.00	4.76942 (12011417)
439854.00	3765445.00	4.75747	(12011417)
	439859.00	3765445.00	4.74708 (12011417)
439674.00	3765450.00	5.06948	(12011417)
	439679.00	3765450.00	5.06490 (12011417)
439684.00	3765450.00	5.06072	(12011417)
	439689.00	3765450.00	5.05763 (12011417)
439694.00	3765450.00	5.05497	(12011417)
	439699.00	3765450.00	5.05061 (12011417)
439704.00	3765450.00	5.04585	(12011417)
	439709.00	3765450.00	5.04124 (12011417)

439714.00	3765450.00	5.03858	(12011417)
	439719.00	3765450.00	5.03366 (12011417)
439729.00	3765450.00	5.02369	(12011417)
	439734.00	3765450.00	5.01955 (12011417)
439739.00	3765450.00	5.01512	(12011417)
	439744.00	3765450.00	5.00983 (12011417)
439749.00	3765450.00	5.00389	(12011417)
	439774.00	3765450.00	4.97372 (12011417)
439844.00	3765450.00	4.86383	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439849.00	3765450.00	4.85385	(12011417)
439854.00	3765450.00	4.84515	(12011417)
439859.00	3765450.00	4.83289	(12011417)
439674.00	3765455.00	5.14003	(12011417)
439679.00	3765455.00	5.13870	(12011417)
439684.00	3765455.00	5.13521	(12011417)
439689.00	3765455.00	5.13184	(12011417)
439694.00	3765455.00	5.12641	(12011417)
439699.00	3765455.00	5.12436	(12011417)
439704.00	3765455.00	5.12083	(12011417)
439709.00	3765455.00	5.11766	(12011417)
439714.00	3765455.00	5.11215	(12011417)
439719.00	3765455.00	5.10800	(12011417)
439729.00	3765455.00	5.10023	(12011417)
439734.00	3765455.00	5.09595	(12011417)
439739.00	3765455.00	5.08954	(12011417)
439744.00	3765455.00	5.08665	(12011417)
439749.00	3765455.00	5.08107	(12011417)
439844.00	3765455.00	4.95026	(12011417)

439849.00	3765455.00	4.93959	(12011417)
	439854.00	3765455.00	4.92910 (12011417)
439859.00	3765455.00	4.92069	(12011417)
	439674.00	3765460.00	5.21695 (12011417)
439679.00	3765460.00	5.21105	(12011417)
	439684.00	3765460.00	5.20908 (12011417)
439689.00	3765460.00	5.20579	(12011417)
	439694.00	3765460.00	5.20438 (12011417)
439699.00	3765460.00	5.19930	(12011417)
	439704.00	3765460.00	5.19523 (12011417)
439709.00	3765460.00	5.19244	(12011417)
	439714.00	3765460.00	5.18974 (12011417)
439719.00	3765460.00	5.18603	(12011417)
	439729.00	3765460.00	5.17631 (12011417)
439734.00	3765460.00	5.17300	(12011417)
	439739.00	3765460.00	5.16897 (12011417)
439744.00	3765460.00	5.16373	(12011417)
	439749.00	3765460.00	5.15916 (12011417)
439789.00	3765460.00	5.11672	(12011417)
	439794.00	3765460.00	5.10927 (12011417)
439799.00	3765460.00	5.10319	(12011417)
	439804.00	3765460.00	5.09721 (12011417)
439809.00	3765460.00	5.09083	(12011417)
	439814.00	3765460.00	5.08307 (12011417)
439819.00	3765460.00	5.07474	(12011417)
	439824.00	3765460.00	5.06845 (12011417)
439829.00	3765460.00	5.06112	(12011417)
	439844.00	3765460.00	5.03578 (12011417)
439849.00	3765460.00	5.02720	(12011417)
	439854.00	3765460.00	5.01924 (12011417)
439859.00	3765460.00	5.00692	(12011417)
	439674.00	3765465.00	5.29064 (12011417)
439679.00	3765465.00	5.28967	(12011417)
	439684.00	3765465.00	5.28612 (12011417)
439689.00	3765465.00	5.28282	(12011417)
	439694.00	3765465.00	5.27878 (12011417)
439699.00	3765465.00	5.27773	(12011417)
	439704.00	3765465.00	5.27452 (12011417)
439709.00	3765465.00	5.27040	(12011417)
	439714.00	3765465.00	5.26587 (12011417)
439719.00	3765465.00	5.26336	(12011417)
	439729.00	3765465.00	5.25645 (12011417)
439734.00	3765465.00	5.25124	(12011417)
	439739.00	3765465.00	5.24677 (12011417)
439744.00	3765465.00	5.24417	(12011417)
	439749.00	3765465.00	5.23915 (12011417)
439789.00	3765465.00	5.19866	(12011417)
	439794.00	3765465.00	5.19357 (12011417)
439799.00	3765465.00	5.18715	(12011417)
	439804.00	3765465.00	5.17996 (12011417)
439809.00	3765465.00	5.17368	(12011417)
	439814.00	3765465.00	5.16786 (12011417)

439819.00	3765465.00	5.16180	(12011417)
	439824.00	3765465.00	5.15404 (12011417)
439829.00	3765465.00	5.14542	(12011417)
	439844.00	3765465.00	5.12396 (12011417)
439849.00	3765465.00	5.11366	(12011417)
	439854.00	3765465.00	5.10620 (12011417)
439859.00	3765465.00	5.09791	(12011417)
	439674.00	3765470.00	5.37111 (12011417)
439679.00	3765470.00	5.36597	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439684.00	3765470.00	5.36446	(12011417)
439689.00	3765470.00	5.36185	(12011417)
439694.00	3765470.00	5.35989	(12011417)
439699.00	3765470.00	5.35526	(12011417)
439704.00	3765470.00	5.35212	(12011417)
439709.00	3765470.00	5.34999	(12011417)
439714.00	3765470.00	5.34702	(12011417)
439719.00	3765470.00	5.34338	(12011417)
439729.00	3765470.00	5.33586	(12011417)
439734.00	3765470.00	5.33312	(12011417)
439739.00	3765470.00	5.32878	(12011417)
439744.00	3765470.00	5.32500	(12011417)
439749.00	3765470.00	5.31977	(12011417)
439789.00	3765470.00	5.28253	(12011417)
439794.00	3765470.00	5.27720	(12011417)
439799.00	3765470.00	5.27173	(12011417)
439804.00	3765470.00	5.26648	(12011417)
439809.00	3765470.00	5.26108	(12011417)
439814.00	3765470.00	5.25264	(12011417)

439819.00	3765470.00	5.24762	(12011417)
	439824.00	3765470.00	5.24093 (12011417)
439829.00	3765470.00	5.23575	(12011417)
	439844.00	3765470.00	5.21201 (12011417)
439849.00	3765470.00	5.20579	(12011417)
	439854.00	3765470.00	5.19673 (12011417)
439859.00	3765470.00	5.18724	(12011417)
	439674.00	3765475.00	5.45064 (12011417)
439679.00	3765475.00	5.44786	(12011417)
	439684.00	3765475.00	5.44655 (12011417)
439689.00	3765475.00	5.44130	(12011417)
	439694.00	3765475.00	5.43989 (12011417)
439699.00	3765475.00	5.43724	(12011417)
	439704.00	3765475.00	5.43519 (12011417)
439709.00	3765475.00	5.43074	(12011417)
	439714.00	3765475.00	5.42722 (12011417)
439719.00	3765475.00	5.42501	(12011417)
	439729.00	3765475.00	5.41919 (12011417)
439734.00	3765475.00	5.41353	(12011417)
	439739.00	3765475.00	5.41234 (12011417)
439744.00	3765475.00	5.40733	(12011417)
	439749.00	3765475.00	5.40562 (12011417)
439754.00	3765475.00	5.39941	(12011417)
	439789.00	3765475.00	5.36996 (12011417)
439794.00	3765475.00	5.36454	(12011417)
	439799.00	3765475.00	5.35925 (12011417)
439804.00	3765475.00	5.35307	(12011417)
	439809.00	3765475.00	5.34778 (12011417)
439814.00	3765475.00	5.34319	(12011417)
	439819.00	3765475.00	5.33635 (12011417)
439824.00	3765475.00	5.33002	(12011417)
	439829.00	3765475.00	5.32215 (12011417)
439269.00	3764900.00	2.15231	(12010217)
	439369.00	3764900.00	2.15300 (12010217)
439469.00	3764900.00	2.15364	(12010217)
	439569.00	3764900.00	2.15398 (12010217)
439669.00	3764900.00	2.15410	(12010217)
	439769.00	3764900.00	2.15347 (12010217)
439869.00	3764900.00	2.15052	(12010217)
	439969.00	3764900.00	2.13639 (12010217)
440069.00	3764900.00	2.12087	(15010717)
	440169.00	3764900.00	2.12224 (15010717)
440269.00	3764900.00	2.12246	(15010717)
	439269.00	3765000.00	2.34808 (12010217)
439369.00	3765000.00	2.34910	(12010217)
	439469.00	3765000.00	2.34998 (12010217)
439569.00	3765000.00	2.35070	(12010217)
	439669.00	3765000.00	2.35090 (12010217)
439769.00	3765000.00	2.35074	(12010217)
	439869.00	3765000.00	2.34998 (12010217)
439969.00	3765000.00	2.34513	(12010217)
	440069.00	3765000.00	2.31890 (12010217)

440169.00	3765000.00	2.31558	(15010717)
440269.00	3765000.00	2.31588	(15010717)
439269.00	3765100.00	2.63341	(13121718)
439369.00	3765100.00	2.59688	(12010217)
439469.00	3765100.00	2.59857	(12010217)
439569.00	3765100.00	2.59962	(12010217)
439669.00	3765100.00	2.59938	(12010217)
439769.00	3765100.00	2.59945	(12010217)
439869.00	3765100.00	2.59977	(12010217)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439969.00	3765100.00	2.59907	(12010217)
440069.00	3765100.00	2.59135	(12010217)
440169.00	3765100.00	2.55959	(15010717)
440269.00	3765100.00	2.55989	(15010717)
439269.00	3765200.00	3.12490	(12011417)
439369.00	3765200.00	3.00073	(12011417)
439469.00	3765200.00	2.95491	(13121718)
439569.00	3765200.00	2.92538	(12010217)
439669.00	3765200.00	2.92617	(12010217)
439769.00	3765200.00	2.92787	(12010217)
439869.00	3765200.00	2.92611	(12010217)
439969.00	3765200.00	2.92742	(12010217)
440069.00	3765200.00	2.92601	(12010217)
440169.00	3765200.00	2.91069	(12010217)
440269.00	3765200.00	2.88117	(15010717)
439269.00	3765300.00	3.77719	(12011417)
439369.00	3765300.00	3.72511	(12011417)
439469.00	3765300.00	3.63748	(12011417)
439569.00	3765300.00	3.49597	(12011417)

439669.00	3765300.00	3.40116	(13121718)
	439769.00	3765300.00	3.38076 (12010217)
439869.00	3765300.00	3.38158	(12010217)
	439969.00	3765300.00	3.38142 (12010217)
440069.00	3765300.00	3.38264	(12010217)
	440169.00	3765300.00	3.38272 (12010217)
440269.00	3765300.00	3.34725	(12010217)
	439269.00	3765400.00	4.59771 (12011417)
439369.00	3765400.00	4.58475	(12011417)
	439469.00	3765400.00	4.55645 (12011417)
439569.00	3765400.00	4.50564	(12011417)
	439669.00	3765400.00	4.41529 (12011417)
439769.00	3765400.00	4.25268	(12011417)
	439869.00	3765400.00	4.08148 (13121718)
439969.00	3765400.00	4.06617	(12010217)
	440069.00	3765400.00	4.06804 (12010217)
440169.00	3765400.00	4.07220	(12010217)
	440269.00	3765400.00	4.07227 (12010217)
439269.00	3765500.00	5.91526	(12011417)
	439369.00	3765500.00	5.91931 (12011417)
439469.00	3765500.00	5.91925	(12011417)
	439569.00	3765500.00	5.91062 (12011417)
439669.00	3765500.00	5.88816	(12011417)
	439769.00	3765500.00	5.84489 (12011417)
439869.00	3765500.00	5.75777	(12011417)
	439969.00	3765500.00	5.58220 (12011417)
440069.00	3765500.00	5.26401	(13121718)
	440169.00	3765500.00	5.28732 (15011517)
440269.00	3765500.00	5.32218	(14101107)
	439269.00	3765600.00	8.84043 (12011417)
439369.00	3765600.00	8.86101	(12011417)
	439469.00	3765600.00	8.88224 (12011417)
439569.00	3765600.00	8.89574	(12011417)
	439669.00	3765600.00	8.90653 (12011417)
439769.00	3765600.00	8.90775	(12011417)
	439869.00	3765600.00	8.89479 (12011417)
439969.00	3765600.00	8.86778	(12011417)
	440069.00	3765600.00	8.86536 (14101107)
440169.00	3765600.00	9.05202	(15112218)
	440269.00	3765600.00	9.21264 (15112218)
439269.00	3765700.00	33.98259	(14012908)
	439369.00	3765700.00	34.81738 (14012908)
439469.00	3765700.00	35.90648	(14101107)
	439569.00	3765700.00	37.60073 (14101107)
439669.00	3765700.00	38.56289	(14101107)
	439769.00	3765700.00	39.30767 (14101107)
439869.00	3765700.00	39.63476	(14101107)
	439969.00	3765700.00	40.12018 (14101107)
440069.00	3765700.00	40.48740	(14101107)
	440169.00	3765700.00	40.70908 (14101107)
440269.00	3765700.00	41.07030	(14101107)
	439269.00	3765800.00	13.84038 (12111317)

439369.00	3765800.00	13.66514	(12111317)
439469.00	3765800.00	13.46774	(12111317)
439569.00	3765800.00	13.36472	(12011717)
439669.00	3765800.00	13.43111	(12011717)
439769.00	3765800.00	13.46468	(12011717)
439869.00	3765800.00	13.47434	(12011717)
439969.00	3765800.00	13.47719	(12011717)
440069.00	3765800.00	13.47122	(12011717)
440169.00	3765800.00	13.47424	(15120418)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
440269.00	3765800.00	13.44919	(15120418)
439269.00	3765900.00	7.22045	(15120818)
439369.00	3765900.00	7.18030	(15120818)
439469.00	3765900.00	7.12899	(15120818)
439569.00	3765900.00	7.08221	(13111217)
439669.00	3765900.00	7.09373	(13111217)
439769.00	3765900.00	7.09283	(13111217)
439869.00	3765900.00	7.18720	(12011717)
439969.00	3765900.00	7.29639	(12011717)
440069.00	3765900.00	7.36866	(12011717)
440169.00	3765900.00	7.41706	(12011717)
440269.00	3765900.00	7.44916	(12011717)
439649.00	3765310.00	3.48563	(13121718)
439679.00	3765310.00	3.46458	(13121718)
439709.00	3765310.00	3.43971	(13121718)
439739.00	3765310.00	3.43657	(12010217)
439769.00	3765310.00	3.43692	(12010217)
439799.00	3765310.00	3.43708	(12010217)
439829.00	3765310.00	3.43700	(12010217)

439859.00	3765310.00	3.43676	(12010217)
	439889.00	3765310.00	3.43678 (12010217)
439649.00	3765340.00	3.75698	(12011417)
	439679.00	3765340.00	3.69462 (12011417)
439709.00	3765340.00	3.66523	(13121718)
	439739.00	3765340.00	3.64574 (13121718)
439769.00	3765340.00	3.61781	(12010217)
	439799.00	3765340.00	3.61835 (12010217)
439829.00	3765340.00	3.61883	(12010217)
	439859.00	3765340.00	3.61889 (12010217)
439889.00	3765340.00	3.61855	(12010217)
	439649.00	3765370.00	4.08946 (12011417)
439679.00	3765370.00	4.04228	(12011417)
	439709.00	3765370.00	3.98616 (12011417)
439739.00	3765370.00	3.92025	(12011417)
	439769.00	3765370.00	3.87421 (13121718)
439799.00	3765370.00	3.84980	(13121718)
	439829.00	3765370.00	3.82572 (12010217)
439859.00	3765370.00	3.82593	(12010217)
	439889.00	3765370.00	3.82612 (12010217)
439649.00	3765400.00	4.43766	(12011417)
	439679.00	3765400.00	4.40164 (12011417)
439709.00	3765400.00	4.36092	(12011417)
	439739.00	3765400.00	4.31153 (12011417)
439769.00	3765400.00	4.25268	(12011417)
	439799.00	3765400.00	4.18431 (12011417)
439829.00	3765400.00	4.11597	(13121718)
	439859.00	3765400.00	4.09133 (13121718)
439889.00	3765400.00	4.06641	(12010217)
	439649.00	3765430.00	4.81186 (12011417)
439679.00	3765430.00	4.78807	(12011417)
	439709.00	3765430.00	4.75751 (12011417)
439739.00	3765430.00	4.72159	(12011417)
	439769.00	3765430.00	4.68035 (12011417)
439799.00	3765430.00	4.62830	(12011417)
	439829.00	3765430.00	4.56752 (12011417)
439859.00	3765430.00	4.49464	(12011417)
	439889.00	3765430.00	4.40587 (12011417)
439649.00	3765460.00	5.22976	(12011417)
	439679.00	3765460.00	5.21105 (12011417)
439709.00	3765460.00	5.19244	(12011417)
	439739.00	3765460.00	5.16897 (12011417)
439769.00	3765460.00	5.13881	(12011417)
	439799.00	3765460.00	5.10319 (12011417)
439829.00	3765460.00	5.06112	(12011417)
	439859.00	3765460.00	5.00692 (12011417)
439889.00	3765460.00	4.94433	(12011417)
	439649.00	3765490.00	5.71423 (12011417)
439679.00	3765490.00	5.70253	(12011417)
	439709.00	3765490.00	5.69011 (12011417)
439739.00	3765490.00	5.67478	(12011417)
	439769.00	3765490.00	5.65410 (12011417)

439799.00	3765490.00	5.63025	(12011417)
439829.00	3765490.00	5.60234	(12011417)
439859.00	3765490.00	5.56590	(12011417)
439889.00	3765490.00	5.52525	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439674.00	3765310.00	1.46381	(12121717)
439679.00	3765310.00	1.46388	(12121717)
439684.00	3765310.00	1.46385	(12121717)
439689.00	3765310.00	1.46361	(12121717)
439694.00	3765310.00	1.46320	(12121717)
439699.00	3765310.00	1.46264	(12121717)
439704.00	3765310.00	1.46196	(12121717)
439709.00	3765310.00	1.46133	(12121717)
439714.00	3765310.00	1.46030	(12121717)
439719.00	3765310.00	1.45907	(12121717)
439729.00	3765310.00	1.45596	(12121717)
439734.00	3765310.00	1.45400	(12121717)
439739.00	3765310.00	1.45176	(12121717)
439744.00	3765310.00	1.44926	(12121717)
439749.00	3765310.00	1.44630	(12121717)
439764.00	3765310.00	1.43407	(12121717)
439769.00	3765310.00	1.42892	(12121717)

439774.00	3765310.00	1.42311	(12121717)
	439779.00	3765310.00	1.42053 (13012419)
439784.00	3765310.00	1.42234	(13012419)
	439789.00	3765310.00	1.42386 (13012419)
439794.00	3765310.00	1.42580	(13012419)
	439799.00	3765310.00	1.42664 (13012419)
439804.00	3765310.00	1.42766	(13012419)
	439809.00	3765310.00	1.42913 (13012419)
439814.00	3765310.00	1.42955	(13012419)
	439819.00	3765310.00	1.43017 (13012419)
439824.00	3765310.00	1.43711	(15010717)
	439829.00	3765310.00	1.45069 (15010717)
439839.00	3765310.00	1.47457	(15010717)
	439844.00	3765310.00	1.48615 (15010717)
439849.00	3765310.00	1.49651	(15010717)
	439854.00	3765310.00	1.50620 (15010717)
439859.00	3765310.00	1.51626	(15010717)
	439864.00	3765310.00	1.52513 (15010717)
439869.00	3765310.00	1.53317	(15010717)
	439874.00	3765310.00	1.54125 (15010717)
439879.00	3765310.00	1.54881	(15010717)
	439884.00	3765310.00	1.55543 (15010717)
439674.00	3765315.00	1.47659	(12121717)
	439679.00	3765315.00	1.47664 (12121717)
439684.00	3765315.00	1.47657	(12121717)
	439689.00	3765315.00	1.47633 (12121717)
439694.00	3765315.00	1.47597	(12121717)
	439699.00	3765315.00	1.47538 (12121717)
439704.00	3765315.00	1.47479	(12121717)
	439709.00	3765315.00	1.47408 (12121717)
439714.00	3765315.00	1.47317	(12121717)
	439719.00	3765315.00	1.47195 (12121717)
439729.00	3765315.00	1.46897	(12121717)
	439734.00	3765315.00	1.46709 (12121717)
439739.00	3765315.00	1.46483	(12121717)
	439744.00	3765315.00	1.46243 (12121717)
439749.00	3765315.00	1.45945	(12121717)
	439764.00	3765315.00	1.44748 (12121717)
439769.00	3765315.00	1.44236	(12121717)
	439774.00	3765315.00	1.43659 (12121717)
439779.00	3765315.00	1.43370	(13012419)
	439784.00	3765315.00	1.43591 (13012419)
439789.00	3765315.00	1.43729	(13012419)
	439794.00	3765315.00	1.43876 (13012419)
439799.00	3765315.00	1.44024	(13012419)
	439804.00	3765315.00	1.44067 (13012419)
439809.00	3765315.00	1.44192	(13012419)
	439814.00	3765315.00	1.44278 (13012419)
439819.00	3765315.00	1.44707	(15010717)
	439824.00	3765315.00	1.46041 (15010717)
439829.00	3765315.00	1.47338	(15010717)
	439839.00	3765315.00	1.49666 (15010717)

439844.00	3765315.00	1.50755	(15010717)
	439849.00	3765315.00	1.51810 (15010717)
439854.00	3765315.00	1.52754	(15010717)
	439859.00	3765315.00	1.53645 (15010717)
439864.00	3765315.00	1.54586	(15010717)
	439869.00	3765315.00	1.55343 (15010717)
439874.00	3765315.00	1.56046	(15010717)
	439879.00	3765315.00	1.56862 (15010717)
439884.00	3765315.00	1.57489	(15010717)
	439674.00	3765320.00	1.48960 (12121717)
439679.00	3765320.00	1.48965	(12121717)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439684.00	3765320.00	1.48955	(12121717)
439689.00	3765320.00	1.48934	(12121717)
439694.00	3765320.00	1.48894	(12121717)
439699.00	3765320.00	1.48841	(12121717)
439704.00	3765320.00	1.48789	(12121717)
439709.00	3765320.00	1.48709	(12121717)
439714.00	3765320.00	1.48625	(12121717)
439719.00	3765320.00	1.48514	(12121717)
439729.00	3765320.00	1.48228	(12121717)
439734.00	3765320.00	1.48033	(12121717)
439739.00	3765320.00	1.47820	(12121717)
439744.00	3765320.00	1.47588	(12121717)
439749.00	3765320.00	1.47289	(12121717)
439764.00	3765320.00	1.46116	(12121717)
439769.00	3765320.00	1.45611	(12121717)
439774.00	3765320.00	1.45042	(12121717)
439779.00	3765320.00	1.44749	(13012419)

439784.00	3765320.00	1.44915	(13012419)
	439789.00	3765320.00	1.45103 (13012419)
439794.00	3765320.00	1.45195	(13012419)
	439799.00	3765320.00	1.45343 (13012419)
439804.00	3765320.00	1.45434	(13012419)
	439809.00	3765320.00	1.45480 (13012419)
439814.00	3765320.00	1.45706	(15010717)
	439819.00	3765320.00	1.47091 (15010717)
439824.00	3765320.00	1.48407	(15010717)
	439829.00	3765320.00	1.49633 (15010717)
439839.00	3765320.00	1.51918	(15010717)
	439844.00	3765320.00	1.52961 (15010717)
439849.00	3765320.00	1.53983	(15010717)
	439854.00	3765320.00	1.54932 (15010717)
439859.00	3765320.00	1.55785	(15010717)
	439864.00	3765320.00	1.56624 (15010717)
439869.00	3765320.00	1.57435	(15010717)
	439874.00	3765320.00	1.58135 (15010717)
439879.00	3765320.00	1.58810	(15010717)
	439884.00	3765320.00	1.59493 (15010717)
439674.00	3765325.00	1.50293	(12121717)
	439679.00	3765325.00	1.50291 (12121717)
439684.00	3765325.00	1.50279	(12121717)
	439689.00	3765325.00	1.50264 (12121717)
439694.00	3765325.00	1.50223	(12121717)
	439699.00	3765325.00	1.50172 (12121717)
439704.00	3765325.00	1.50122	(12121717)
	439709.00	3765325.00	1.50042 (12121717)
439714.00	3765325.00	1.49957	(12121717)
	439719.00	3765325.00	1.49856 (12121717)
439729.00	3765325.00	1.49583	(12121717)
	439734.00	3765325.00	1.49388 (12121717)
439739.00	3765325.00	1.49186	(12121717)
	439744.00	3765325.00	1.48956 (12121717)
439749.00	3765325.00	1.48673	(12121717)
	439754.00	3765325.00	1.48343 (12121717)
439769.00	3765325.00	1.47028	(12121717)
	439774.00	3765325.00	1.46453 (12121717)
439779.00	3765325.00	1.46182	(13012419)
	439784.00	3765325.00	1.46287 (13012419)
439789.00	3765325.00	1.46453	(13012419)
	439794.00	3765325.00	1.46596 (13012419)
439799.00	3765325.00	1.46674	(13012419)
	439804.00	3765325.00	1.46803 (13012419)
439809.00	3765325.00	1.46846	(13012419)
	439814.00	3765325.00	1.48128 (15010717)
439819.00	3765325.00	1.49476	(15010717)
	439824.00	3765325.00	1.50758 (15010717)
439829.00	3765325.00	1.51969	(15010717)
	439839.00	3765325.00	1.54162 (15010717)
439844.00	3765325.00	1.55189	(15010717)
	439849.00	3765325.00	1.56125 (15010717)

439854.00	3765325.00	1.57064	(15010717)
	439859.00	3765325.00	1.57915 (15010717)
439864.00	3765325.00	1.58661	(15010717)
	439869.00	3765325.00	1.59473 (15010717)
439874.00	3765325.00	1.60174	(15010717)
	439879.00	3765325.00	1.60779 (15010717)
439884.00	3765325.00	1.61431	(15010717)
	439674.00	3765330.00	1.51649 (12121717)
439679.00	3765330.00	1.51648	(12121717)
	439684.00	3765330.00	1.51633 (12121717)
439689.00	3765330.00	1.51615	(12121717)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439694.00	3765330.00	1.51580	(12121717)
439699.00	3765330.00	1.51537	(12121717)
439704.00	3765330.00	1.51481	(12121717)
439709.00	3765330.00	1.51408	(12121717)
439714.00	3765330.00	1.51319	(12121717)
439719.00	3765330.00	1.51227	(12121717)
439729.00	3765330.00	1.50962	(12121717)
439734.00	3765330.00	1.50786	(12121717)
439739.00	3765330.00	1.50582	(12121717)
439744.00	3765330.00	1.50351	(12121717)
439749.00	3765330.00	1.50081	(12121717)
439754.00	3765330.00	1.49765	(12121717)
439774.00	3765330.00	1.47897	(12121717)
439779.00	3765330.00	1.47570	(13012419)
439784.00	3765330.00	1.47739	(13012419)
439789.00	3765330.00	1.47810	(13012419)
439794.00	3765330.00	1.47991	(13012419)

439799.00	3765330.00	1.48087	(13012419)
	439804.00	3765330.00	1.48155 (13012419)
439809.00	3765330.00	1.49209	(15010717)
	439814.00	3765330.00	1.50577 (15010717)
439819.00	3765330.00	1.51886	(15010717)
	439824.00	3765330.00	1.53135 (15010717)
439829.00	3765330.00	1.54321	(15010717)
	439839.00	3765330.00	1.56434 (15010717)
439844.00	3765330.00	1.57446	(15010717)
	439849.00	3765330.00	1.58341 (15010717)
439854.00	3765330.00	1.59208	(15010717)
	439859.00	3765330.00	1.60073 (15010717)
439864.00	3765330.00	1.60826	(15010717)
	439869.00	3765330.00	1.61504 (15010717)
439874.00	3765330.00	1.62236	(15010717)
	439879.00	3765330.00	1.62865 (15010717)
439884.00	3765330.00	1.63374	(15010717)
	439674.00	3765335.00	1.53036 (12121717)
439679.00	3765335.00	1.53031	(12121717)
	439684.00	3765335.00	1.53021 (12121717)
439689.00	3765335.00	1.52994	(12121717)
	439694.00	3765335.00	1.52968 (12121717)
439699.00	3765335.00	1.52930	(12121717)
	439704.00	3765335.00	1.52867 (12121717)
439709.00	3765335.00	1.52801	(12121717)
	439714.00	3765335.00	1.52714 (12121717)
439719.00	3765335.00	1.52626	(12121717)
	439729.00	3765335.00	1.52367 (12121717)
439734.00	3765335.00	1.52208	(12121717)
	439739.00	3765335.00	1.52008 (12121717)
439744.00	3765335.00	1.51772	(12121717)
	439749.00	3765335.00	1.51518 (12121717)
439774.00	3765335.00	1.49373	(12121717)
	439779.00	3765335.00	1.48962 (13012419)
439784.00	3765335.00	1.49170	(13012419)
	439789.00	3765335.00	1.49281 (13012419)
439794.00	3765335.00	1.49361	(13012419)
	439839.00	3765335.00	1.58692 (15010717)
439844.00	3765335.00	1.59671	(15010717)
	439849.00	3765335.00	1.60582 (15010717)
439854.00	3765335.00	1.61368	(15010717)
	439859.00	3765335.00	1.62194 (15010717)
439864.00	3765335.00	1.62977	(15010717)
	439869.00	3765335.00	1.63597 (15010717)
439874.00	3765335.00	1.64242	(15010717)
	439879.00	3765335.00	1.64911 (15010717)
439884.00	3765335.00	1.65424	(15010717)
	439674.00	3765340.00	1.54455 (12121717)
439679.00	3765340.00	1.54445	(12121717)
	439684.00	3765340.00	1.54435 (12121717)
439689.00	3765340.00	1.54408	(12121717)
	439694.00	3765340.00	1.54385 (12121717)

439699.00	3765340.00	1.54346	(12121717)
	439704.00	3765340.00	1.54288 (12121717)
439709.00	3765340.00	1.54225	(12121717)
	439714.00	3765340.00	1.54142 (12121717)
439719.00	3765340.00	1.54053	(12121717)
	439729.00	3765340.00	1.53808 (12121717)
439734.00	3765340.00	1.53659	(12121717)
	439739.00	3765340.00	1.53463 (12121717)
439744.00	3765340.00	1.53238	(12121717)
	439749.00	3765340.00	1.52987 (12121717)
439774.00	3765340.00	1.50885	(12121717)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439779.00	3765340.00	1.50467	(13012419)
439784.00	3765340.00	1.50571	(13012419)
439789.00	3765340.00	1.50760	(13012419)
439794.00	3765340.00	1.50819	(13012419)
439839.00	3765340.00	1.61007	(15010717)
439844.00	3765340.00	1.61927	(15010717)
439849.00	3765340.00	1.62791	(15010717)
439854.00	3765340.00	1.63609	(15010717)
439859.00	3765340.00	1.64353	(15010717)
439864.00	3765340.00	1.65076	(15010717)
439869.00	3765340.00	1.65772	(15010717)
439874.00	3765340.00	1.66330	(15010717)
439879.00	3765340.00	1.66910	(15010717)
439884.00	3765340.00	1.67536	(15010717)
439679.00	3765345.00	1.55896	(12121717)
439684.00	3765345.00	1.55878	(12121717)

439689.00	3765345.00	1.55857	(12121717)
	439694.00	3765345.00	1.55832 (12121717)
439699.00	3765345.00	1.55793	(12121717)
	439704.00	3765345.00	1.55741 (12121717)
439709.00	3765345.00	1.55676	(12121717)
	439714.00	3765345.00	1.55606 (12121717)
439719.00	3765345.00	1.55513	(12121717)
	439729.00	3765345.00	1.55288 (12121717)
439734.00	3765345.00	1.55137	(12121717)
	439739.00	3765345.00	1.54952 (12121717)
439744.00	3765345.00	1.54738	(12121717)
	439749.00	3765345.00	1.54493 (12121717)
439774.00	3765345.00	1.52437	(12121717)
	439779.00	3765345.00	1.51967 (13012419)
439784.00	3765345.00	1.52075	(13012419)
	439789.00	3765345.00	1.52203 (13012419)
439794.00	3765345.00	1.52541	(15010717)
	439839.00	3765345.00	1.63360 (15010717)
439844.00	3765345.00	1.64204	(15010717)
	439849.00	3765345.00	1.65026 (15010717)
439854.00	3765345.00	1.65843	(15010717)
	439859.00	3765345.00	1.66546 (15010717)
439864.00	3765345.00	1.67214	(15010717)
	439869.00	3765345.00	1.67876 (15010717)
439874.00	3765345.00	1.68476	(15010717)
	439879.00	3765345.00	1.68998 (15010717)
439884.00	3765345.00	1.69518	(15010717)
	439674.00	3765350.00	1.57385 (12121717)
439679.00	3765350.00	1.57377	(12121717)
	439684.00	3765350.00	1.57356 (12121717)
439689.00	3765350.00	1.57340	(12121717)
	439694.00	3765350.00	1.57313 (12121717)
439699.00	3765350.00	1.57276	(12121717)
	439704.00	3765350.00	1.57227 (12121717)
439709.00	3765350.00	1.57165	(12121717)
	439714.00	3765350.00	1.57099 (12121717)
439719.00	3765350.00	1.57011	(12121717)
	439729.00	3765350.00	1.56805 (12121717)
439734.00	3765350.00	1.56642	(12121717)
	439739.00	3765350.00	1.56472 (12121717)
439744.00	3765350.00	1.56267	(12121717)
	439749.00	3765350.00	1.56030 (12121717)
439774.00	3765350.00	1.54032	(12121717)
	439779.00	3765350.00	1.53449 (13012419)
439784.00	3765350.00	1.53616	(13012419)
	439789.00	3765350.00	1.53699 (13012419)
439794.00	3765350.00	1.55230	(15010717)
	439839.00	3765350.00	1.65660 (15010717)
439844.00	3765350.00	1.66533	(15010717)
	439849.00	3765350.00	1.67302 (15010717)
439854.00	3765350.00	1.68039	(15010717)
	439859.00	3765350.00	1.68801 (15010717)

439864.00	3765350.00	1.69400	(15010717)
	439869.00	3765350.00	1.69993 (15010717)
439874.00	3765350.00	1.70644	(15010717)
	439879.00	3765350.00	1.71131 (15010717)
439884.00	3765350.00	1.71575	(15010717)
	439674.00	3765355.00	1.58896 (12121717)
439679.00	3765355.00	1.58893	(12121717)
	439684.00	3765355.00	1.58871 (12121717)
439689.00	3765355.00	1.58858	(12121717)
	439694.00	3765355.00	1.58827 (12121717)
439699.00	3765355.00	1.58793	(12121717)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439704.00	3765355.00	1.58745	(12121717)
439709.00	3765355.00	1.58692	(12121717)
439714.00	3765355.00	1.58626	(12121717)
439719.00	3765355.00	1.58546	(12121717)
439729.00	3765355.00	1.58344	(12121717)
439734.00	3765355.00	1.58193	(12121717)
439739.00	3765355.00	1.58024	(12121717)
439744.00	3765355.00	1.57836	(12121717)
439749.00	3765355.00	1.57598	(12121717)
439774.00	3765355.00	1.55657	(12121717)
439779.00	3765355.00	1.55044	(12121717)
439784.00	3765355.00	1.55130	(13012419)
439789.00	3765355.00	1.56458	(15010717)
439794.00	3765355.00	1.57914	(15010717)
439839.00	3765355.00	1.67998	(15010717)
439844.00	3765355.00	1.68844	(15010717)
439849.00	3765355.00	1.69598	(15010717)

439854.00	3765355.00	1.70317	(15010717)
	439859.00	3765355.00	1.70976 (15010717)
439864.00	3765355.00	1.71637	(15010717)
	439869.00	3765355.00	1.72195 (15010717)
439874.00	3765355.00	1.72705	(15010717)
	439879.00	3765355.00	1.73286 (15010717)
439884.00	3765355.00	1.73727	(15010717)
	439674.00	3765360.00	1.60448 (12121717)
439679.00	3765360.00	1.60442	(12121717)
	439684.00	3765360.00	1.60427 (12121717)
439689.00	3765360.00	1.60406	(12121717)
	439694.00	3765360.00	1.60382 (12121717)
439699.00	3765360.00	1.60339	(12121717)
	439704.00	3765360.00	1.60303 (12121717)
439709.00	3765360.00	1.60253	(12121717)
	439714.00	3765360.00	1.60187 (12121717)
439719.00	3765360.00	1.60113	(12121717)
	439729.00	3765360.00	1.59910 (12121717)
439734.00	3765360.00	1.59780	(12121717)
	439739.00	3765360.00	1.59615 (12121717)
439744.00	3765360.00	1.59433	(12121717)
	439749.00	3765360.00	1.59208 (12121717)
439774.00	3765360.00	1.57319	(12121717)
	439779.00	3765360.00	1.56707 (12121717)
439784.00	3765360.00	1.57667	(15010717)
	439789.00	3765360.00	1.59246 (15010717)
439794.00	3765360.00	1.60675	(15010717)
	439799.00	3765360.00	1.62017 (15010717)
439804.00	3765360.00	1.63322	(15010717)
	439809.00	3765360.00	1.64516 (15010717)
439814.00	3765360.00	1.65672	(15010717)
	439839.00	3765360.00	1.70396 (15010717)
439844.00	3765360.00	1.71150	(15010717)
	439849.00	3765360.00	1.71923 (15010717)
439854.00	3765360.00	1.72622	(15010717)
	439859.00	3765360.00	1.73234 (15010717)
439864.00	3765360.00	1.73862	(15010717)
	439869.00	3765360.00	1.74445 (15010717)
439874.00	3765360.00	1.74923	(15010717)
	439879.00	3765360.00	1.75380 (15010717)
439884.00	3765360.00	1.75907	(15010717)
	439674.00	3765365.00	1.62032 (12121717)
439679.00	3765365.00	1.62030	(12121717)
	439684.00	3765365.00	1.62017 (12121717)
439689.00	3765365.00	1.61993	(12121717)
	439694.00	3765365.00	1.61967 (12121717)
439699.00	3765365.00	1.61931	(12121717)
	439704.00	3765365.00	1.61895 (12121717)
439709.00	3765365.00	1.61849	(12121717)
	439714.00	3765365.00	1.61787 (12121717)
439719.00	3765365.00	1.61715	(12121717)
	439729.00	3765365.00	1.61521 (12121717)

439734.00	3765365.00	1.61405	(12121717)
	439739.00	3765365.00	1.61252 (12121717)
439744.00	3765365.00	1.61065	(12121717)
	439749.00	3765365.00	1.60855 (12121717)
439774.00	3765365.00	1.59018	(12121717)
	439779.00	3765365.00	1.58958 (15010717)
439784.00	3765365.00	1.60539	(15010717)
	439789.00	3765365.00	1.62009 (15010717)
439794.00	3765365.00	1.63461	(15010717)
	439799.00	3765365.00	1.64755 (15010717)
439804.00	3765365.00	1.65972	(15010717)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439809.00	3765365.00	1.67163	(15010717)
439814.00	3765365.00	1.68240	(15010717)
439839.00	3765365.00	1.72796	(15010717)
439844.00	3765365.00	1.73535	(15010717)
439849.00	3765365.00	1.74226	(15010717)
439854.00	3765365.00	1.74911	(15010717)
439859.00	3765365.00	1.75550	(15010717)
439864.00	3765365.00	1.76087	(15010717)
439869.00	3765365.00	1.76635	(15010717)
439874.00	3765365.00	1.77182	(15010717)
439879.00	3765365.00	1.77566	(15010717)
439884.00	3765365.00	1.77987	(15010717)
439674.00	3765370.00	1.63654	(12121717)
439679.00	3765370.00	1.63653	(12121717)
439684.00	3765370.00	1.63648	(12121717)
439689.00	3765370.00	1.63623	(12121717)
439694.00	3765370.00	1.63592	(12121717)

439699.00	3765370.00	1.63562	(12121717)
	439704.00	3765370.00	1.63525 (12121717)
439709.00	3765370.00	1.63483	(12121717)
	439714.00	3765370.00	1.63431 (12121717)
439719.00	3765370.00	1.63359	(12121717)
	439729.00	3765370.00	1.63176 (12121717)
439734.00	3765370.00	1.63061	(12121717)
	439739.00	3765370.00	1.62926 (12121717)
439744.00	3765370.00	1.62739	(12121717)
	439749.00	3765370.00	1.62542 (12121717)
439774.00	3765370.00	1.60761	(12121717)
	439779.00	3765370.00	1.61859 (15010717)
439784.00	3765370.00	1.63426	(15010717)
	439789.00	3765370.00	1.64858 (15010717)
439794.00	3765370.00	1.66195	(15010717)
	439799.00	3765370.00	1.67500 (15010717)
439804.00	3765370.00	1.68681	(15010717)
	439809.00	3765370.00	1.69784 (15010717)
439814.00	3765370.00	1.70854	(15010717)
	439839.00	3765370.00	1.75208 (15010717)
439844.00	3765370.00	1.75952	(15010717)
	439849.00	3765370.00	1.76597 (15010717)
439854.00	3765370.00	1.77239	(15010717)
	439859.00	3765370.00	1.77845 (15010717)
439864.00	3765370.00	1.78390	(15010717)
	439869.00	3765370.00	1.78890 (15010717)
439874.00	3765370.00	1.79382	(15010717)
	439879.00	3765370.00	1.79859 (15010717)
439884.00	3765370.00	1.80195	(15010717)
	439674.00	3765375.00	1.65315 (12121717)
439679.00	3765375.00	1.65323	(12121717)
	439684.00	3765375.00	1.65318 (12121717)
439689.00	3765375.00	1.65292	(12121717)
	439694.00	3765375.00	1.65262 (12121717)
439699.00	3765375.00	1.65234	(12121717)
	439704.00	3765375.00	1.65194 (12121717)
439709.00	3765375.00	1.65153	(12121717)
	439714.00	3765375.00	1.65107 (12121717)
439719.00	3765375.00	1.65047	(12121717)
	439729.00	3765375.00	1.64877 (12121717)
439734.00	3765375.00	1.64763	(12121717)
	439739.00	3765375.00	1.64632 (12121717)
439744.00	3765375.00	1.64463	(12121717)
	439749.00	3765375.00	1.64270 (12121717)
439754.00	3765375.00	1.64037	(12121717)
	439774.00	3765375.00	1.63281 (15010717)
439779.00	3765375.00	1.64851	(15010717)
	439784.00	3765375.00	1.66285 (15010717)
439789.00	3765375.00	1.67735	(15010717)
	439794.00	3765375.00	1.69000 (15010717)
439799.00	3765375.00	1.70242	(15010717)
	439804.00	3765375.00	1.71415 (15010717)

439809.00	3765375.00	1.72478	(15010717)
	439814.00	3765375.00	1.73490 (15010717)
439839.00	3765375.00	1.77646	(15010717)
	439844.00	3765375.00	1.78354 (15010717)
439849.00	3765375.00	1.79038	(15010717)
	439854.00	3765375.00	1.79605 (15010717)
439859.00	3765375.00	1.80152	(15010717)
	439864.00	3765375.00	1.80720 (15010717)
439869.00	3765375.00	1.81180	(15010717)
	439874.00	3765375.00	1.81642 (15010717)
439879.00	3765375.00	1.82069	(15010717)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439884.00	3765375.00	1.82469	(15010717)
439774.00	3765380.00	1.66270	(15010717)
439779.00	3765380.00	1.67845	(15010717)
439784.00	3765380.00	1.69276	(15010717)
439789.00	3765380.00	1.70562	(15010717)
439794.00	3765380.00	1.71876	(15010717)
439799.00	3765380.00	1.73016	(15010717)
439804.00	3765380.00	1.74129	(15010717)
439809.00	3765380.00	1.75204	(15010717)
439814.00	3765380.00	1.76141	(15010717)
439769.00	3765385.00	1.67782	(15010717)
439819.00	3765385.00	1.79701	(15010717)
439769.00	3765400.00	1.77325	(15010717)
439844.00	3765400.00	1.90922	(15010717)
439849.00	3765400.00	1.91438	(15010717)
439674.00	3765405.00	1.80270	(12010217)
439714.00	3765405.00	1.76137	(12121717)

439719.00	3765405.00	1.76098	(12121717)
	439734.00	3765405.00	1.75934 (12121717)
439749.00	3765405.00	1.75613	(12121717)
	439754.00	3765405.00	1.75862 (15010717)
439774.00	3765405.00	1.81911	(15010717)
	439779.00	3765405.00	1.83170 (15010717)
439784.00	3765405.00	1.84343	(15010717)
	439789.00	3765405.00	1.85453 (15010717)
439794.00	3765405.00	1.86451	(15010717)
	439799.00	3765405.00	1.87369 (15010717)
439804.00	3765405.00	1.88254	(15010717)
	439809.00	3765405.00	1.89085 (15010717)
439814.00	3765405.00	1.89849	(15010717)
	439819.00	3765405.00	1.90606 (15010717)
439824.00	3765405.00	1.91246	(15010717)
	439829.00	3765405.00	1.91866 (15010717)
439834.00	3765405.00	1.92469	(15010717)
	439839.00	3765405.00	1.93017 (15010717)
439844.00	3765405.00	1.93568	(15010717)
	439849.00	3765405.00	1.94039 (15010717)
439854.00	3765405.00	1.94500	(15010717)
	439859.00	3765405.00	1.94963 (15010717)
439674.00	3765410.00	1.83099	(12010217)
	439679.00	3765410.00	1.81595 (12010217)
439684.00	3765410.00	1.80023	(12010217)
	439689.00	3765410.00	1.78383 (12010217)
439694.00	3765410.00	1.78239	(12121717)
	439699.00	3765410.00	1.78223 (12121717)
439704.00	3765410.00	1.78201	(12121717)
	439709.00	3765410.00	1.78182 (12121717)
439714.00	3765410.00	1.78148	(12121717)
	439719.00	3765410.00	1.78117 (12121717)
439729.00	3765410.00	1.78039	(12121717)
	439734.00	3765410.00	1.77975 (12121717)
439739.00	3765410.00	1.77896	(12121717)
	439744.00	3765410.00	1.77806 (12121717)
439749.00	3765410.00	1.77679	(12121717)
	439774.00	3765410.00	1.85092 (15010717)
439779.00	3765410.00	1.86345	(15010717)
	439784.00	3765410.00	1.87465 (15010717)
439789.00	3765410.00	1.88507	(15010717)
	439794.00	3765410.00	1.89496 (15010717)
439799.00	3765410.00	1.90376	(15010717)
	439804.00	3765410.00	1.91208 (15010717)
439809.00	3765410.00	1.91964	(15010717)
	439814.00	3765410.00	1.92716 (15010717)
439819.00	3765410.00	1.93385	(15010717)
	439824.00	3765410.00	1.94044 (15010717)
439829.00	3765410.00	1.94655	(15010717)
	439834.00	3765410.00	1.95172 (15010717)
439839.00	3765410.00	1.95715	(15010717)
	439844.00	3765410.00	1.96225 (15010717)

439849.00	3765410.00	1.96693	(15010717)
	439854.00	3765410.00	1.97165 (15010717)
439859.00	3765410.00	1.97577	(15010717)
	439674.00	3765415.00	1.86016 (12010217)
439679.00	3765415.00	1.84541	(12010217)
	439684.00	3765415.00	1.82976 (12010217)
439689.00	3765415.00	1.81343	(12010217)
	439694.00	3765415.00	1.80306 (12121717)
439699.00	3765415.00	1.80292	(12121717)
	439704.00	3765415.00	1.80272 (12121717)
439709.00	3765415.00	1.80253	(12121717)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439714.00	3765415.00	1.80229	(12121717)
439719.00	3765415.00	1.80205	(12121717)
439729.00	3765415.00	1.80132	(12121717)
439734.00	3765415.00	1.80087	(12121717)
439739.00	3765415.00	1.80018	(12121717)
439744.00	3765415.00	1.79928	(12121717)
439749.00	3765415.00	1.81164	(15010717)
439774.00	3765415.00	1.88399	(15010717)
439779.00	3765415.00	1.89506	(15010717)
439784.00	3765415.00	1.90585	(15010717)
439789.00	3765415.00	1.91576	(15010717)
439794.00	3765415.00	1.92493	(15010717)
439799.00	3765415.00	1.93378	(15010717)
439804.00	3765415.00	1.94173	(15010717)
439809.00	3765415.00	1.94928	(15010717)
439814.00	3765415.00	1.95582	(15010717)
439819.00	3765415.00	1.96226	(15010717)

439824.00	3765415.00	1.96838	(15010717)
	439829.00	3765415.00	1.97415 (15010717)
439834.00	3765415.00	1.97986	(15010717)
	439839.00	3765415.00	1.98461 (15010717)
439844.00	3765415.00	1.98941	(15010717)
	439849.00	3765415.00	1.99399 (15010717)
439854.00	3765415.00	1.99875	(15010717)
	439859.00	3765415.00	2.00295 (15010717)
439674.00	3765420.00	1.88978	(12010217)
	439679.00	3765420.00	1.87567 (12010217)
439684.00	3765420.00	1.86027	(12010217)
	439689.00	3765420.00	1.84391 (12010217)
439694.00	3765420.00	1.82654	(12010217)
	439699.00	3765420.00	1.82424 (12121717)
439704.00	3765420.00	1.82405	(12121717)
	439709.00	3765420.00	1.82385 (12121717)
439714.00	3765420.00	1.82368	(12121717)
	439719.00	3765420.00	1.82344 (12121717)
439729.00	3765420.00	1.82284	(12121717)
	439734.00	3765420.00	1.82250 (12121717)
439739.00	3765420.00	1.82191	(12121717)
	439744.00	3765420.00	1.83035 (15010717)
439749.00	3765420.00	1.84745	(15010717)
	439774.00	3765420.00	1.91694 (15010717)
439779.00	3765420.00	1.92797	(15010717)
	439784.00	3765420.00	1.93785 (15010717)
439789.00	3765420.00	1.94701	(15010717)
	439794.00	3765420.00	1.95593 (15010717)
439799.00	3765420.00	1.96385	(15010717)
	439804.00	3765420.00	1.97154 (15010717)
439809.00	3765420.00	1.97882	(15010717)
	439814.00	3765420.00	1.98541 (15010717)
439819.00	3765420.00	1.99148	(15010717)
	439824.00	3765420.00	1.99702 (15010717)
439829.00	3765420.00	2.00259	(15010717)
	439834.00	3765420.00	2.00769 (15010717)
439839.00	3765420.00	2.01279	(15010717)
	439844.00	3765420.00	2.01747 (15010717)
439849.00	3765420.00	2.02188	(15010717)
	439854.00	3765420.00	2.02633 (15010717)
439859.00	3765420.00	2.03040	(15010717)
	439674.00	3765425.00	1.92057 (12010217)
439679.00	3765425.00	1.90603	(12010217)
	439684.00	3765425.00	1.89124 (12010217)
439689.00	3765425.00	1.87503	(12010217)
	439694.00	3765425.00	1.85810 (12010217)
439699.00	3765425.00	1.84612	(12121717)
	439704.00	3765425.00	1.84601 (12121717)
439709.00	3765425.00	1.84585	(12121717)
	439714.00	3765425.00	1.84571 (12121717)
439719.00	3765425.00	1.84549	(12121717)
	439729.00	3765425.00	1.84499 (12121717)

439734.00	3765425.00	1.84469	(12121717)
	439739.00	3765425.00	1.85048 (15010717)
439744.00	3765425.00	1.86829	(15010717)
	439749.00	3765425.00	1.88426 (15010717)
439774.00	3765425.00	1.95003	(15010717)
	439779.00	3765425.00	1.96091 (15010717)
439784.00	3765425.00	1.97051	(15010717)
	439789.00	3765425.00	1.97950 (15010717)
439794.00	3765425.00	1.98749	(15010717)
	439799.00	3765425.00	1.99515 (15010717)
439804.00	3765425.00	2.00216	(15010717)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439809.00	3765425.00	2.00863	(15010717)
439814.00	3765425.00	2.01514	(15010717)
439819.00	3765425.00	2.02110	(15010717)
439824.00	3765425.00	2.02671	(15010717)
439829.00	3765425.00	2.03182	(15010717)
439834.00	3765425.00	2.03661	(15010717)
439839.00	3765425.00	2.04121	(15010717)
439844.00	3765425.00	2.04592	(15010717)
439849.00	3765425.00	2.05040	(15010717)
439854.00	3765425.00	2.05458	(15010717)
439859.00	3765425.00	2.05855	(15010717)
439674.00	3765430.00	1.95171	(12010217)
439679.00	3765430.00	1.93770	(12010217)
439684.00	3765430.00	1.92268	(12010217)
439689.00	3765430.00	1.90686	(12010217)
439694.00	3765430.00	1.89027	(12010217)
439699.00	3765430.00	1.87247	(12010217)

439704.00	3765430.00	1.86864	(12121717)
	439709.00	3765430.00	1.86851 (12121717)
439714.00	3765430.00	1.86839	(12121717)
	439719.00	3765430.00	1.86828 (12121717)
439729.00	3765430.00	1.86788	(12121717)
	439734.00	3765430.00	1.86967 (15010717)
439739.00	3765430.00	1.88829	(15010717)
	439744.00	3765430.00	1.90544 (15010717)
439749.00	3765430.00	1.92154	(15010717)
	439774.00	3765430.00	1.98398 (15010717)
439779.00	3765430.00	1.99357	(15010717)
	439784.00	3765430.00	2.00310 (15010717)
439789.00	3765430.00	2.01144	(15010717)
	439794.00	3765430.00	2.01959 (15010717)
439799.00	3765430.00	2.02687	(15010717)
	439804.00	3765430.00	2.03326 (15010717)
439809.00	3765430.00	2.03963	(15010717)
	439814.00	3765430.00	2.04524 (15010717)
439819.00	3765430.00	2.05088	(15010717)
	439824.00	3765430.00	2.05618 (15010717)
439829.00	3765430.00	2.06116	(15010717)
	439834.00	3765430.00	2.06617 (15010717)
439839.00	3765430.00	2.07060	(15010717)
	439844.00	3765430.00	2.07460 (15010717)
439849.00	3765430.00	2.07894	(15010717)
	439854.00	3765430.00	2.08326 (15010717)
439859.00	3765430.00	2.08725	(15010717)
	439674.00	3765435.00	1.98353 (12010217)
439679.00	3765435.00	1.96996	(12010217)
	439684.00	3765435.00	1.95529 (12010217)
439689.00	3765435.00	1.94008	(12010217)
	439694.00	3765435.00	1.92325 (12010217)
439699.00	3765435.00	1.90579	(12010217)
	439704.00	3765435.00	1.89195 (12121717)
439709.00	3765435.00	1.89186	(12121717)
	439714.00	3765435.00	1.89179 (12121717)
439719.00	3765435.00	1.89169	(12121717)
	439729.00	3765435.00	1.89140 (12121717)
439734.00	3765435.00	1.90960	(15010717)
	439739.00	3765435.00	1.92665 (15010717)
439744.00	3765435.00	1.94286	(15010717)
	439749.00	3765435.00	1.95800 (15010717)
439774.00	3765435.00	2.01828	(15010717)
	439779.00	3765435.00	2.02750 (15010717)
439784.00	3765435.00	2.03596	(15010717)
	439789.00	3765435.00	2.04408 (15010717)
439794.00	3765435.00	2.05102	(15010717)
	439799.00	3765435.00	2.05823 (15010717)
439804.00	3765435.00	2.06503	(15010717)
	439809.00	3765435.00	2.07071 (15010717)
439814.00	3765435.00	2.07653	(15010717)
	439819.00	3765435.00	2.08153 (15010717)

439824.00	3765435.00	2.08618	(15010717)
	439829.00	3765435.00	2.09115 (15010717)
439834.00	3765435.00	2.09564	(15010717)
	439839.00	3765435.00	2.10031 (15010717)
439844.00	3765435.00	2.10461	(15010717)
	439849.00	3765435.00	2.10860 (15010717)
439854.00	3765435.00	2.11283	(15010717)
	439859.00	3765435.00	2.11667 (15010717)
439674.00	3765440.00	2.01662	(12010217)
	439679.00	3765440.00	2.00298 (12010217)
439684.00	3765440.00	1.98865	(12010217)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439689.00	3765440.00	1.97335	(12010217)
439694.00	3765440.00	1.95727	(12010217)
439699.00	3765440.00	1.94012	(12010217)
439704.00	3765440.00	1.92159	(12010217)
439709.00	3765440.00	1.91596	(12121717)
439714.00	3765440.00	1.91593	(12121717)
439719.00	3765440.00	1.91591	(12121717)
439729.00	3765440.00	1.93114	(15010717)
439734.00	3765440.00	1.94959	(15010717)
439739.00	3765440.00	1.96646	(15010717)
439744.00	3765440.00	1.98160	(15010717)
439749.00	3765440.00	1.99588	(15010717)
439774.00	3765440.00	2.05295	(15010717)
439779.00	3765440.00	2.06174	(15010717)
439784.00	3765440.00	2.07011	(15010717)
439789.00	3765440.00	2.07726	(15010717)
439794.00	3765440.00	2.08407	(15010717)

439799.00	3765440.00	2.09038	(15010717)
	439804.00	3765440.00	2.09651 (15010717)
439809.00	3765440.00	2.10225	(15010717)
	439814.00	3765440.00	2.10739 (15010717)
439819.00	3765440.00	2.11276	(15010717)
	439824.00	3765440.00	2.11772 (15010717)
439829.00	3765440.00	2.12191	(15010717)
	439834.00	3765440.00	2.12647 (15010717)
439839.00	3765440.00	2.13078	(15010717)
	439844.00	3765440.00	2.13505 (15010717)
439849.00	3765440.00	2.13944	(15010717)
	439854.00	3765440.00	2.14355 (15010717)
439859.00	3765440.00	2.14744	(15010717)
	439674.00	3765445.00	2.04990 (12010217)
439679.00	3765445.00	2.03696	(12010217)
	439684.00	3765445.00	2.02318 (12010217)
439689.00	3765445.00	2.00793	(12010217)
	439694.00	3765445.00	1.99206 (12010217)
439699.00	3765445.00	1.97485	(12010217)
	439704.00	3765445.00	1.95689 (12010217)
439709.00	3765445.00	1.94089	(12121717)
	439714.00	3765445.00	1.94085 (12121717)
439719.00	3765445.00	1.94084	(12121717)
	439729.00	3765445.00	1.97234 (15010717)
439734.00	3765445.00	1.98953	(15010717)
	439739.00	3765445.00	2.00598 (15010717)
439744.00	3765445.00	2.02124	(15010717)
	439749.00	3765445.00	2.03495 (15010717)
439774.00	3765445.00	2.08804	(15010717)
	439779.00	3765445.00	2.09630 (15010717)
439784.00	3765445.00	2.10423	(15010717)
	439789.00	3765445.00	2.11176 (15010717)
439794.00	3765445.00	2.11810	(15010717)
	439799.00	3765445.00	2.12421 (15010717)
439804.00	3765445.00	2.12969	(15010717)
	439809.00	3765445.00	2.13476 (15010717)
439814.00	3765445.00	2.13986	(15010717)
	439819.00	3765445.00	2.14448 (15010717)
439824.00	3765445.00	2.14919	(15010717)
	439829.00	3765445.00	2.15420 (15010717)
439834.00	3765445.00	2.15842	(15010717)
	439839.00	3765445.00	2.16264 (15010717)
439844.00	3765445.00	2.16673	(15010717)
	439849.00	3765445.00	2.17081 (15010717)
439854.00	3765445.00	2.17511	(15010717)
	439859.00	3765445.00	2.17900 (15010717)
439674.00	3765450.00	2.08450	(12010217)
	439679.00	3765450.00	2.07181 (12010217)
439684.00	3765450.00	2.05785	(12010217)
	439689.00	3765450.00	2.04334 (12010217)
439694.00	3765450.00	2.02772	(12010217)
	439699.00	3765450.00	2.01108 (12010217)

439704.00	3765450.00	1.99349	(12010217)
	439709.00	3765450.00	1.97430 (12010217)
439714.00	3765450.00	1.96664	(12121717)
	439719.00	3765450.00	1.97695 (15010717)
439729.00	3765450.00	2.01410	(15010717)
	439734.00	3765450.00	2.03105 (15010717)
439739.00	3765450.00	2.04630	(15010717)
	439744.00	3765450.00	2.06024 (15010717)
439749.00	3765450.00	2.07331	(15010717)
	439774.00	3765450.00	2.12438 (15010717)
439844.00	3765450.00	2.19929	(15010717)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439849.00	3765450.00	2.20326	(15010717)
439854.00	3765450.00	2.20708	(15010717)
439859.00	3765450.00	2.21084	(15010717)
439674.00	3765455.00	2.12004	(12010217)
439679.00	3765455.00	2.10741	(12010217)
439684.00	3765455.00	2.09402	(12010217)
439689.00	3765455.00	2.07988	(12010217)
439694.00	3765455.00	2.06436	(12010217)
439699.00	3765455.00	2.04809	(12010217)
439704.00	3765455.00	2.03049	(12010217)
439709.00	3765455.00	2.01218	(12010217)
439714.00	3765455.00	2.00078	(15010717)
439719.00	3765455.00	2.02061	(15010717)
439729.00	3765455.00	2.05721	(15010717)
439734.00	3765455.00	2.07256	(15010717)
439739.00	3765455.00	2.08762	(15010717)
439744.00	3765455.00	2.10101	(15010717)

439749.00	3765455.00	2.11303	(15010717)
	439844.00	3765455.00	2.23210 (15010717)
439849.00	3765455.00	2.23629	(15010717)
	439854.00	3765455.00	2.24078 (15010717)
439859.00	3765455.00	2.24449	(15010717)
	439674.00	3765460.00	2.15644 (12010217)
439679.00	3765460.00	2.14415	(12010217)
	439684.00	3765460.00	2.13125 (12010217)
439689.00	3765460.00	2.11698	(12010217)
	439694.00	3765460.00	2.10214 (12010217)
439699.00	3765460.00	2.08618	(12010217)
	439704.00	3765460.00	2.06900 (12010217)
439709.00	3765460.00	2.05078	(12010217)
	439714.00	3765460.00	2.04608 (15010717)
439719.00	3765460.00	2.06548	(15010717)
	439729.00	3765460.00	2.09955 (15010717)
439734.00	3765460.00	2.11517	(15010717)
	439739.00	3765460.00	2.12868 (15010717)
439744.00	3765460.00	2.14208	(15010717)
	439749.00	3765460.00	2.15373 (15010717)
439789.00	3765460.00	2.21735	(15010717)
	439794.00	3765460.00	2.22308 (15010717)
439799.00	3765460.00	2.22754	(15010717)
	439804.00	3765460.00	2.23228 (15010717)
439809.00	3765460.00	2.23691	(15010717)
	439814.00	3765460.00	2.24121 (15010717)
439819.00	3765460.00	2.24560	(15010717)
	439824.00	3765460.00	2.24962 (15010717)
439829.00	3765460.00	2.25393	(15010717)
	439844.00	3765460.00	2.26654 (15010717)
439849.00	3765460.00	2.27084	(15010717)
	439854.00	3765460.00	2.27502 (15010717)
439859.00	3765460.00	2.27919	(15010717)
	439674.00	3765465.00	2.19366 (12010217)
439679.00	3765465.00	2.18208	(12010217)
	439684.00	3765465.00	2.16924 (12010217)
439689.00	3765465.00	2.15553	(12010217)
	439694.00	3765465.00	2.14089 (12010217)
439699.00	3765465.00	2.12508	(12010217)
	439704.00	3765465.00	2.10842 (12010217)
439709.00	3765465.00	2.09054	(12010217)
	439714.00	3765465.00	2.09263 (15010717)
439719.00	3765465.00	2.11080	(15010717)
	439729.00	3765465.00	2.14402 (15010717)
439734.00	3765465.00	2.15775	(15010717)
	439739.00	3765465.00	2.17123 (15010717)
439744.00	3765465.00	2.18291	(15010717)
	439749.00	3765465.00	2.19363 (15010717)
439789.00	3765465.00	2.25288	(15010717)
	439794.00	3765465.00	2.25842 (15010717)
439799.00	3765465.00	2.26327	(15010717)
	439804.00	3765465.00	2.26767 (15010717)

439809.00	3765465.00	2.27285	(15010717)
	439814.00	3765465.00	2.27739 (15010717)
439819.00	3765465.00	2.28075	(15010717)
	439824.00	3765465.00	2.28501 (15010717)
439829.00	3765465.00	2.28931	(15010717)
	439844.00	3765465.00	2.30182 (15010717)
439849.00	3765465.00	2.30630	(15010717)
	439854.00	3765465.00	2.31091 (15010717)
439859.00	3765465.00	2.31488	(15010717)
	439674.00	3765470.00	2.23241 (12010217)
439679.00	3765470.00	2.22087	(12010217)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439684.00	3765470.00	2.20841	(12010217)
439689.00	3765470.00	2.19514	(12010217)
439694.00	3765470.00	2.18048	(12010217)
439699.00	3765470.00	2.16552	(12010217)
439704.00	3765470.00	2.14915	(12010217)
439709.00	3765470.00	2.13157	(12010217)
439714.00	3765470.00	2.13961	(15010717)
439719.00	3765470.00	2.15728	(15010717)
439729.00	3765470.00	2.18840	(15010717)
439734.00	3765470.00	2.20224	(15010717)
439739.00	3765470.00	2.21387	(15010717)
439744.00	3765470.00	2.22548	(15010717)
439749.00	3765470.00	2.23584	(15010717)
439789.00	3765470.00	2.29137	(15010717)
439794.00	3765470.00	2.29602	(15010717)
439799.00	3765470.00	2.30032	(15010717)
439804.00	3765470.00	2.30492	(15010717)

439809.00	3765470.00	2.30913	(15010717)
	439814.00	3765470.00	2.31314 (15010717)
439819.00	3765470.00	2.31736	(15010717)
	439824.00	3765470.00	2.32170 (15010717)
439829.00	3765470.00	2.32625	(15010717)
	439844.00	3765470.00	2.33875 (15010717)
439849.00	3765470.00	2.34303	(15010717)
	439854.00	3765470.00	2.34756 (15010717)
439859.00	3765470.00	2.35210	(15010717)
	439674.00	3765475.00	2.27189 (12010217)
439679.00	3765475.00	2.26072	(12010217)
	439684.00	3765475.00	2.24885 (12010217)
439689.00	3765475.00	2.23574	(12010217)
	439694.00	3765475.00	2.22200 (12010217)
439699.00	3765475.00	2.20698	(12010217)
	439704.00	3765475.00	2.19071 (12010217)
439709.00	3765475.00	2.17383	(12010217)
	439714.00	3765475.00	2.18744 (15010717)
439719.00	3765475.00	2.20418	(15010717)
	439729.00	3765475.00	2.23383 (15010717)
439734.00	3765475.00	2.24604	(15010717)
	439739.00	3765475.00	2.25803 (15010717)
439744.00	3765475.00	2.26867	(15010717)
	439749.00	3765475.00	2.27853 (15010717)
439754.00	3765475.00	2.28724	(15010717)
	439789.00	3765475.00	2.32951 (15010717)
439794.00	3765475.00	2.33461	(15010717)
	439799.00	3765475.00	2.33932 (15010717)
439804.00	3765475.00	2.34321	(15010717)
	439809.00	3765475.00	2.34714 (15010717)
439814.00	3765475.00	2.35137	(15010717)
	439819.00	3765475.00	2.35515 (15010717)
439824.00	3765475.00	2.35946	(15010717)
	439829.00	3765475.00	2.36379 (15010717)
439269.00	3764900.00	0.82108	(12120908)
	439369.00	3764900.00	0.92368 (12010217)
439469.00	3764900.00	0.89259	(12010217)
	439569.00	3764900.00	0.85298 (15010918)
439669.00	3764900.00	0.86385	(12121717)
	439769.00	3764900.00	0.83973 (12121717)
439869.00	3764900.00	0.79156	(13012419)
	439969.00	3764900.00	0.82699 (13012419)
440069.00	3764900.00	0.77552	(14011819)
	440169.00	3764900.00	0.87121 (15010717)
440269.00	3764900.00	0.88005	(15010717)
	439269.00	3765000.00	0.95963 (13120808)
439369.00	3765000.00	1.01711	(12010217)
	439469.00	3765000.00	1.01721 (12010217)
439569.00	3765000.00	0.94562	(15010918)
	439669.00	3765000.00	0.96153 (12121717)
439769.00	3765000.00	0.92777	(12121717)
	439869.00	3765000.00	0.91149 (13012419)

439969.00	3765000.00	0.90597	(13012419)
	440069.00	3765000.00	0.95267 (15010717)
440169.00	3765000.00	0.98883	(15010717)
	440269.00	3765000.00	0.97136 (13121617)
439269.00	3765100.00	1.13847	(13120808)
	439369.00	3765100.00	1.11456 (12010217)
439469.00	3765100.00	1.17037	(12010217)
	439569.00	3765100.00	1.06431 (12010217)
439669.00	3765100.00	1.08143	(12121717)
	439769.00	3765100.00	1.04012 (12121717)
439869.00	3765100.00	1.04310	(13012419)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
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 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439969.00	3765100.00	1.03653	(15010717)
440069.00	3765100.00	1.12612	(15010717)
440169.00	3765100.00	1.10214	(13121617)
440269.00	3765100.00	1.08389	(13121617)
439269.00	3765200.00	1.32083	(13120808)
439369.00	3765200.00	1.27914	(13120808)
439469.00	3765200.00	1.35637	(12010217)
439569.00	3765200.00	1.27547	(12010217)
439669.00	3765200.00	1.23382	(12121717)
439769.00	3765200.00	1.19031	(12121717)
439869.00	3765200.00	1.19553	(13012419)
439969.00	3765200.00	1.29392	(15010717)
440069.00	3765200.00	1.28370	(15010717)
440169.00	3765200.00	1.25916	(13121617)
440269.00	3765200.00	1.19003	(16010608)
439269.00	3765300.00	1.46905	(14100607)
439369.00	3765300.00	1.58113	(13120808)

439469.00	3765300.00	1.58924	(12010217)
	439569.00	3765300.00	1.55771 (12010217)
439669.00	3765300.00	1.43882	(12121717)
	439769.00	3765300.00	1.40265 (12121717)
439869.00	3765300.00	1.49334	(15010717)
	439969.00	3765300.00	1.56245 (15010717)
440069.00	3765300.00	1.51568	(13121617)
	440169.00	3765300.00	1.41047 (16010608)
440269.00	3765300.00	1.39578	(15113017)
	439269.00	3765400.00	1.79798 (13121718)
439369.00	3765400.00	1.91687	(13120808)
	439469.00	3765400.00	1.91840 (13120808)
439569.00	3765400.00	1.94457	(12010217)
	439669.00	3765400.00	1.78937 (12010217)
439769.00	3765400.00	1.77325	(15010717)
	439869.00	3765400.00	1.93205 (15010717)
439969.00	3765400.00	1.92177	(13121617)
	440069.00	3765400.00	1.75260 (16010608)
440169.00	3765400.00	1.78863	(15113017)
	440269.00	3765400.00	1.75926 (15113017)
439269.00	3765500.00	2.45983	(12011417)
	439369.00	3765500.00	2.46736 (13121718)
439469.00	3765500.00	2.57652	(13120808)
	439569.00	3765500.00	2.56457 (12010217)
439669.00	3765500.00	2.49889	(12010217)
	439769.00	3765500.00	2.52588 (15010717)
439869.00	3765500.00	2.62439	(15010717)
	439969.00	3765500.00	2.54522 (15113017)
440069.00	3765500.00	2.40790	(15113017)
	440169.00	3765500.00	2.44253 (12011608)
440269.00	3765500.00	2.43780	(12011608)
	439269.00	3765600.00	3.13308 (12111318)
439369.00	3765600.00	3.91996	(12011417)
	439469.00	3765600.00	4.02504 (12011417)
439569.00	3765600.00	4.08047	(13120808)
	439669.00	3765600.00	4.12557 (12010217)
439769.00	3765600.00	4.21553	(15010717)
	439869.00	3765600.00	4.92488 (15010717)
439969.00	3765600.00	5.47594	(12011417)
	440069.00	3765600.00	4.72130 (12011608)
440169.00	3765600.00	4.57951	(14101107)
	440269.00	3765600.00	4.27960 (14101107)
439269.00	3765700.00	4.73913	(14012908)
	439369.00	3765700.00	6.90229 (14012908)
439469.00	3765700.00	29.56830	(14101007)
	439569.00	3765700.00	13.65650 (13111217)
439669.00	3765700.00	7.83900	(12011908)
	439769.00	3765700.00	5.68142 (14121418)
439869.00	3765700.00	4.39712	(14121418)
	439969.00	3765700.00	4.88116 (12111317)
440069.00	3765700.00	6.04430	(15120818)
	440169.00	3765700.00	8.87945 (13111217)

440269.00	3765700.00	15.27275	(13111217)
	439269.00	3765800.00	4.40214 (12111317)
439369.00	3765800.00	5.75688	(12100707)
	439469.00	3765800.00	5.91963 (15120818)
439569.00	3765800.00	5.82962	(15120818)
	439669.00	3765800.00	6.46856 (13111218)
439769.00	3765800.00	8.85238	(13111217)
	439869.00	3765800.00	14.53752 (13111217)
439969.00	3765800.00	6.40108	(14121418)
	440069.00	3765800.00	4.02892 (14121418)
440169.00	3765800.00	3.25499	(13111218)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
440269.00	3765800.00	3.46389	(13111217)
439269.00	3765900.00	3.03243	(15120818)
439369.00	3765900.00	3.08651	(15112217)
439469.00	3765900.00	3.04673	(13111218)
439569.00	3765900.00	2.99123	(13111218)
439669.00	3765900.00	2.88461	(13111218)
439769.00	3765900.00	2.98339	(12122117)
439869.00	3765900.00	3.41569	(13111217)
439969.00	3765900.00	3.55475	(13111217)
440069.00	3765900.00	2.91351	(12011717)
440169.00	3765900.00	2.38912	(12011717)
440269.00	3765900.00	1.99784	(15120418)
439649.00	3765310.00	1.46115	(12121717)
439679.00	3765310.00	1.46388	(12121717)
439709.00	3765310.00	1.46133	(12121717)
439739.00	3765310.00	1.45176	(12121717)
439769.00	3765310.00	1.42892	(12121717)

439799.00	3765310.00	1.42664	(13012419)
	439829.00	3765310.00	1.45069 (15010717)
439859.00	3765310.00	1.51626	(15010717)
	439889.00	3765310.00	1.56188 (15010717)
439649.00	3765340.00	1.55820	(12010217)
	439679.00	3765340.00	1.54445 (12121717)
439709.00	3765340.00	1.54225	(12121717)
	439739.00	3765340.00	1.53463 (12121717)
439769.00	3765340.00	1.51436	(12121717)
	439799.00	3765340.00	1.51408 (15010717)
439829.00	3765340.00	1.59019	(15010717)
	439859.00	3765340.00	1.64353 (15010717)
439889.00	3765340.00	1.67951	(15010717)
	439649.00	3765370.00	1.69022 (12010217)
439679.00	3765370.00	1.63653	(12121717)
	439709.00	3765370.00	1.63483 (12121717)
439739.00	3765370.00	1.62926	(12121717)
	439769.00	3765370.00	1.61264 (12121717)
439799.00	3765370.00	1.67500	(15010717)
	439829.00	3765370.00	1.73644 (15010717)
439859.00	3765370.00	1.77845	(15010717)
	439889.00	3765370.00	1.80529 (15010717)
439649.00	3765400.00	1.83953	(12010217)
	439679.00	3765400.00	1.75959 (12010217)
439709.00	3765400.00	1.74205	(12121717)
	439739.00	3765400.00	1.73844 (12121717)
439769.00	3765400.00	1.77325	(15010717)
	439799.00	3765400.00	1.84462 (15010717)
439829.00	3765400.00	1.89163	(15010717)
	439859.00	3765400.00	1.92416 (15010717)
439889.00	3765400.00	1.94508	(15010717)
	439649.00	3765430.00	2.00947 (12010217)
439679.00	3765430.00	1.93770	(12010217)
	439709.00	3765430.00	1.86851 (12121717)
439739.00	3765430.00	1.88829	(15010717)
	439769.00	3765430.00	1.97352 (15010717)
439799.00	3765430.00	2.02687	(15010717)
	439829.00	3765430.00	2.06116 (15010717)
439859.00	3765430.00	2.08725	(15010717)
	439889.00	3765430.00	2.10542 (15010717)
439649.00	3765460.00	2.20549	(12010217)
	439679.00	3765460.00	2.14415 (12010217)
439709.00	3765460.00	2.05078	(12010217)
	439739.00	3765460.00	2.12868 (15010717)
439769.00	3765460.00	2.19003	(15010717)
	439799.00	3765460.00	2.22754 (15010717)
439829.00	3765460.00	2.25393	(15010717)
	439859.00	3765460.00	2.27919 (15010717)
439889.00	3765460.00	2.29761	(15010717)
	439649.00	3765490.00	2.43819 (12010217)
439679.00	3765490.00	2.38844	(12010217)
	439709.00	3765490.00	2.32058 (15010717)

439739.00	3765490.00	2.39457	(15010717)
439769.00	3765490.00	2.43487	(15010717)
439799.00	3765490.00	2.46051	(15010717)
439829.00	3765490.00	2.48616	(15010717)
439859.00	3765490.00	2.51765	(15010717)
439889.00	3765490.00	2.54095	(15010717)



439784.00	3765310.00	2.55488	(12010217)
	439789.00	3765310.00	2.55555 (12010217)
439794.00	3765310.00	2.55523	(12010217)
	439799.00	3765310.00	2.55536 (12010217)
439804.00	3765310.00	2.55520	(12010217)
	439809.00	3765310.00	2.55559 (12010217)
439814.00	3765310.00	2.55514	(12010217)
	439819.00	3765310.00	2.55557 (12010217)
439824.00	3765310.00	2.55527	(12010217)
	439829.00	3765310.00	2.55546 (12010217)
439839.00	3765310.00	2.55552	(12010217)
	439844.00	3765310.00	2.55543 (12010217)
439849.00	3765310.00	2.55539	(12010217)
	439854.00	3765310.00	2.55568 (12010217)
439859.00	3765310.00	2.55547	(12010217)
	439864.00	3765310.00	2.55550 (12010217)
439869.00	3765310.00	2.55538	(12010217)
	439874.00	3765310.00	2.55576 (12010217)
439879.00	3765310.00	2.55530	(12010217)
	439884.00	3765310.00	2.55592 (12010217)
439674.00	3765315.00	2.57599	(12010217)
	439679.00	3765315.00	2.57572 (12010217)
439684.00	3765315.00	2.57581	(12010217)
	439689.00	3765315.00	2.57592 (12010217)
439694.00	3765315.00	2.57607	(12010217)
	439699.00	3765315.00	2.57588 (12010217)
439704.00	3765315.00	2.57622	(12010217)
	439709.00	3765315.00	2.57622 (12010217)
439714.00	3765315.00	2.57618	(12010217)
	439719.00	3765315.00	2.57617 (12010217)
439729.00	3765315.00	2.57644	(12010217)
	439734.00	3765315.00	2.57650 (12010217)
439739.00	3765315.00	2.57648	(12010217)
	439744.00	3765315.00	2.57657 (12010217)
439749.00	3765315.00	2.57630	(12010217)
	439764.00	3765315.00	2.57651 (12010217)
439769.00	3765315.00	2.57659	(12010217)
	439774.00	3765315.00	2.57667 (12010217)
439779.00	3765315.00	2.57674	(12010217)
	439784.00	3765315.00	2.57641 (12010217)
439789.00	3765315.00	2.57677	(12010217)
	439794.00	3765315.00	2.57670 (12010217)
439799.00	3765315.00	2.57682	(12010217)
	439804.00	3765315.00	2.57673 (12010217)
439809.00	3765315.00	2.57705	(12010217)
	439814.00	3765315.00	2.57665 (12010217)
439819.00	3765315.00	2.57715	(12010217)
	439824.00	3765315.00	2.57688 (12010217)
439829.00	3765315.00	2.57697	(12010217)
	439839.00	3765315.00	2.57713 (12010217)
439844.00	3765315.00	2.57701	(12010217)
	439849.00	3765315.00	2.57701 (12010217)

439854.00	3765315.00	2.57719	(12010217)
	439859.00	3765315.00	2.57713 (12010217)
439864.00	3765315.00	2.57707	(12010217)
	439869.00	3765315.00	2.57715 (12010217)
439874.00	3765315.00	2.57734	(12010217)
	439879.00	3765315.00	2.57691 (12010217)
439884.00	3765315.00	2.57720	(12010217)
	439674.00	3765320.00	2.60987 (12011417)
439679.00	3765320.00	2.60012	(12011417)



439794.00	3765320.00	2.59907	(12010217)
	439799.00	3765320.00	2.59869 (12010217)
439804.00	3765320.00	2.59905	(12010217)
	439809.00	3765320.00	2.59874 (12010217)
439814.00	3765320.00	2.59890	(12010217)
	439819.00	3765320.00	2.59896 (12010217)
439824.00	3765320.00	2.59900	(12010217)
	439829.00	3765320.00	2.59875 (12010217)
439839.00	3765320.00	2.59917	(12010217)
	439844.00	3765320.00	2.59885 (12010217)
439849.00	3765320.00	2.59917	(12010217)
	439854.00	3765320.00	2.59892 (12010217)
439859.00	3765320.00	2.59931	(12010217)
	439864.00	3765320.00	2.59891 (12010217)
439869.00	3765320.00	2.59938	(12010217)
	439874.00	3765320.00	2.59914 (12010217)
439879.00	3765320.00	2.59923	(12010217)
	439884.00	3765320.00	2.59922 (12010217)
439674.00	3765325.00	2.65071	(12011417)
	439679.00	3765325.00	2.64245 (12011417)
439684.00	3765325.00	2.63310	(12011417)
	439689.00	3765325.00	2.62415 (12011417)
439694.00	3765325.00	2.62047	(12010217)
	439699.00	3765325.00	2.62048 (12010217)
439704.00	3765325.00	2.62069	(12010217)
	439709.00	3765325.00	2.62073 (12010217)
439714.00	3765325.00	2.62065	(12010217)
	439719.00	3765325.00	2.62097 (12010217)
439729.00	3765325.00	2.62084	(12010217)
	439734.00	3765325.00	2.62082 (12010217)
439739.00	3765325.00	2.62115	(12010217)
	439744.00	3765325.00	2.62083 (12010217)
439749.00	3765325.00	2.62115	(12010217)
	439754.00	3765325.00	2.62097 (12010217)
439769.00	3765325.00	2.62109	(12010217)
	439774.00	3765325.00	2.62120 (12010217)
439779.00	3765325.00	2.62100	(12010217)
	439784.00	3765325.00	2.62139 (12010217)
439789.00	3765325.00	2.62119	(12010217)
	439794.00	3765325.00	2.62126 (12010217)
439799.00	3765325.00	2.62141	(12010217)
	439804.00	3765325.00	2.62151 (12010217)
439809.00	3765325.00	2.62132	(12010217)
	439814.00	3765325.00	2.62146 (12010217)
439819.00	3765325.00	2.62166	(12010217)
	439824.00	3765325.00	2.62144 (12010217)
439829.00	3765325.00	2.62142	(12010217)
	439839.00	3765325.00	2.62180 (12010217)
439844.00	3765325.00	2.62135	(12010217)
	439849.00	3765325.00	2.62189 (12010217)
439854.00	3765325.00	2.62162	(12010217)
	439859.00	3765325.00	2.62180 (12010217)

439864.00	3765325.00	2.62158	(12010217)
	439869.00	3765325.00	2.62177 (12010217)
439874.00	3765325.00	2.62153	(12010217)
	439879.00	3765325.00	2.62174 (12010217)
439884.00	3765325.00	2.62161	(12010217)
	439674.00	3765330.00	2.69296 (12011417)
439679.00	3765330.00	2.68398	(12011417)
	439684.00	3765330.00	2.67601 (12011417)
439689.00	3765330.00	2.66654	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439694.00	3765330.00	2.65803	(12011417)
439699.00	3765330.00	2.64814	(12011417)
439704.00	3765330.00	2.64366	(12010217)
439709.00	3765330.00	2.64359	(12010217)
439714.00	3765330.00	2.64350	(12010217)
439719.00	3765330.00	2.64398	(12010217)
439729.00	3765330.00	2.64383	(12010217)
439734.00	3765330.00	2.64376	(12010217)
439739.00	3765330.00	2.64409	(12010217)
439744.00	3765330.00	2.64365	(12010217)
439749.00	3765330.00	2.64415	(12010217)
439754.00	3765330.00	2.64393	(12010217)
439774.00	3765330.00	2.64403	(12010217)
439779.00	3765330.00	2.64414	(12010217)
439784.00	3765330.00	2.64434	(12010217)
439789.00	3765330.00	2.64438	(12010217)
439794.00	3765330.00	2.64397	(12010217)
439799.00	3765330.00	2.64461	(12010217)
439804.00	3765330.00	2.64439	(12010217)

439809.00	3765330.00	2.64422	(12010217)
	439814.00	3765330.00	2.64442 (12010217)
439819.00	3765330.00	2.64457	(12010217)
	439824.00	3765330.00	2.64446 (12010217)
439829.00	3765330.00	2.64422	(12010217)
	439839.00	3765330.00	2.64433 (12010217)
439844.00	3765330.00	2.64454	(12010217)
	439849.00	3765330.00	2.64446 (12010217)
439854.00	3765330.00	2.64481	(12010217)
	439859.00	3765330.00	2.64415 (12010217)
439864.00	3765330.00	2.64504	(12010217)
	439869.00	3765330.00	2.64449 (12010217)
439874.00	3765330.00	2.64475	(12010217)
	439879.00	3765330.00	2.64453 (12010217)
439884.00	3765330.00	2.64487	(12010217)
	439674.00	3765335.00	2.73436 (12011417)
439679.00	3765335.00	2.72701	(12011417)
	439684.00	3765335.00	2.71792 (12011417)
439689.00	3765335.00	2.70995	(12011417)
	439694.00	3765335.00	2.70098 (12011417)
439699.00	3765335.00	2.69242	(12011417)
	439704.00	3765335.00	2.68261 (12011417)
439709.00	3765335.00	2.67352	(12011417)
	439714.00	3765335.00	2.66729 (12010217)
439719.00	3765335.00	2.66719	(12010217)
	439729.00	3765335.00	2.66708 (12010217)
439734.00	3765335.00	2.66750	(12010217)
	439739.00	3765335.00	2.66729 (12010217)
439744.00	3765335.00	2.66753	(12010217)
	439749.00	3765335.00	2.66752 (12010217)
439774.00	3765335.00	2.66754	(12010217)
	439779.00	3765335.00	2.66767 (12010217)
439784.00	3765335.00	2.66791	(12010217)
	439789.00	3765335.00	2.66777 (12010217)
439794.00	3765335.00	2.66762	(12010217)
	439839.00	3765335.00	2.66793 (12010217)
439844.00	3765335.00	2.66832	(12010217)
	439849.00	3765335.00	2.66819 (12010217)
439854.00	3765335.00	2.66830	(12010217)
	439859.00	3765335.00	2.66793 (12010217)
439864.00	3765335.00	2.66857	(12010217)
	439869.00	3765335.00	2.66817 (12010217)
439874.00	3765335.00	2.66825	(12010217)
	439879.00	3765335.00	2.66820 (12010217)
439884.00	3765335.00	2.66853	(12010217)
	439674.00	3765340.00	2.77716 (12011417)
439679.00	3765340.00	2.76870	(12011417)
	439684.00	3765340.00	2.76128 (12011417)
439689.00	3765340.00	2.75253	(12011417)
	439694.00	3765340.00	2.74466 (12011417)
439699.00	3765340.00	2.73537	(12011417)
	439704.00	3765340.00	2.72727 (12011417)

439709.00	3765340.00	2.71759	(12011417)
439714.00	3765340.00	2.70860	(12011417)
439719.00	3765340.00	2.69869	(12011417)
439729.00	3765340.00	2.69132	(12010217)
439734.00	3765340.00	2.69138	(12010217)
439739.00	3765340.00	2.69121	(12010217)
439744.00	3765340.00	2.69142	(12010217)
439749.00	3765340.00	2.69161	(12010217)
439774.00	3765340.00	2.69143	(12010217)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439779.00	3765340.00	2.69181	(12010217)
439784.00	3765340.00	2.69184	(12010217)
439789.00	3765340.00	2.69174	(12010217)
439794.00	3765340.00	2.69174	(12010217)
439839.00	3765340.00	2.69214	(12010217)
439844.00	3765340.00	2.69195	(12010217)
439849.00	3765340.00	2.69257	(12010217)
439854.00	3765340.00	2.69183	(12010217)
439859.00	3765340.00	2.69245	(12010217)
439864.00	3765340.00	2.69214	(12010217)
439869.00	3765340.00	2.69242	(12010217)
439874.00	3765340.00	2.69191	(12010217)
439879.00	3765340.00	2.69255	(12010217)
439884.00	3765340.00	2.69213	(12010217)
439674.00	3765345.00	2.81877	(12011417)
439679.00	3765345.00	2.81189	(12011417)
439684.00	3765345.00	2.80366	(12011417)
439689.00	3765345.00	2.79621	(12011417)
439694.00	3765345.00	2.78741	(12011417)

439699.00	3765345.00	2.77989	(12011417)
	439704.00	3765345.00	2.77074 (12011417)
439709.00	3765345.00	2.76254	(12011417)
	439714.00	3765345.00	2.75313 (12011417)
439719.00	3765345.00	2.74440	(12011417)
	439729.00	3765345.00	2.72519 (12011417)
439734.00	3765345.00	2.71590	(12010217)
	439739.00	3765345.00	2.71569 (12010217)
439744.00	3765345.00	2.71614	(12010217)
	439749.00	3765345.00	2.71619 (12010217)
439774.00	3765345.00	2.71613	(12010217)
	439779.00	3765345.00	2.71642 (12010217)
439784.00	3765345.00	2.71635	(12010217)
	439789.00	3765345.00	2.71617 (12010217)
439794.00	3765345.00	2.71639	(12010217)
	439839.00	3765345.00	2.71634 (12010217)
439844.00	3765345.00	2.71696	(12010217)
	439849.00	3765345.00	2.71666 (12010217)
439854.00	3765345.00	2.71653	(12010217)
	439859.00	3765345.00	2.71679 (12010217)
439864.00	3765345.00	2.71697	(12010217)
	439869.00	3765345.00	2.71661 (12010217)
439874.00	3765345.00	2.71692	(12010217)
	439879.00	3765345.00	2.71709 (12010217)
439884.00	3765345.00	2.71668	(12010217)
	439674.00	3765350.00	2.86130 (12011417)
439679.00	3765350.00	2.85390	(12011417)
	439684.00	3765350.00	2.84718 (12011417)
439689.00	3765350.00	2.83903	(12011417)
	439694.00	3765350.00	2.83187 (12011417)
439699.00	3765350.00	2.82335	(12011417)
	439704.00	3765350.00	2.81569 (12011417)
439709.00	3765350.00	2.80669	(12011417)
	439714.00	3765350.00	2.79893 (12011417)
439719.00	3765350.00	2.78907	(12011417)
	439729.00	3765350.00	2.77095 (12011417)
439734.00	3765350.00	2.76158	(12011417)
	439739.00	3765350.00	2.75179 (12011417)
439744.00	3765350.00	2.74146	(12011417)
	439749.00	3765350.00	2.74117 (12010217)
439774.00	3765350.00	2.74150	(12010217)
	439779.00	3765350.00	2.74152 (12010217)
439784.00	3765350.00	2.74148	(12010217)
	439789.00	3765350.00	2.74144 (12010217)
439794.00	3765350.00	2.74179	(12010217)
	439839.00	3765350.00	2.74164 (12010217)
439844.00	3765350.00	2.74232	(12010217)
	439849.00	3765350.00	2.74173 (12010217)
439854.00	3765350.00	2.74207	(12010217)
	439859.00	3765350.00	2.74200 (12010217)
439864.00	3765350.00	2.74224	(12010217)
	439869.00	3765350.00	2.74170 (12010217)

439874.00	3765350.00	2.74244	(12010217)
	439879.00	3765350.00	2.74209 (12010217)
439884.00	3765350.00	2.74211	(12010217)
	439674.00	3765355.00	2.90411 (12011417)
439679.00	3765355.00	2.89737	(12011417)
	439684.00	3765355.00	2.88961 (12011417)
439689.00	3765355.00	2.88306	(12011417)
	439694.00	3765355.00	2.87522 (12011417)
439699.00	3765355.00	2.86821	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439704.00	3765355.00	2.85965	(12011417)
439709.00	3765355.00	2.85219	(12011417)
439714.00	3765355.00	2.84321	(12011417)
439719.00	3765355.00	2.83539	(12011417)
439729.00	3765355.00	2.81736	(12011417)
439734.00	3765355.00	2.80797	(12011417)
439739.00	3765355.00	2.79881	(12011417)
439744.00	3765355.00	2.78946	(12011417)
439749.00	3765355.00	2.77891	(12011417)
439774.00	3765355.00	2.76724	(12010217)
439779.00	3765355.00	2.76731	(12010217)
439784.00	3765355.00	2.76689	(12010217)
439789.00	3765355.00	2.76743	(12010217)
439794.00	3765355.00	2.76751	(12010217)
439839.00	3765355.00	2.76799	(12010217)
439844.00	3765355.00	2.76758	(12010217)
439849.00	3765355.00	2.76767	(12010217)
439854.00	3765355.00	2.76751	(12010217)
439859.00	3765355.00	2.76804	(12010217)

439864.00	3765355.00	2.76738	(12010217)
	439869.00	3765355.00	2.76785 (12010217)
439874.00	3765355.00	2.76777	(12010217)
	439879.00	3765355.00	2.76784 (12010217)
439884.00	3765355.00	2.76761	(12010217)
	439674.00	3765360.00	2.94687 (12011417)
439679.00	3765360.00	2.93991	(12011417)
	439684.00	3765360.00	2.93395 (12011417)
439689.00	3765360.00	2.92633	(12011417)
	439694.00	3765360.00	2.91952 (12011417)
439699.00	3765360.00	2.91167	(12011417)
	439704.00	3765360.00	2.90505 (12011417)
439709.00	3765360.00	2.89651	(12011417)
	439714.00	3765360.00	2.88923 (12011417)
439719.00	3765360.00	2.88063	(12011417)
	439729.00	3765360.00	2.86369 (12011417)
439734.00	3765360.00	2.85513	(12011417)
	439739.00	3765360.00	2.84566 (12011417)
439744.00	3765360.00	2.83629	(12011417)
	439749.00	3765360.00	2.82756 (12011417)
439774.00	3765360.00	2.79365	(12010217)
	439779.00	3765360.00	2.79359 (12010217)
439784.00	3765360.00	2.79326	(12010217)
	439789.00	3765360.00	2.79389 (12010217)
439794.00	3765360.00	2.79356	(12010217)
	439799.00	3765360.00	2.79351 (12010217)
439804.00	3765360.00	2.79365	(12010217)
	439809.00	3765360.00	2.79394 (12010217)
439814.00	3765360.00	2.79351	(12010217)
	439839.00	3765360.00	2.79404 (12010217)
439844.00	3765360.00	2.79392	(12010217)
	439849.00	3765360.00	2.79377 (12010217)
439854.00	3765360.00	2.79428	(12010217)
	439859.00	3765360.00	2.79403 (12010217)
439864.00	3765360.00	2.79403	(12010217)
	439869.00	3765360.00	2.79418 (12010217)
439874.00	3765360.00	2.79432	(12010217)
	439879.00	3765360.00	2.79395 (12010217)
439884.00	3765360.00	2.79426	(12010217)
	439674.00	3765365.00	2.98980 (12011417)
439679.00	3765365.00	2.98344	(12011417)
	439684.00	3765365.00	2.97685 (12011417)
439689.00	3765365.00	2.97053	(12011417)
	439694.00	3765365.00	2.96352 (12011417)
439699.00	3765365.00	2.95713	(12011417)
	439704.00	3765365.00	2.94907 (12011417)
439709.00	3765365.00	2.94232	(12011417)
	439714.00	3765365.00	2.93426 (12011417)
439719.00	3765365.00	2.92716	(12011417)
	439729.00	3765365.00	2.91061 (12011417)
439734.00	3765365.00	2.90165	(12011417)
	439739.00	3765365.00	2.89333 (12011417)

439744.00	3765365.00	2.88452	(12011417)
439749.00	3765365.00	2.87483	(12011417)
439774.00	3765365.00	2.82584	(12011417)
439779.00	3765365.00	2.82019	(12010217)
439784.00	3765365.00	2.82055	(12010217)
439789.00	3765365.00	2.82054	(12010217)
439794.00	3765365.00	2.82053	(12010217)
439799.00	3765365.00	2.82045	(12010217)
439804.00	3765365.00	2.82101	(12010217)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439809.00	3765365.00	2.82050	(12010217)
439814.00	3765365.00	2.82072	(12010217)
439839.00	3765365.00	2.82113	(12010217)
439844.00	3765365.00	2.82088	(12010217)
439849.00	3765365.00	2.82107	(12010217)
439854.00	3765365.00	2.82127	(12010217)
439859.00	3765365.00	2.82089	(12010217)
439864.00	3765365.00	2.82119	(12010217)
439869.00	3765365.00	2.82136	(12010217)
439874.00	3765365.00	2.82120	(12010217)
439879.00	3765365.00	2.82094	(12010217)
439884.00	3765365.00	2.82160	(12010217)
439674.00	3765370.00	3.03323	(12011417)
439679.00	3765370.00	3.02721	(12011417)
439684.00	3765370.00	3.02097	(12011417)
439689.00	3765370.00	3.01435	(12011417)
439694.00	3765370.00	3.00837	(12011417)
439699.00	3765370.00	3.00105	(12011417)
439704.00	3765370.00	2.99544	(12011417)

439709.00	3765370.00	2.98752	(12011417)
	439714.00	3765370.00	2.98036 (12011417)
439719.00	3765370.00	2.97238	(12011417)
	439729.00	3765370.00	2.95720 (12011417)
439734.00	3765370.00	2.94911	(12011417)
	439739.00	3765370.00	2.94050 (12011417)
439744.00	3765370.00	2.93215	(12011417)
	439749.00	3765370.00	2.92416 (12011417)
439774.00	3765370.00	2.87601	(12011417)
	439779.00	3765370.00	2.86587 (12011417)
439784.00	3765370.00	2.85473	(12011417)
	439789.00	3765370.00	2.84815 (12010217)
439794.00	3765370.00	2.84836	(12010217)
	439799.00	3765370.00	2.84835 (12010217)
439804.00	3765370.00	2.84863	(12010217)
	439809.00	3765370.00	2.84824 (12010217)
439814.00	3765370.00	2.84857	(12010217)
	439839.00	3765370.00	2.84854 (12010217)
439844.00	3765370.00	2.84850	(12010217)
	439849.00	3765370.00	2.84906 (12010217)
439854.00	3765370.00	2.84856	(12010217)
	439859.00	3765370.00	2.84876 (12010217)
439864.00	3765370.00	2.84870	(12010217)
	439869.00	3765370.00	2.84914 (12010217)
439874.00	3765370.00	2.84857	(12010217)
	439879.00	3765370.00	2.84906 (12010217)
439884.00	3765370.00	2.84894	(12010217)
	439674.00	3765375.00	3.07668 (12011417)
439679.00	3765375.00	3.07107	(12011417)
	439684.00	3765375.00	3.06495 (12011417)
439689.00	3765375.00	3.05966	(12011417)
	439694.00	3765375.00	3.05260 (12011417)
439699.00	3765375.00	3.04664	(12011417)
	439704.00	3765375.00	3.03958 (12011417)
439709.00	3765375.00	3.03374	(12011417)
	439714.00	3765375.00	3.02623 (12011417)
439719.00	3765375.00	3.01960	(12011417)
	439729.00	3765375.00	3.00462 (12011417)
439734.00	3765375.00	2.99677	(12011417)
	439739.00	3765375.00	2.98859 (12011417)
439744.00	3765375.00	2.98013	(12011417)
	439749.00	3765375.00	2.97158 (12011417)
439754.00	3765375.00	2.96405	(12011417)
	439774.00	3765375.00	2.92703 (12011417)
439779.00	3765375.00	2.91692	(12011417)
	439784.00	3765375.00	2.90703 (12011417)
439789.00	3765375.00	2.89578	(12011417)
	439794.00	3765375.00	2.88540 (12011417)
439799.00	3765375.00	2.87693	(12010217)
	439804.00	3765375.00	2.87647 (12010217)
439809.00	3765375.00	2.87664	(12010217)
	439814.00	3765375.00	2.87689 (12010217)

439839.00	3765375.00	2.87665	(12010217)
	439844.00	3765375.00	2.87722 (12010217)
439849.00	3765375.00	2.87703	(12010217)
	439854.00	3765375.00	2.87706 (12010217)
439859.00	3765375.00	2.87684	(12010217)
	439864.00	3765375.00	2.87753 (12010217)
439869.00	3765375.00	2.87692	(12010217)
	439874.00	3765375.00	2.87728 (12010217)
439879.00	3765375.00	2.87727	(12010217)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439884.00	3765375.00	2.87731	(12010217)
439774.00	3765380.00	2.97671	(12011417)
439779.00	3765380.00	2.96778	(12011417)
439784.00	3765380.00	2.95814	(12011417)
439789.00	3765380.00	2.94872	(12011417)
439794.00	3765380.00	2.93782	(12011417)
439799.00	3765380.00	2.92710	(12011417)
439804.00	3765380.00	2.91632	(12011417)
439809.00	3765380.00	2.90585	(12010217)
439814.00	3765380.00	2.90578	(12010217)
439769.00	3765385.00	3.03681	(12011417)
439819.00	3765385.00	2.93719	(12011417)
439769.00	3765400.00	3.19028	(12011417)
439844.00	3765400.00	3.04926	(12011417)
439849.00	3765400.00	3.03821	(12011417)
439674.00	3765405.00	3.34671	(12011417)
439714.00	3765405.00	3.30965	(12011417)
439719.00	3765405.00	3.30431	(12011417)
439734.00	3765405.00	3.28734	(12011417)

439749.00	3765405.00	3.26957	(12011417)
	439754.00	3765405.00	3.26286 (12011417)
439774.00	3765405.00	3.23542	(12011417)
	439779.00	3765405.00	3.22697 (12011417)
439784.00	3765405.00	3.22004	(12011417)
	439789.00	3765405.00	3.21270 (12011417)
439794.00	3765405.00	3.20378	(12011417)
	439799.00	3765405.00	3.19497 (12011417)
439804.00	3765405.00	3.18666	(12011417)
	439809.00	3765405.00	3.17822 (12011417)
439814.00	3765405.00	3.16878	(12011417)
	439819.00	3765405.00	3.15897 (12011417)
439824.00	3765405.00	3.14904	(12011417)
	439829.00	3765405.00	3.13922 (12011417)
439834.00	3765405.00	3.12962	(12011417)
	439839.00	3765405.00	3.11838 (12011417)
439844.00	3765405.00	3.10756	(12011417)
	439849.00	3765405.00	3.09640 (12011417)
439854.00	3765405.00	3.08545	(12011417)
	439859.00	3765405.00	3.07316 (12011417)
439674.00	3765410.00	3.39310	(12011417)
	439679.00	3765410.00	3.38934 (12011417)
439684.00	3765410.00	3.38576	(12011417)
	439689.00	3765410.00	3.38115 (12011417)
439694.00	3765410.00	3.37716	(12011417)
	439699.00	3765410.00	3.37228 (12011417)
439704.00	3765410.00	3.36828	(12011417)
	439709.00	3765410.00	3.36346 (12011417)
439714.00	3765410.00	3.35856	(12011417)
	439719.00	3765410.00	3.35328 (12011417)
439729.00	3765410.00	3.34341	(12011417)
	439734.00	3765410.00	3.33823 (12011417)
439739.00	3765410.00	3.33206	(12011417)
	439744.00	3765410.00	3.32582 (12011417)
439749.00	3765410.00	3.32042	(12011417)
	439774.00	3765410.00	3.28827 (12011417)
439779.00	3765410.00	3.28133	(12011417)
	439784.00	3765410.00	3.27304 (12011417)
439789.00	3765410.00	3.26554	(12011417)
	439794.00	3765410.00	3.25829 (12011417)
439799.00	3765410.00	3.25069	(12011417)
	439804.00	3765410.00	3.24193 (12011417)
439809.00	3765410.00	3.23314	(12011417)
	439814.00	3765410.00	3.22445 (12011417)
439819.00	3765410.00	3.21597	(12011417)
	439824.00	3765410.00	3.20615 (12011417)
439829.00	3765410.00	3.19662	(12011417)
	439834.00	3765410.00	3.18653 (12011417)
439839.00	3765410.00	3.17731	(12011417)
	439844.00	3765410.00	3.16634 (12011417)
439849.00	3765410.00	3.15599	(12011417)
	439854.00	3765410.00	3.14432 (12011417)

439859.00	3765410.00	3.13354	(12011417)
	439674.00	3765415.00	3.44104 (12011417)
439679.00	3765415.00	3.43719	(12011417)
	439684.00	3765415.00	3.43300 (12011417)
439689.00	3765415.00	3.42981	(12011417)
	439694.00	3765415.00	3.42542 (12011417)
439699.00	3765415.00	3.42143	(12011417)
	439704.00	3765415.00	3.41673 (12011417)
439709.00	3765415.00	3.41261	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439714.00	3765415.00	3.40797	(12011417)
439719.00	3765415.00	3.40328	(12011417)
439729.00	3765415.00	3.39313	(12011417)
439734.00	3765415.00	3.38811	(12011417)
439739.00	3765415.00	3.38304	(12011417)
439744.00	3765415.00	3.37771	(12011417)
439749.00	3765415.00	3.37203	(12011417)
439774.00	3765415.00	3.34048	(12011417)
439779.00	3765415.00	3.33414	(12011417)
439784.00	3765415.00	3.32773	(12011417)
439789.00	3765415.00	3.32071	(12011417)
439794.00	3765415.00	3.31241	(12011417)
439799.00	3765415.00	3.30469	(12011417)
439804.00	3765415.00	3.29738	(12011417)
439809.00	3765415.00	3.29007	(12011417)
439814.00	3765415.00	3.28094	(12011417)
439819.00	3765415.00	3.27173	(12011417)
439824.00	3765415.00	3.26349	(12011417)
439829.00	3765415.00	3.25446	(12011417)

439834.00	3765415.00	3.24511	(12011417)
	439839.00	3765415.00	3.23506 (12011417)
439844.00	3765415.00	3.22558	(12011417)
	439849.00	3765415.00	3.21521 (12011417)
439854.00	3765415.00	3.20527	(12011417)
	439859.00	3765415.00	3.19373 (12011417)
439674.00	3765420.00	3.48846	(12011417)
	439679.00	3765420.00	3.48581 (12011417)
439684.00	3765420.00	3.48200	(12011417)
	439689.00	3765420.00	3.47808 (12011417)
439694.00	3765420.00	3.47408	(12011417)
	439699.00	3765420.00	3.47055 (12011417)
439704.00	3765420.00	3.46639	(12011417)
	439709.00	3765420.00	3.46232 (12011417)
439714.00	3765420.00	3.45794	(12011417)
	439719.00	3765420.00	3.45341 (12011417)
439729.00	3765420.00	3.44467	(12011417)
	439734.00	3765420.00	3.43958 (12011417)
439739.00	3765420.00	3.43396	(12011417)
	439744.00	3765420.00	3.42882 (12011417)
439749.00	3765420.00	3.42424	(12011417)
	439774.00	3765420.00	3.39530 (12011417)
439779.00	3765420.00	3.38841	(12011417)
	439784.00	3765420.00	3.38100 (12011417)
439789.00	3765420.00	3.37493	(12011417)
	439794.00	3765420.00	3.36890 (12011417)
439799.00	3765420.00	3.36111	(12011417)
	439804.00	3765420.00	3.35281 (12011417)
439809.00	3765420.00	3.34541	(12011417)
	439814.00	3765420.00	3.33793 (12011417)
439819.00	3765420.00	3.33025	(12011417)
	439824.00	3765420.00	3.32085 (12011417)
439829.00	3765420.00	3.31217	(12011417)
	439834.00	3765420.00	3.30345 (12011417)
439839.00	3765420.00	3.29509	(12011417)
	439844.00	3765420.00	3.28463 (12011417)
439849.00	3765420.00	3.27533	(12011417)
	439854.00	3765420.00	3.26509 (12011417)
439859.00	3765420.00	3.25508	(12011417)
	439674.00	3765425.00	3.53769 (12011417)
439679.00	3765425.00	3.53401	(12011417)
	439684.00	3765425.00	3.53114 (12011417)
439689.00	3765425.00	3.52821	(12011417)
	439694.00	3765425.00	3.52428 (12011417)
439699.00	3765425.00	3.52038	(12011417)
	439704.00	3765425.00	3.51625 (12011417)
439709.00	3765425.00	3.51300	(12011417)
	439714.00	3765425.00	3.50871 (12011417)
439719.00	3765425.00	3.50461	(12011417)
	439729.00	3765425.00	3.49573 (12011417)
439734.00	3765425.00	3.49100	(12011417)
	439739.00	3765425.00	3.48686 (12011417)

439744.00	3765425.00	3.48148	(12011417)
	439749.00	3765425.00	3.47634 (12011417)
439774.00	3765425.00	3.44847	(12011417)
	439779.00	3765425.00	3.44318 (12011417)
439784.00	3765425.00	3.43705	(12011417)
	439789.00	3765425.00	3.43030 (12011417)
439794.00	3765425.00	3.42288	(12011417)
	439799.00	3765425.00	3.41690 (12011417)
439804.00	3765425.00	3.41027	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439809.00	3765425.00	3.40287	(12011417)
439814.00	3765425.00	3.39449	(12011417)
439819.00	3765425.00	3.38688	(12011417)
439824.00	3765425.00	3.37978	(12011417)
439829.00	3765425.00	3.37131	(12011417)
439834.00	3765425.00	3.36258	(12011417)
439839.00	3765425.00	3.35313	(12011417)
439844.00	3765425.00	3.34526	(12011417)
439849.00	3765425.00	3.33553	(12011417)
439854.00	3765425.00	3.32624	(12011417)
439859.00	3765425.00	3.31580	(12011417)
439674.00	3765430.00	3.58727	(12011417)
439679.00	3765430.00	3.58484	(12011417)
439684.00	3765430.00	3.58076	(12011417)
439689.00	3765430.00	3.57767	(12011417)
439694.00	3765430.00	3.57444	(12011417)
439699.00	3765430.00	3.57140	(12011417)
439704.00	3765430.00	3.56760	(12011417)
439709.00	3765430.00	3.56380	(12011417)

439714.00	3765430.00	3.55992	(12011417)
	439719.00	3765430.00	3.55638 (12011417)
439729.00	3765430.00	3.54802	(12011417)
	439734.00	3765430.00	3.54355 (12011417)
439739.00	3765430.00	3.53878	(12011417)
	439744.00	3765430.00	3.53460 (12011417)
439749.00	3765430.00	3.53031	(12011417)
	439774.00	3765430.00	3.50434 (12011417)
439779.00	3765430.00	3.49773	(12011417)
	439784.00	3765430.00	3.49202 (12011417)
439789.00	3765430.00	3.48639	(12011417)
	439794.00	3765430.00	3.48082 (12011417)
439799.00	3765430.00	3.47330	(12011417)
	439804.00	3765430.00	3.46626 (12011417)
439809.00	3765430.00	3.46014	(12011417)
	439814.00	3765430.00	3.45347 (12011417)
439819.00	3765430.00	3.44588	(12011417)
	439824.00	3765430.00	3.43739 (12011417)
439829.00	3765430.00	3.43021	(12011417)
	439834.00	3765430.00	3.42246 (12011417)
439839.00	3765430.00	3.41457	(12011417)
	439844.00	3765430.00	3.40479 (12011417)
439849.00	3765430.00	3.39645	(12011417)
	439854.00	3765430.00	3.38748 (12011417)
439859.00	3765430.00	3.37821	(12011417)
	439674.00	3765435.00	3.63745 (12011417)
439679.00	3765435.00	3.63434	(12011417)
	439684.00	3765435.00	3.63245 (12011417)
439689.00	3765435.00	3.62955	(12011417)
	439694.00	3765435.00	3.62609 (12011417)
439699.00	3765435.00	3.62237	(12011417)
	439704.00	3765435.00	3.61938 (12011417)
439709.00	3765435.00	3.61622	(12011417)
	439714.00	3765435.00	3.61235 (12011417)
439719.00	3765435.00	3.60855	(12011417)
	439729.00	3765435.00	3.60108 (12011417)
439734.00	3765435.00	3.59687	(12011417)
	439739.00	3765435.00	3.59280 (12011417)
439744.00	3765435.00	3.58787	(12011417)
	439749.00	3765435.00	3.58403 (12011417)
439774.00	3765435.00	3.55935	(12011417)
	439779.00	3765435.00	3.55450 (12011417)
439784.00	3765435.00	3.54906	(12011417)
	439789.00	3765435.00	3.54221 (12011417)
439794.00	3765435.00	3.53660	(12011417)
	439799.00	3765435.00	3.53107 (12011417)
439804.00	3765435.00	3.52520	(12011417)
	439809.00	3765435.00	3.51754 (12011417)
439814.00	3765435.00	3.51077	(12011417)
	439819.00	3765435.00	3.50422 (12011417)
439824.00	3765435.00	3.49819	(12011417)
	439829.00	3765435.00	3.48981 (12011417)

439834.00	3765435.00	3.48197	(12011417)
	439839.00	3765435.00	3.47407 (12011417)
439844.00	3765435.00	3.46703	(12011417)
	439849.00	3765435.00	3.45773 (12011417)
439854.00	3765435.00	3.44923	(12011417)
	439859.00	3765435.00	3.43971 (12011417)
439674.00	3765440.00	3.68953	(12011417)
	439679.00	3765440.00	3.68723 (12011417)
439684.00	3765440.00	3.68323	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439689.00	3765440.00	3.68072	(12011417)
439694.00	3765440.00	3.67834	(12011417)
439699.00	3765440.00	3.67556	(12011417)
439704.00	3765440.00	3.67204	(12011417)
439709.00	3765440.00	3.66839	(12011417)
439714.00	3765440.00	3.66568	(12011417)
439719.00	3765440.00	3.66193	(12011417)
439729.00	3765440.00	3.65454	(12011417)
439734.00	3765440.00	3.65108	(12011417)
439739.00	3765440.00	3.64673	(12011417)
439744.00	3765440.00	3.64316	(12011417)
439749.00	3765440.00	3.63909	(12011417)
439774.00	3765440.00	3.61581	(12011417)
439779.00	3765440.00	3.61039	(12011417)
439784.00	3765440.00	3.60524	(12011417)
439789.00	3765440.00	3.60078	(12011417)
439794.00	3765440.00	3.59496	(12011417)
439799.00	3765440.00	3.58840	(12011417)
439804.00	3765440.00	3.58252	(12011417)

439809.00	3765440.00	3.57730	(12011417)
	439814.00	3765440.00	3.57100 (12011417)
439819.00	3765440.00	3.56359	(12011417)
	439824.00	3765440.00	3.55663 (12011417)
439829.00	3765440.00	3.55052	(12011417)
	439834.00	3765440.00	3.54385 (12011417)
439839.00	3765440.00	3.53590	(12011417)
	439844.00	3765440.00	3.52761 (12011417)
439849.00	3765440.00	3.52017	(12011417)
	439854.00	3765440.00	3.51216 (12011417)
439859.00	3765440.00	3.50363	(12011417)
	439674.00	3765445.00	3.74128 (12011417)
439679.00	3765445.00	3.73952	(12011417)
	439684.00	3765445.00	3.73741 (12011417)
439689.00	3765445.00	3.73475	(12011417)
	439694.00	3765445.00	3.73077 (12011417)
439699.00	3765445.00	3.72842	(12011417)
	439704.00	3765445.00	3.72597 (12011417)
439709.00	3765445.00	3.72331	(12011417)
	439714.00	3765445.00	3.71923 (12011417)
439719.00	3765445.00	3.71605	(12011417)
	439729.00	3765445.00	3.70953 (12011417)
439734.00	3765445.00	3.70653	(12011417)
	439739.00	3765445.00	3.70208 (12011417)
439744.00	3765445.00	3.69859	(12011417)
	439749.00	3765445.00	3.69448 (12011417)
439774.00	3765445.00	3.67321	(12011417)
	439779.00	3765445.00	3.66858 (12011417)
439784.00	3765445.00	3.66368	(12011417)
	439789.00	3765445.00	3.65732 (12011417)
439794.00	3765445.00	3.65331	(12011417)
	439799.00	3765445.00	3.64804 (12011417)
439804.00	3765445.00	3.64274	(12011417)
	439809.00	3765445.00	3.63555 (12011417)
439814.00	3765445.00	3.63033	(12011417)
	439819.00	3765445.00	3.62456 (12011417)
439824.00	3765445.00	3.61881	(12011417)
	439829.00	3765445.00	3.61087 (12011417)
439834.00	3765445.00	3.60413	(12011417)
	439839.00	3765445.00	3.59805 (12011417)
439844.00	3765445.00	3.59091	(12011417)
	439849.00	3765445.00	3.58292 (12011417)
439854.00	3765445.00	3.57473	(12011417)
	439859.00	3765445.00	3.56718 (12011417)
439674.00	3765450.00	3.79622	(12011417)
	439679.00	3765450.00	3.79297 (12011417)
439684.00	3765450.00	3.79030	(12011417)
	439689.00	3765450.00	3.78810 (12011417)
439694.00	3765450.00	3.78638	(12011417)
	439699.00	3765450.00	3.78306 (12011417)
439704.00	3765450.00	3.78020	(12011417)
	439709.00	3765450.00	3.77691 (12011417)

439714.00	3765450.00	3.77533	(12011417)
	439719.00	3765450.00	3.77150 (12011417)
439729.00	3765450.00	3.76517	(12011417)
	439734.00	3765450.00	3.76220 (12011417)
439739.00	3765450.00	3.75905	(12011417)
	439744.00	3765450.00	3.75531 (12011417)
439749.00	3765450.00	3.75140	(12011417)
	439774.00	3765450.00	3.73066 (12011417)
439844.00	3765450.00	3.65362	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439849.00	3765450.00	3.64628	(12011417)
439854.00	3765450.00	3.64026	(12011417)
439859.00	3765450.00	3.63131	(12011417)
439674.00	3765455.00	3.84959	(12011417)
439679.00	3765455.00	3.84873	(12011417)
439684.00	3765455.00	3.84618	(12011417)
439689.00	3765455.00	3.84392	(12011417)
439694.00	3765455.00	3.84021	(12011417)
439699.00	3765455.00	3.83889	(12011417)
439704.00	3765455.00	3.83642	(12011417)
439709.00	3765455.00	3.83416	(12011417)
439714.00	3765455.00	3.83058	(12011417)
439719.00	3765455.00	3.82805	(12011417)
439729.00	3765455.00	3.82223	(12011417)
439734.00	3765455.00	3.81967	(12011417)
439739.00	3765455.00	3.81525	(12011417)
439744.00	3765455.00	3.81351	(12011417)
439749.00	3765455.00	3.80910	(12011417)
439844.00	3765455.00	3.71788	(12011417)

439849.00	3765455.00	3.71076	(12011417)
	439854.00	3765455.00	3.70331 (12011417)
439859.00	3765455.00	3.69745	(12011417)
	439674.00	3765460.00	3.90743 (12011417)
439679.00	3765460.00	3.90330	(12011417)
	439684.00	3765460.00	3.90226 (12011417)
439689.00	3765460.00	3.89977	(12011417)
	439694.00	3765460.00	3.89900 (12011417)
439699.00	3765460.00	3.89529	(12011417)
	439704.00	3765460.00	3.89276 (12011417)
439709.00	3765460.00	3.89102	(12011417)
	439714.00	3765460.00	3.88903 (12011417)
439719.00	3765460.00	3.88634	(12011417)
	439729.00	3765460.00	3.88020 (12011417)
439734.00	3765460.00	3.87757	(12011417)
	439739.00	3765460.00	3.87481 (12011417)
439744.00	3765460.00	3.87097	(12011417)
	439749.00	3765460.00	3.86857 (12011417)
439789.00	3765460.00	3.83886	(12011417)
	439794.00	3765460.00	3.83423 (12011417)
439799.00	3765460.00	3.82928	(12011417)
	439804.00	3765460.00	3.82554 (12011417)
439809.00	3765460.00	3.82063	(12011417)
	439814.00	3765460.00	3.81607 (12011417)
439819.00	3765460.00	3.80955	(12011417)
	439824.00	3765460.00	3.80533 (12011417)
439829.00	3765460.00	3.79982	(12011417)
	439844.00	3765460.00	3.78251 (12011417)
439849.00	3765460.00	3.77597	(12011417)
	439854.00	3765460.00	3.77087 (12011417)
439859.00	3765460.00	3.76181	(12011417)
	439674.00	3765465.00	3.96311 (12011417)
439679.00	3765465.00	3.96275	(12011417)
	439684.00	3765465.00	3.96013 (12011417)
439689.00	3765465.00	3.95812	(12011417)
	439694.00	3765465.00	3.95557 (12011417)
439699.00	3765465.00	3.95459	(12011417)
	439704.00	3765465.00	3.95275 (12011417)
439709.00	3765465.00	3.94934	(12011417)
	439714.00	3765465.00	3.94700 (12011417)
439719.00	3765465.00	3.94474	(12011417)
	439729.00	3765465.00	3.93983 (12011417)
439734.00	3765465.00	3.93698	(12011417)
	439739.00	3765465.00	3.93349 (12011417)
439744.00	3765465.00	3.93222	(12011417)
	439749.00	3765465.00	3.92791 (12011417)
439789.00	3765465.00	3.90085	(12011417)
	439794.00	3765465.00	3.89689 (12011417)
439799.00	3765465.00	3.89289	(12011417)
	439804.00	3765465.00	3.88779 (12011417)
439809.00	3765465.00	3.88349	(12011417)
	439814.00	3765465.00	3.87897 (12011417)

439819.00	3765465.00	3.87536	(12011417)
	439824.00	3765465.00	3.86983 (12011417)
439829.00	3765465.00	3.86380	(12011417)
	439844.00	3765465.00	3.84851 (12011417)
439849.00	3765465.00	3.84172	(12011417)
	439854.00	3765465.00	3.83593 (12011417)
439859.00	3765465.00	3.83057	(12011417)
	439674.00	3765470.00	4.02408 (12011417)
439679.00	3765470.00	4.02056	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439684.00	3765470.00	4.01960	(12011417)
439689.00	3765470.00	4.01786	(12011417)
439694.00	3765470.00	4.01647	(12011417)
439699.00	3765470.00	4.01362	(12011417)
439704.00	3765470.00	4.01120	(12011417)
439709.00	3765470.00	4.01016	(12011417)
439714.00	3765470.00	4.00755	(12011417)
439719.00	3765470.00	4.00550	(12011417)
439729.00	3765470.00	4.00055	(12011417)
439734.00	3765470.00	3.99827	(12011417)
439739.00	3765470.00	3.99548	(12011417)
439744.00	3765470.00	3.99280	(12011417)
439749.00	3765470.00	3.98970	(12011417)
439789.00	3765470.00	3.96370	(12011417)
439794.00	3765470.00	3.96081	(12011417)
439799.00	3765470.00	3.95618	(12011417)
439804.00	3765470.00	3.95301	(12011417)
439809.00	3765470.00	3.94889	(12011417)
439814.00	3765470.00	3.94380	(12011417)

439819.00	3765470.00	3.93943	(12011417)
	439824.00	3765470.00	3.93537 (12011417)
439829.00	3765470.00	3.93150	(12011417)
	439844.00	3765470.00	3.91518 (12011417)
439849.00	3765470.00	3.91051	(12011417)
	439854.00	3765470.00	3.90452 (12011417)
439859.00	3765470.00	3.89766	(12011417)
	439674.00	3765475.00	4.08422 (12011417)
439679.00	3765475.00	4.08232	(12011417)
	439684.00	3765475.00	4.08165 (12011417)
439689.00	3765475.00	4.07794	(12011417)
	439694.00	3765475.00	4.07728 (12011417)
439699.00	3765475.00	4.07515	(12011417)
	439704.00	3765475.00	4.07421 (12011417)
439709.00	3765475.00	4.07051	(12011417)
	439714.00	3765475.00	4.06907 (12011417)
439719.00	3765475.00	4.06672	(12011417)
	439729.00	3765475.00	4.06278 (12011417)
439734.00	3765475.00	4.05964	(12011417)
	439739.00	3765475.00	4.05881 (12011417)
439744.00	3765475.00	4.05545	(12011417)
	439749.00	3765475.00	4.05390 (12011417)
439754.00	3765475.00	4.04996	(12011417)
	439789.00	3765475.00	4.02966 (12011417)
439794.00	3765475.00	4.02583	(12011417)
	439799.00	3765475.00	4.02271 (12011417)
439804.00	3765475.00	4.01868	(12011417)
	439809.00	3765475.00	4.01443 (12011417)
439814.00	3765475.00	4.01147	(12011417)
	439819.00	3765475.00	4.00679 (12011417)
439824.00	3765475.00	4.00250	(12011417)
	439829.00	3765475.00	3.99685 (12011417)
439269.00	3764900.00	1.59313	(12010217)
	439369.00	3764900.00	1.59387 (12010217)
439469.00	3764900.00	1.59448	(12010217)
	439569.00	3764900.00	1.59485 (12010217)
439669.00	3764900.00	1.59504	(12010217)
	439769.00	3764900.00	1.59476 (12010217)
439869.00	3764900.00	1.59287	(12010217)
	439969.00	3764900.00	1.58293 (12010217)
440069.00	3764900.00	1.57060	(15010717)
	440169.00	3764900.00	1.57140 (15010717)
440269.00	3764900.00	1.57120	(15010717)
	439269.00	3765000.00	1.73893 (12010217)
439369.00	3765000.00	1.73990	(12010217)
	439469.00	3765000.00	1.74077 (12010217)
439569.00	3765000.00	1.74143	(12010217)
	439669.00	3765000.00	1.74173 (12010217)
439769.00	3765000.00	1.74174	(12010217)
	439869.00	3765000.00	1.74137 (12010217)
439969.00	3765000.00	1.73810	(12010217)
	440069.00	3765000.00	1.71952 (12010217)

440169.00	3765000.00	1.71545	(15010717)
440269.00	3765000.00	1.71533	(15010717)
439269.00	3765100.00	1.92354	(12010217)
439369.00	3765100.00	1.92497	(12010217)
439469.00	3765100.00	1.92653	(12010217)
439569.00	3765100.00	1.92735	(12010217)
439669.00	3765100.00	1.92702	(12010217)
439769.00	3765100.00	1.92728	(12010217)
439869.00	3765100.00	1.92793	(12010217)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439969.00	3765100.00	1.92757	(12010217)
440069.00	3765100.00	1.92202	(12010217)
440169.00	3765100.00	1.89733	(15010717)
440269.00	3765100.00	1.89746	(15010717)
439269.00	3765200.00	2.32933	(12011417)
439369.00	3765200.00	2.24074	(12011417)
439469.00	3765200.00	2.16966	(12010217)
439569.00	3765200.00	2.17095	(12010217)
439669.00	3765200.00	2.17185	(12010217)
439769.00	3765200.00	2.17304	(12010217)
439869.00	3765200.00	2.17210	(12010217)
439969.00	3765200.00	2.17298	(12010217)
440069.00	3765200.00	2.17234	(12010217)
440169.00	3765200.00	2.16174	(12010217)
440269.00	3765200.00	2.13750	(15010717)
439269.00	3765300.00	2.81323	(12011417)
439369.00	3765300.00	2.77726	(12011417)
439469.00	3765300.00	2.71621	(12011417)
439569.00	3765300.00	2.61553	(12011417)

439669.00	3765300.00	2.51256	(12010217)
	439769.00	3765300.00	2.51309 (12010217)
439869.00	3765300.00	2.51373	(12010217)
	439969.00	3765300.00	2.51399 (12010217)
440069.00	3765300.00	2.51484	(12010217)
	440169.00	3765300.00	2.51482 (12010217)
440269.00	3765300.00	2.49002	(12010217)
	439269.00	3765400.00	3.42826 (12011417)
439369.00	3765400.00	3.42067	(12011417)
	439469.00	3765400.00	3.40193 (12011417)
439569.00	3765400.00	3.36749	(12011417)
	439669.00	3765400.00	3.30478 (12011417)
439769.00	3765400.00	3.19028	(12011417)
	439869.00	3765400.00	3.03036 (12010217)
439969.00	3765400.00	3.03077	(12010217)
	440069.00	3765400.00	3.03215 (12010217)
440169.00	3765400.00	3.03448	(12010217)
	440269.00	3765400.00	3.03462 (12010217)
439269.00	3765500.00	4.42698	(12011417)
	439369.00	3765500.00	4.43305 (12011417)
439469.00	3765500.00	4.43524	(12011417)
	439569.00	3765500.00	4.43017 (12011417)
439669.00	3765500.00	4.41633	(12011417)
	439769.00	3765500.00	4.38858 (12011417)
439869.00	3765500.00	4.32918	(12011417)
	439969.00	3765500.00	4.20654 (12011417)
440069.00	3765500.00	3.94868	(12011417)
	440169.00	3765500.00	3.96209 (15011517)
440269.00	3765500.00	3.97306	(15011517)
	439269.00	3765600.00	6.69317 (12011417)
439369.00	3765600.00	6.71505	(12011417)
	439469.00	3765600.00	6.73794 (12011417)
439569.00	3765600.00	6.75121	(12011417)
	439669.00	3765600.00	6.76146 (12011417)
439769.00	3765600.00	6.76414	(12011417)
	439869.00	3765600.00	6.75825 (12011417)
439969.00	3765600.00	6.74373	(12011417)
	440069.00	3765600.00	6.70982 (12011417)
440169.00	3765600.00	6.76288	(15112218)
	440269.00	3765600.00	6.87235 (15112218)
439269.00	3765700.00	29.73991	(12011417)
	439369.00	3765700.00	30.85846 (12011417)
439469.00	3765700.00	32.06369	(12011417)
	439569.00	3765700.00	33.12662 (12011417)
439669.00	3765700.00	33.58885	(12011417)
	439769.00	3765700.00	34.05400 (14012117)
439869.00	3765700.00	34.75595	(14012117)
	439969.00	3765700.00	35.10332 (14012117)
440069.00	3765700.00	35.72513	(14012117)
	440169.00	3765700.00	35.88035 (14012117)
440269.00	3765700.00	36.07950	(14012117)
	439269.00	3765800.00	9.75068 (12111317)

439369.00	3765800.00	9.61181	(12111317)
	439469.00	3765800.00	9.45847 (12111317)
439569.00	3765800.00	9.40731	(12011717)
	439669.00	3765800.00	9.46029 (12011717)
439769.00	3765800.00	9.49141	(12011717)
	439869.00	3765800.00	9.50597 (12011717)
439969.00	3765800.00	9.51648	(12011717)
	440069.00	3765800.00	9.51897 (12011717)
440169.00	3765800.00	9.51567	(12011717)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEVAP \*\*\*  
 INCLUDING SOURCE(S):  
 A0000067 , A0000068 , A0000069 , A0000070 ,  
 A0000071 ,  
 A0000072 , A0000073 , A0000074 ,  
 A0000075 , A0000076 , A0000077 , A0000078 ,  
 A0000079 ,  
 A0000080 , A0000081 , A0000082 ,  
 A0000083 , A0000084 , A0000085 , A0000086 ,  
 A0000087 ,  
 A0000088 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
440269.00	3765800.00	9.48893	(12011717)
439269.00	3765900.00	5.08837	(15120818)
439369.00	3765900.00	5.05555	(15120818)
439469.00	3765900.00	5.08184	(13111217)
439569.00	3765900.00	5.11793	(13111217)
439669.00	3765900.00	5.12750	(13111217)
439769.00	3765900.00	5.12785	(13111217)
439869.00	3765900.00	5.17412	(12011717)
439969.00	3765900.00	5.26036	(12011717)
440069.00	3765900.00	5.31836	(12011717)
440169.00	3765900.00	5.35788	(12011717)
440269.00	3765900.00	5.38569	(12011717)
439649.00	3765310.00	2.57118	(12011417)
439679.00	3765310.00	2.55416	(12010217)
439709.00	3765310.00	2.55462	(12010217)
439739.00	3765310.00	2.55498	(12010217)
439769.00	3765310.00	2.55530	(12010217)
439799.00	3765310.00	2.55536	(12010217)
439829.00	3765310.00	2.55546	(12010217)

439859.00	3765310.00	2.55547	(12010217)
	439889.00	3765310.00	2.55553 (12010217)
439649.00	3765340.00	2.81345	(12011417)
	439679.00	3765340.00	2.76870 (12011417)
439709.00	3765340.00	2.71759	(12011417)
	439739.00	3765340.00	2.69121 (12010217)
439769.00	3765340.00	2.69169	(12010217)
	439799.00	3765340.00	2.69212 (12010217)
439829.00	3765340.00	2.69251	(12010217)
	439859.00	3765340.00	2.69245 (12010217)
439889.00	3765340.00	2.69234	(12010217)
	439649.00	3765370.00	3.06101 (12011417)
439679.00	3765370.00	3.02721	(12011417)
	439709.00	3765370.00	2.98752 (12011417)
439739.00	3765370.00	2.94050	(12011417)
	439769.00	3765370.00	2.88690 (12011417)
439799.00	3765370.00	2.84835	(12010217)
	439829.00	3765370.00	2.84859 (12010217)
439859.00	3765370.00	2.84876	(12010217)
	439889.00	3765370.00	2.84885 (12010217)
439649.00	3765400.00	3.32055	(12011417)
	439679.00	3765400.00	3.29552 (12011417)
439709.00	3765400.00	3.26663	(12011417)
	439739.00	3765400.00	3.23210 (12011417)
439769.00	3765400.00	3.19028	(12011417)
	439799.00	3765400.00	3.14150 (12011417)
439829.00	3765400.00	3.08253	(12011417)
	439859.00	3765400.00	3.03012 (12010217)
439889.00	3765400.00	3.03055	(12010217)
	439649.00	3765430.00	3.60122 (12011417)
439679.00	3765430.00	3.58484	(12011417)
	439709.00	3765430.00	3.56380 (12011417)
439739.00	3765430.00	3.53878	(12011417)
	439769.00	3765430.00	3.50979 (12011417)
439799.00	3765430.00	3.47330	(12011417)
	439829.00	3765430.00	3.43021 (12011417)
439859.00	3765430.00	3.37821	(12011417)
	439889.00	3765430.00	3.31501 (12011417)
439649.00	3765460.00	3.91586	(12011417)
	439679.00	3765460.00	3.90330 (12011417)
439709.00	3765460.00	3.89102	(12011417)
	439739.00	3765460.00	3.87481 (12011417)
439769.00	3765460.00	3.85440	(12011417)
	439799.00	3765460.00	3.82928 (12011417)
439829.00	3765460.00	3.79982	(12011417)
	439859.00	3765460.00	3.76181 (12011417)
439889.00	3765460.00	3.71779	(12011417)
	439649.00	3765490.00	4.28335 (12011417)
439679.00	3765490.00	4.27579	(12011417)
	439709.00	3765490.00	4.26721 (12011417)
439739.00	3765490.00	4.25700	(12011417)
	439769.00	3765490.00	4.24412 (12011417)

439799.00	3765490.00	4.22790	(12011417)
439829.00	3765490.00	4.20854	(12011417)
439859.00	3765490.00	4.18360	(12011417)
439889.00	3765490.00	4.15516	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\*    \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*  
 \*\*\*            08:30:01

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\*\*\* MODELOPTs:        NonDEFAULT    CONC    FLAT    URBAN    ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*  
 INCLUDING SOURCE(S):  
 A0000089    , A0000090    , A0000091    , A0000092    ,  
 A0000093    ,  
                   A0000094    , A0000095    , A0000096    ,  
 A0000097    , A0000098    , A0000099    , A0000100    ,  
 A0000101    ,  
                   A0000102    , A0000103    , A0000104    ,  
 A0000105    , A0000106    , A0000107    , A0000108    ,  
 A0000109    ,  
                   A0000110    , A0000111    , A0000112    ,  
 A0000113    , A0000114    , A0000115    ,  
 A0000116    , . . .            ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_2.5    IN  
 MICROGRAMS/M\*\*3            \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439674.00	3765310.00	1.67734	(13121718)
439679.00	3765310.00	1.68121	(13121718)
439684.00	3765310.00	1.68456	(13121718)
439689.00	3765310.00	1.68675	(13121718)
439694.00	3765310.00	1.68829	(13121718)
439699.00	3765310.00	1.68794	(13121718)
439704.00	3765310.00	1.68731	(13121718)
439709.00	3765310.00	1.68979	(12011808)
439714.00	3765310.00	1.69826	(12011808)
439719.00	3765310.00	1.70623	(12011808)
439729.00	3765310.00	1.71762	(12011808)
439734.00	3765310.00	1.72174	(12011808)
439739.00	3765310.00	1.72526	(12011808)
439744.00	3765310.00	1.72719	(12011808)
439749.00	3765310.00	1.72782	(12011808)
439764.00	3765310.00	1.72449	(12011808)
439769.00	3765310.00	1.72095	(12011808)

439774.00	3765310.00	1.71669	(12011808)
	439779.00	3765310.00	1.71678 (15111218)
439784.00	3765310.00	1.71679	(14100607)
	439789.00	3765310.00	1.72380 (14100607)
439794.00	3765310.00	1.72930	(14100607)
	439799.00	3765310.00	1.73488 (13120808)
439804.00	3765310.00	1.75492	(13120808)
	439809.00	3765310.00	1.77350 (13120808)
439814.00	3765310.00	1.78985	(13120808)
	439819.00	3765310.00	1.80467 (13120808)
439824.00	3765310.00	1.81772	(13120808)
	439829.00	3765310.00	1.82908 (13120808)
439839.00	3765310.00	1.84728	(13120808)
	439844.00	3765310.00	1.85383 (13120808)
439849.00	3765310.00	1.85924	(13120808)
	439854.00	3765310.00	1.86364 (13120808)
439859.00	3765310.00	1.86571	(13120808)
	439864.00	3765310.00	1.86757 (13120808)
439869.00	3765310.00	1.86855	(13120808)
	439874.00	3765310.00	1.86776 (13120808)
439879.00	3765310.00	1.86671	(13120808)
	439884.00	3765310.00	1.86510 (13120808)
439674.00	3765315.00	1.69468	(13121718)
	439679.00	3765315.00	1.70029 (13121718)
439684.00	3765315.00	1.70423	(13121718)
	439689.00	3765315.00	1.70791 (13121718)
439694.00	3765315.00	1.71011	(13121718)
	439699.00	3765315.00	1.71192 (13121718)
439704.00	3765315.00	1.71191	(13121718)
	439709.00	3765315.00	1.71102 (13121718)
439714.00	3765315.00	1.71243	(12011808)
	439719.00	3765315.00	1.72133 (12011808)
439729.00	3765315.00	1.73555	(12011808)
	439734.00	3765315.00	1.74065 (12011808)
439739.00	3765315.00	1.74521	(12011808)
	439744.00	3765315.00	1.74846 (12011808)
439749.00	3765315.00	1.75055	(12011808)
	439764.00	3765315.00	1.74959 (12011808)
439769.00	3765315.00	1.74734	(12011808)
	439774.00	3765315.00	1.74379 (12011808)
439779.00	3765315.00	1.73921	(12011808)
	439784.00	3765315.00	1.73773 (15111218)
439789.00	3765315.00	1.73848	(14100607)
	439794.00	3765315.00	1.74526 (14100607)
439799.00	3765315.00	1.75071	(14100607)
	439804.00	3765315.00	1.76314 (13120808)
439809.00	3765315.00	1.78274	(13120808)
	439814.00	3765315.00	1.80042 (13120808)
439819.00	3765315.00	1.81660	(13120808)
	439824.00	3765315.00	1.83105 (13120808)
439829.00	3765315.00	1.84300	(13120808)
	439839.00	3765315.00	1.86302 (13120808)

439844.00	3765315.00	1.87070	(13120808)
	439849.00	3765315.00	1.87733 (13120808)
439854.00	3765315.00	1.88135	(13120808)
	439859.00	3765315.00	1.88473 (13120808)
439864.00	3765315.00	1.88736	(13120808)
	439869.00	3765315.00	1.88806 (13120808)
439874.00	3765315.00	1.88816	(13120808)
	439879.00	3765315.00	1.88782 (13120808)
439884.00	3765315.00	1.88588	(13120808)
	439674.00	3765320.00	1.71092 (13121718)
439679.00	3765320.00	1.71765	(13121718)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*  
 INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439684.00	3765320.00	1.72374	(13121718)
439689.00	3765320.00	1.72813	(13121718)
439694.00	3765320.00	1.73182	(13121718)
439699.00	3765320.00	1.73419	(13121718)
439704.00	3765320.00	1.73593	(13121718)
439709.00	3765320.00	1.73647	(13121718)
439714.00	3765320.00	1.73528	(13121718)
439719.00	3765320.00	1.73571	(12011808)
439729.00	3765320.00	1.75263	(12011808)
439734.00	3765320.00	1.75959	(12011808)
439739.00	3765320.00	1.76441	(12011808)
439744.00	3765320.00	1.76913	(12011808)
439749.00	3765320.00	1.77221	(12011808)
439764.00	3765320.00	1.77428	(12011808)
439769.00	3765320.00	1.77328	(12011808)
439774.00	3765320.00	1.77054	(12011808)
439779.00	3765320.00	1.76712	(12011808)

439784.00	3765320.00	1.76246	(12011808)
	439789.00	3765320.00	1.75907 (15111218)
439794.00	3765320.00	1.76087	(14100607)
	439799.00	3765320.00	1.76719 (14100607)
439804.00	3765320.00	1.77208	(14100607)
	439809.00	3765320.00	1.79145 (13120808)
439814.00	3765320.00	1.81099	(13120808)
	439819.00	3765320.00	1.82831 (13120808)
439824.00	3765320.00	1.84346	(13120808)
	439829.00	3765320.00	1.85738 (13120808)
439839.00	3765320.00	1.87917	(13120808)
	439844.00	3765320.00	1.88796 (13120808)
439849.00	3765320.00	1.89457	(13120808)
	439854.00	3765320.00	1.89961 (13120808)
439859.00	3765320.00	1.90446	(13120808)
	439864.00	3765320.00	1.90661 (13120808)
439869.00	3765320.00	1.90820	(13120808)
	439874.00	3765320.00	1.90947 (13120808)
439879.00	3765320.00	1.90826	(13120808)
	439884.00	3765320.00	1.90684 (13120808)
439674.00	3765325.00	1.72619	(13121718)
	439679.00	3765325.00	1.73431 (13121718)
439684.00	3765325.00	1.74139	(13121718)
	439689.00	3765325.00	1.74756 (13121718)
439694.00	3765325.00	1.75268	(13121718)
	439699.00	3765325.00	1.75633 (13121718)
439704.00	3765325.00	1.75899	(13121718)
	439709.00	3765325.00	1.76053 (13121718)
439714.00	3765325.00	1.76139	(13121718)
	439719.00	3765325.00	1.76041 (13121718)
439729.00	3765325.00	1.76920	(12011808)
	439734.00	3765325.00	1.77690 (12011808)
439739.00	3765325.00	1.78393	(12011808)
	439744.00	3765325.00	1.78907 (12011808)
439749.00	3765325.00	1.79370	(12011808)
	439754.00	3765325.00	1.79649 (12011808)
439769.00	3765325.00	1.79870	(12011808)
	439774.00	3765325.00	1.79720 (12011808)
439779.00	3765325.00	1.79430	(12011808)
	439784.00	3765325.00	1.79088 (12011808)
439789.00	3765325.00	1.78612	(12011808)
	439794.00	3765325.00	1.78089 (15111218)
439799.00	3765325.00	1.78348	(14100607)
	439804.00	3765325.00	1.78962 (14100607)
439809.00	3765325.00	1.80029	(13120808)
	439814.00	3765325.00	1.82076 (13120808)
439819.00	3765325.00	1.83929	(13120808)
	439824.00	3765325.00	1.85623 (13120808)
439829.00	3765325.00	1.87111	(13120808)
	439839.00	3765325.00	1.89527 (13120808)
439844.00	3765325.00	1.90444	(13120808)
	439849.00	3765325.00	1.91213 (13120808)

439854.00	3765325.00	1.91908	(13120808)
	439859.00	3765325.00	1.92315 (13120808)
439864.00	3765325.00	1.92647	(13120808)
	439869.00	3765325.00	1.92918 (13120808)
439874.00	3765325.00	1.92955	(13120808)
	439879.00	3765325.00	1.92968 (13120808)
439884.00	3765325.00	1.92918	(13120808)
	439674.00	3765330.00	1.74064 (13121718)
439679.00	3765330.00	1.75007	(13121718)
	439684.00	3765330.00	1.75845 (13121718)
439689.00	3765330.00	1.76584	(13121718)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*  
 INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439694.00	3765330.00	1.77211	(13121718)
439699.00	3765330.00	1.77754	(13121718)
439704.00	3765330.00	1.78159	(13121718)
439709.00	3765330.00	1.78442	(13121718)
439714.00	3765330.00	1.78584	(13121718)
439719.00	3765330.00	1.78684	(13121718)
439729.00	3765330.00	1.78458	(13121718)
439734.00	3765330.00	1.79397	(12011808)
439739.00	3765330.00	1.80171	(12011808)
439744.00	3765330.00	1.80880	(12011808)
439749.00	3765330.00	1.81444	(12011808)
439754.00	3765330.00	1.81852	(12011808)
439774.00	3765330.00	1.82359	(12011808)
439779.00	3765330.00	1.82194	(12011808)
439784.00	3765330.00	1.81880	(12011808)
439789.00	3765330.00	1.81507	(12011808)
439794.00	3765330.00	1.81007	(12011808)

439799.00	3765330.00	1.80377	(12011808)
	439804.00	3765330.00	1.80648 (14100607)
439809.00	3765330.00	1.81228	(14100607)
	439814.00	3765330.00	1.83012 (13120808)
439819.00	3765330.00	1.85043	(13120808)
	439824.00	3765330.00	1.86870 (13120808)
439829.00	3765330.00	1.88463	(13120808)
	439839.00	3765330.00	1.91100 (13120808)
439844.00	3765330.00	1.92146	(13120808)
	439849.00	3765330.00	1.93052 (13120808)
439854.00	3765330.00	1.93714	(13120808)
	439859.00	3765330.00	1.94280 (13120808)
439864.00	3765330.00	1.94668	(13120808)
	439869.00	3765330.00	1.94916 (13120808)
439874.00	3765330.00	1.95124	(13120808)
	439879.00	3765330.00	1.95149 (13120808)
439884.00	3765330.00	1.95099	(13120808)
	439674.00	3765335.00	1.75329 (13121718)
439679.00	3765335.00	1.76438	(13121718)
	439684.00	3765335.00	1.77439 (13121718)
439689.00	3765335.00	1.78338	(13121718)
	439694.00	3765335.00	1.79089 (13121718)
439699.00	3765335.00	1.79741	(13121718)
	439704.00	3765335.00	1.80297 (13121718)
439709.00	3765335.00	1.80726	(13121718)
	439714.00	3765335.00	1.81057 (13121718)
439719.00	3765335.00	1.81205	(13121718)
	439729.00	3765335.00	1.81224 (13121718)
439734.00	3765335.00	1.81104	(13121718)
	439739.00	3765335.00	1.81945 (12011808)
439744.00	3765335.00	1.82740	(12011808)
	439749.00	3765335.00	1.83414 (12011808)
439774.00	3765335.00	1.84966	(12011808)
	439779.00	3765335.00	1.84932 (12011808)
439784.00	3765335.00	1.84689	(12011808)
	439789.00	3765335.00	1.84385 (12011808)
439794.00	3765335.00	1.84005	(12011808)
	439839.00	3765335.00	1.92723 (13120808)
439844.00	3765335.00	1.93812	(13120808)
	439849.00	3765335.00	1.94820 (13120808)
439854.00	3765335.00	1.95598	(13120808)
	439859.00	3765335.00	1.96214 (13120808)
439864.00	3765335.00	1.96747	(13120808)
	439869.00	3765335.00	1.97029 (13120808)
439874.00	3765335.00	1.97249	(13120808)
	439879.00	3765335.00	1.97378 (13120808)
439884.00	3765335.00	1.97318	(13120808)
	439674.00	3765340.00	1.76486 (13121718)
439679.00	3765340.00	1.77730	(13121718)
	439684.00	3765340.00	1.78884 (13121718)
439689.00	3765340.00	1.79927	(13121718)
	439694.00	3765340.00	1.80866 (13121718)

439699.00	3765340.00	1.81675	(13121718)
	439704.00	3765340.00	1.82339 (13121718)
439709.00	3765340.00	1.82922	(13121718)
	439714.00	3765340.00	1.83354 (13121718)
439719.00	3765340.00	1.83728	(13121718)
	439729.00	3765340.00	1.83995 (13121718)
439734.00	3765340.00	1.83899	(13121718)
	439739.00	3765340.00	1.83783 (13121718)
439744.00	3765340.00	1.84559	(12011808)
	439749.00	3765340.00	1.85390 (12011808)
439774.00	3765340.00	1.87549	(12011808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*  
 INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439779.00	3765340.00	1.87554	(12011808)
439784.00	3765340.00	1.87522	(12011808)
439789.00	3765340.00	1.87297	(12011808)
439794.00	3765340.00	1.86945	(12011808)
439839.00	3765340.00	1.94234	(13120808)
439844.00	3765340.00	1.95562	(13120808)
439849.00	3765340.00	1.96604	(13120808)
439854.00	3765340.00	1.97504	(13120808)
439859.00	3765340.00	1.98229	(13120808)
439864.00	3765340.00	1.98769	(13120808)
439869.00	3765340.00	1.99178	(13120808)
439874.00	3765340.00	1.99418	(13120808)
439879.00	3765340.00	1.99572	(13120808)
439884.00	3765340.00	1.99597	(13120808)
439674.00	3765345.00	1.77495	(13121718)
439679.00	3765345.00	1.78906	(13121718)
439684.00	3765345.00	1.80219	(13121718)

439689.00	3765345.00	1.81395	(13121718)
	439694.00	3765345.00	1.82480 (13121718)
439699.00	3765345.00	1.83444	(13121718)
	439704.00	3765345.00	1.84330 (13121718)
439709.00	3765345.00	1.85025	(13121718)
	439714.00	3765345.00	1.85624 (13121718)
439719.00	3765345.00	1.86062	(13121718)
	439729.00	3765345.00	1.86649 (13121718)
439734.00	3765345.00	1.86747	(13121718)
	439739.00	3765345.00	1.86676 (13121718)
439744.00	3765345.00	1.86531	(13121718)
	439749.00	3765345.00	1.87239 (12011808)
439774.00	3765345.00	1.90078	(12011808)
	439779.00	3765345.00	1.90230 (12011808)
439784.00	3765345.00	1.90249	(12011808)
	439789.00	3765345.00	1.90158 (12011808)
439794.00	3765345.00	1.89948	(12011808)
	439839.00	3765345.00	1.95808 (13120808)
439844.00	3765345.00	1.97250	(13120808)
	439849.00	3765345.00	1.98401 (13120808)
439854.00	3765345.00	1.99416	(13120808)
	439859.00	3765345.00	2.00239 (13120808)
439864.00	3765345.00	2.00807	(13120808)
	439869.00	3765345.00	2.01301 (13120808)
439874.00	3765345.00	2.01672	(13120808)
	439879.00	3765345.00	2.01830 (13120808)
439884.00	3765345.00	2.01942	(13120808)
	439674.00	3765350.00	1.80037 (12011417)
439679.00	3765350.00	1.79910	(13121718)
	439684.00	3765350.00	1.81384 (13121718)
439689.00	3765350.00	1.82772	(13121718)
	439694.00	3765350.00	1.83977 (13121718)
439699.00	3765350.00	1.85117	(13121718)
	439704.00	3765350.00	1.86107 (13121718)
439709.00	3765350.00	1.87029	(13121718)
	439714.00	3765350.00	1.87775 (13121718)
439719.00	3765350.00	1.88396	(13121718)
	439729.00	3765350.00	1.89236 (13121718)
439734.00	3765350.00	1.89468	(13121718)
	439739.00	3765350.00	1.89586 (13121718)
439744.00	3765350.00	1.89538	(13121718)
	439749.00	3765350.00	1.89373 (13121718)
439774.00	3765350.00	1.92581	(12011808)
	439779.00	3765350.00	1.92852 (12011808)
439784.00	3765350.00	1.92983	(12011808)
	439789.00	3765350.00	1.92999 (12011808)
439794.00	3765350.00	1.92879	(12011808)
	439839.00	3765350.00	1.97384 (13120808)
439844.00	3765350.00	1.98873	(13120808)
	439849.00	3765350.00	2.00203 (13120808)
439854.00	3765350.00	2.01327	(13120808)
	439859.00	3765350.00	2.02202 (13120808)

439864.00	3765350.00	2.02963	(13120808)
	439869.00	3765350.00	2.03510 (13120808)
439874.00	3765350.00	2.03894	(13120808)
	439879.00	3765350.00	2.04157 (13120808)
439884.00	3765350.00	2.04291	(13120808)
	439674.00	3765355.00	1.84024 (12011417)
439679.00	3765355.00	1.83394	(12011417)
	439684.00	3765355.00	1.82655 (12011417)
439689.00	3765355.00	1.83926	(13121718)
	439694.00	3765355.00	1.85373 (13121718)
439699.00	3765355.00	1.86646	(13121718)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*  
 INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439704.00	3765355.00	1.87832	(13121718)
439709.00	3765355.00	1.88846	(13121718)
439714.00	3765355.00	1.89803	(13121718)
439719.00	3765355.00	1.90591	(13121718)
439729.00	3765355.00	1.91741	(13121718)
439734.00	3765355.00	1.92119	(13121718)
439739.00	3765355.00	1.92359	(13121718)
439744.00	3765355.00	1.92481	(13121718)
439749.00	3765355.00	1.92458	(13121718)
439774.00	3765355.00	1.94996	(12011808)
439779.00	3765355.00	1.95415	(12011808)
439784.00	3765355.00	1.95700	(12011808)
439789.00	3765355.00	1.95822	(12011808)
439794.00	3765355.00	1.95816	(12011808)
439839.00	3765355.00	1.98853	(13120808)
439844.00	3765355.00	2.00519	(13120808)
439849.00	3765355.00	2.02010	(13120808)

439854.00	3765355.00	2.03240	(13120808)
	439859.00	3765355.00	2.04256 (13120808)
439864.00	3765355.00	2.05107	(13120808)
	439869.00	3765355.00	2.05731 (13120808)
439874.00	3765355.00	2.06128	(13120808)
	439879.00	3765355.00	2.06497 (13120808)
439884.00	3765355.00	2.06657	(13120808)
	439674.00	3765360.00	1.87889 (12011417)
439679.00	3765360.00	1.87440	(12011417)
	439684.00	3765360.00	1.86859 (12011417)
439689.00	3765360.00	1.86128	(12011417)
	439694.00	3765360.00	1.86537 (13121718)
439699.00	3765360.00	1.88044	(13121718)
	439704.00	3765360.00	1.89365 (13121718)
439709.00	3765360.00	1.90638	(13121718)
	439714.00	3765360.00	1.91680 (13121718)
439719.00	3765360.00	1.92660	(13121718)
	439729.00	3765360.00	1.94161 (13121718)
439734.00	3765360.00	1.94715	(13121718)
	439739.00	3765360.00	1.95068 (13121718)
439744.00	3765360.00	1.95349	(13121718)
	439749.00	3765360.00	1.95462 (13121718)
439774.00	3765360.00	1.97393	(12011808)
	439779.00	3765360.00	1.97945 (12011808)
439784.00	3765360.00	1.98325	(12011808)
	439789.00	3765360.00	1.98619 (12011808)
439794.00	3765360.00	1.98729	(12011808)
	439799.00	3765360.00	1.98713 (12011808)
439804.00	3765360.00	1.98526	(12011808)
	439809.00	3765360.00	1.98249 (12011808)
439814.00	3765360.00	1.97825	(12011808)
	439839.00	3765360.00	2.00371 (13120808)
439844.00	3765360.00	2.02206	(13120808)
	439849.00	3765360.00	2.03797 (13120808)
439854.00	3765360.00	2.05139	(13120808)
	439859.00	3765360.00	2.06296 (13120808)
439864.00	3765360.00	2.07184	(13120808)
	439869.00	3765360.00	2.07939 (13120808)
439874.00	3765360.00	2.08497	(13120808)
	439879.00	3765360.00	2.08875 (13120808)
439884.00	3765360.00	2.09131	(13120808)
	439674.00	3765365.00	1.91689 (12011417)
439679.00	3765365.00	1.91341	(12011417)
	439684.00	3765365.00	1.90918 (12011417)
439689.00	3765365.00	1.90381	(12011417)
	439694.00	3765365.00	1.89722 (12011417)
439699.00	3765365.00	1.89231	(13121718)
	439704.00	3765365.00	1.90802 (13121718)
439709.00	3765365.00	1.92168	(13121718)
	439714.00	3765365.00	1.93483 (13121718)
439719.00	3765365.00	1.94609	(13121718)
	439729.00	3765365.00	1.96433 (13121718)

439734.00	3765365.00	1.97143	(13121718)
	439739.00	3765365.00	1.97761 (13121718)
439744.00	3765365.00	1.98134	(13121718)
	439749.00	3765365.00	1.98414 (13121718)
439774.00	3765365.00	1.99688	(12011808)
	439779.00	3765365.00	2.00402 (12011808)
439784.00	3765365.00	2.00995	(12011808)
	439789.00	3765365.00	2.01326 (12011808)
439794.00	3765365.00	2.01594	(12011808)
	439799.00	3765365.00	2.01721 (12011808)
439804.00	3765365.00	2.01694	(12011808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*  
 INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439809.00	3765365.00	2.01457	(12011808)
439814.00	3765365.00	2.01137	(12011808)
439839.00	3765365.00	2.01810	(13120808)
439844.00	3765365.00	2.03832	(13120808)
439849.00	3765365.00	2.05573	(13120808)
439854.00	3765365.00	2.07031	(13120808)
439859.00	3765365.00	2.08324	(13120808)
439864.00	3765365.00	2.09391	(13120808)
439869.00	3765365.00	2.10205	(13120808)
439874.00	3765365.00	2.10887	(13120808)
439879.00	3765365.00	2.11297	(13120808)
439884.00	3765365.00	2.11591	(13120808)
439674.00	3765370.00	1.95368	(12011417)
439679.00	3765370.00	1.95232	(12011417)
439684.00	3765370.00	1.94914	(12011417)
439689.00	3765370.00	1.94492	(12011417)
439694.00	3765370.00	1.93975	(12011417)

439699.00	3765370.00	1.93355	(12011417)
	439704.00	3765370.00	1.92631 (12011417)
439709.00	3765370.00	1.93646	(13121718)
	439714.00	3765370.00	1.95048 (13121718)
439719.00	3765370.00	1.96416	(13121718)
	439729.00	3765370.00	1.98636 (13121718)
439734.00	3765370.00	1.99501	(13121718)
	439739.00	3765370.00	2.00225 (13121718)
439744.00	3765370.00	2.00865	(13121718)
	439749.00	3765370.00	2.01287 (13121718)
439774.00	3765370.00	2.01945	(12011808)
	439779.00	3765370.00	2.02822 (12011808)
439784.00	3765370.00	2.03511	(12011808)
	439789.00	3765370.00	2.04062 (12011808)
439794.00	3765370.00	2.04464	(12011808)
	439799.00	3765370.00	2.04668 (12011808)
439804.00	3765370.00	2.04739	(12011808)
	439809.00	3765370.00	2.04726 (12011808)
439814.00	3765370.00	2.04505	(12011808)
	439839.00	3765370.00	2.03218 (13120808)
439844.00	3765370.00	2.05418	(13120808)
	439849.00	3765370.00	2.07340 (13120808)
439854.00	3765370.00	2.08983	(13120808)
	439859.00	3765370.00	2.10408 (13120808)
439864.00	3765370.00	2.11562	(13120808)
	439869.00	3765370.00	2.12449 (13120808)
439874.00	3765370.00	2.13227	(13120808)
	439879.00	3765370.00	2.13769 (13120808)
439884.00	3765370.00	2.14119	(13120808)
	439674.00	3765375.00	1.98921 (12011417)
439679.00	3765375.00	1.98906	(12011417)
	439684.00	3765375.00	1.98856 (12011417)
439689.00	3765375.00	1.98589	(12011417)
	439694.00	3765375.00	1.98222 (12011417)
439699.00	3765375.00	1.97681	(12011417)
	439704.00	3765375.00	1.97085 (12011417)
439709.00	3765375.00	1.96380	(12011417)
	439714.00	3765375.00	1.96579 (13121718)
439719.00	3765375.00	1.98036	(13121718)
	439729.00	3765375.00	2.00659 (13121718)
439734.00	3765375.00	2.01759	(13121718)
	439739.00	3765375.00	2.02689 (13121718)
439744.00	3765375.00	2.03394	(13121718)
	439749.00	3765375.00	2.04061 (13121718)
439754.00	3765375.00	2.04523	(13121718)
	439774.00	3765375.00	2.04784 (13121718)
439779.00	3765375.00	2.05154	(12011808)
	439784.00	3765375.00	2.06034 (12011808)
439789.00	3765375.00	2.06725	(12011808)
	439794.00	3765375.00	2.07221 (12011808)
439799.00	3765375.00	2.07646	(12011808)
	439804.00	3765375.00	2.07842 (12011808)

439809.00	3765375.00	2.07900	(12011808)
	439814.00	3765375.00	2.07803 (12011808)
439839.00	3765375.00	2.05283	(12011808)
	439844.00	3765375.00	2.06990 (13120808)
439849.00	3765375.00	2.09098	(13120808)
	439854.00	3765375.00	2.10935 (13120808)
439859.00	3765375.00	2.12404	(13120808)
	439864.00	3765375.00	2.13717 (13120808)
439869.00	3765375.00	2.14822	(13120808)
	439874.00	3765375.00	2.15626 (13120808)
439879.00	3765375.00	2.16277	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*  
 INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439884.00	3765375.00	2.16740	(13120808)
439774.00	3765380.00	2.08258	(13121718)
439779.00	3765380.00	2.08108	(13121718)
439784.00	3765380.00	2.08441	(12011808)
439789.00	3765380.00	2.09330	(12011808)
439794.00	3765380.00	2.10029	(12011808)
439799.00	3765380.00	2.10520	(12011808)
439804.00	3765380.00	2.10898	(12011808)
439809.00	3765380.00	2.11111	(12011808)
439814.00	3765380.00	2.11122	(12011808)
439769.00	3765385.00	2.11556	(13121718)
439819.00	3765385.00	2.14455	(12011808)
439769.00	3765400.00	2.20886	(13121718)
439844.00	3765400.00	2.24224	(12011808)
439849.00	3765400.00	2.23633	(12011808)
439674.00	3765405.00	2.16517	(12011417)
439714.00	3765405.00	2.22615	(12011417)

439719.00	3765405.00	2.22705	(12011417)
	439734.00	3765405.00	2.21927 (12011417)
439749.00	3765405.00	2.19799	(12011417)
	439754.00	3765405.00	2.19751 (13121718)
439774.00	3765405.00	2.24730	(13121718)
	439779.00	3765405.00	2.25485 (13121718)
439784.00	3765405.00	2.26040	(13121718)
	439789.00	3765405.00	2.26444 (13121718)
439794.00	3765405.00	2.26586	(13121718)
	439799.00	3765405.00	2.26537 (13121718)
439804.00	3765405.00	2.26350	(13121718)
	439809.00	3765405.00	2.26547 (12011808)
439814.00	3765405.00	2.27397	(12011808)
	439819.00	3765405.00	2.28036 (12011808)
439824.00	3765405.00	2.28480	(12011808)
	439829.00	3765405.00	2.28725 (12011808)
439834.00	3765405.00	2.28735	(12011808)
	439839.00	3765405.00	2.28575 (12011808)
439844.00	3765405.00	2.28290	(12011808)
	439849.00	3765405.00	2.27843 (12011808)
439854.00	3765405.00	2.27206	(12011808)
	439859.00	3765405.00	2.26446 (12011808)
439674.00	3765410.00	2.18665	(12011417)
	439679.00	3765410.00	2.20164 (12011417)
439684.00	3765410.00	2.21586	(12011417)
	439689.00	3765410.00	2.22782 (12011417)
439694.00	3765410.00	2.23901	(12011417)
	439699.00	3765410.00	2.24812 (12011417)
439704.00	3765410.00	2.25658	(12011417)
	439709.00	3765410.00	2.26259 (12011417)
439714.00	3765410.00	2.26732	(12011417)
	439719.00	3765410.00	2.26989 (12011417)
439729.00	3765410.00	2.27113	(12011417)
	439734.00	3765410.00	2.26898 (12011417)
439739.00	3765410.00	2.26532	(12011417)
	439744.00	3765410.00	2.25975 (12011417)
439749.00	3765410.00	2.25270	(12011417)
	439774.00	3765410.00	2.27725 (13121718)
439779.00	3765410.00	2.28715	(13121718)
	439784.00	3765410.00	2.29481 (13121718)
439789.00	3765410.00	2.30038	(13121718)
	439794.00	3765410.00	2.30414 (13121718)
439799.00	3765410.00	2.30629	(13121718)
	439804.00	3765410.00	2.30563 (13121718)
439809.00	3765410.00	2.30332	(13121718)
	439814.00	3765410.00	2.30569 (12011808)
439819.00	3765410.00	2.31361	(12011808)
	439824.00	3765410.00	2.31959 (12011808)
439829.00	3765410.00	2.32388	(12011808)
	439834.00	3765410.00	2.32605 (12011808)
439839.00	3765410.00	2.32591	(12011808)
	439844.00	3765410.00	2.32391 (12011808)

439849.00	3765410.00	2.32025	(12011808)
	439854.00	3765410.00	2.31517 (12011808)
439859.00	3765410.00	2.30889	(12011808)
	439674.00	3765415.00	2.20430 (12011417)
439679.00	3765415.00	2.22240	(12011417)
	439684.00	3765415.00	2.23887 (12011417)
439689.00	3765415.00	2.25422	(12011417)
	439694.00	3765415.00	2.26776 (12011417)
439699.00	3765415.00	2.27973	(12011417)
	439704.00	3765415.00	2.28981 (12011417)
439709.00	3765415.00	2.29882	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*  
 INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439714.00	3765415.00	2.30592	(12011417)
439719.00	3765415.00	2.31177	(12011417)
439729.00	3765415.00	2.31725	(12011417)
439734.00	3765415.00	2.31713	(12011417)
439739.00	3765415.00	2.31556	(12011417)
439744.00	3765415.00	2.31268	(12011417)
439749.00	3765415.00	2.30783	(12011417)
439774.00	3765415.00	2.30576	(13121718)
439779.00	3765415.00	2.31786	(13121718)
439784.00	3765415.00	2.32826	(13121718)
439789.00	3765415.00	2.33635	(13121718)
439794.00	3765415.00	2.34173	(13121718)
439799.00	3765415.00	2.34548	(13121718)
439804.00	3765415.00	2.34745	(13121718)
439809.00	3765415.00	2.34690	(13121718)
439814.00	3765415.00	2.34468	(13121718)
439819.00	3765415.00	2.34661	(12011808)

439824.00	3765415.00	2.35482	(12011808)
	439829.00	3765415.00	2.36064 (12011808)
439834.00	3765415.00	2.36394	(12011808)
	439839.00	3765415.00	2.36569 (12011808)
439844.00	3765415.00	2.36552	(12011808)
	439849.00	3765415.00	2.36298 (12011808)
439854.00	3765415.00	2.35872	(12011808)
	439859.00	3765415.00	2.35333 (12011808)
439674.00	3765420.00	2.21979	(12011417)
	439679.00	3765420.00	2.24024 (12011417)
439684.00	3765420.00	2.25901	(12011417)
	439689.00	3765420.00	2.27706 (12011417)
439694.00	3765420.00	2.29322	(12011417)
	439699.00	3765420.00	2.30853 (12011417)
439704.00	3765420.00	2.32155	(12011417)
	439709.00	3765420.00	2.33293 (12011417)
439714.00	3765420.00	2.34283	(12011417)
	439719.00	3765420.00	2.35053 (12011417)
439729.00	3765420.00	2.36164	(12011417)
	439734.00	3765420.00	2.36457 (12011417)
439739.00	3765420.00	2.36503	(12011417)
	439744.00	3765420.00	2.36351 (12011417)
439749.00	3765420.00	2.36131	(12011417)
	439774.00	3765420.00	2.33279 (13121718)
439779.00	3765420.00	2.34792	(13121718)
	439784.00	3765420.00	2.36005 (13121718)
439789.00	3765420.00	2.37067	(13121718)
	439794.00	3765420.00	2.37886 (13121718)
439799.00	3765420.00	2.38486	(13121718)
	439804.00	3765420.00	2.38826 (13121718)
439809.00	3765420.00	2.38988	(13121718)
	439814.00	3765420.00	2.38955 (13121718)
439819.00	3765420.00	2.38734	(13121718)
	439824.00	3765420.00	2.38913 (12011808)
439829.00	3765420.00	2.39688	(12011808)
	439834.00	3765420.00	2.40287 (12011808)
439839.00	3765420.00	2.40580	(12011808)
	439844.00	3765420.00	2.40682 (12011808)
439849.00	3765420.00	2.40578	(12011808)
	439854.00	3765420.00	2.40315 (12011808)
439859.00	3765420.00	2.39877	(12011808)
	439674.00	3765425.00	2.23154 (12011417)
439679.00	3765425.00	2.25431	(12011417)
	439684.00	3765425.00	2.27685 (12011417)
439689.00	3765425.00	2.29696	(12011417)
	439694.00	3765425.00	2.31622 (12011417)
439699.00	3765425.00	2.33346	(12011417)
	439704.00	3765425.00	2.34980 (12011417)
439709.00	3765425.00	2.36404	(12011417)
	439714.00	3765425.00	2.37719 (12011417)
439719.00	3765425.00	2.38805	(12011417)
	439729.00	3765425.00	2.40399 (12011417)

439734.00	3765425.00	2.40929	(12011417)
	439739.00	3765425.00	2.41324 (12011417)
439744.00	3765425.00	2.41439	(12011417)
	439749.00	3765425.00	2.41384 (12011417)
439774.00	3765425.00	2.38405	(12011417)
	439779.00	3765425.00	2.37554 (13121718)
439784.00	3765425.00	2.39145	(13121718)
	439789.00	3765425.00	2.40414 (13121718)
439794.00	3765425.00	2.41443	(13121718)
	439799.00	3765425.00	2.42309 (13121718)
439804.00	3765425.00	2.42908	(13121718)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*  
 INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439809.00	3765425.00	2.43295	(13121718)
439814.00	3765425.00	2.43411	(13121718)
439819.00	3765425.00	2.43349	(13121718)
439824.00	3765425.00	2.43067	(13121718)
439829.00	3765425.00	2.43296	(12011808)
439834.00	3765425.00	2.44062	(12011808)
439839.00	3765425.00	2.44596	(12011808)
439844.00	3765425.00	2.44866	(12011808)
439849.00	3765425.00	2.44923	(12011808)
439854.00	3765425.00	2.44770	(12011808)
439859.00	3765425.00	2.44461	(12011808)
439674.00	3765430.00	2.25440	(12112508)
439679.00	3765430.00	2.26547	(12011417)
439684.00	3765430.00	2.28980	(12011417)
439689.00	3765430.00	2.31370	(12011417)
439694.00	3765430.00	2.33567	(12011417)
439699.00	3765430.00	2.35660	(12011417)

439704.00	3765430.00	2.37510	(12011417)
	439709.00	3765430.00	2.39272 (12011417)
439714.00	3765430.00	2.40797	(12011417)
	439719.00	3765430.00	2.42222 (12011417)
439729.00	3765430.00	2.44482	(12011417)
	439734.00	3765430.00	2.45276 (12011417)
439739.00	3765430.00	2.45850	(12011417)
	439744.00	3765430.00	2.46308 (12011417)
439749.00	3765430.00	2.46532	(12011417)
	439774.00	3765430.00	2.44674 (12011417)
439779.00	3765430.00	2.43767	(12011417)
	439784.00	3765430.00	2.42599 (12011417)
439789.00	3765430.00	2.43615	(13121718)
	439794.00	3765430.00	2.44984 (13121718)
439799.00	3765430.00	2.46037	(13121718)
	439804.00	3765430.00	2.46874 (13121718)
439809.00	3765430.00	2.47482	(13121718)
	439814.00	3765430.00	2.47889 (13121718)
439819.00	3765430.00	2.48012	(13121718)
	439824.00	3765430.00	2.47904 (13121718)
439829.00	3765430.00	2.47591	(13121718)
	439834.00	3765430.00	2.47859 (12011808)
439839.00	3765430.00	2.48606	(12011808)
	439844.00	3765430.00	2.49058 (12011808)
439849.00	3765430.00	2.49306	(12011808)
	439854.00	3765430.00	2.49295 (12011808)
439859.00	3765430.00	2.49071	(12011808)
	439674.00	3765435.00	2.29100 (12112508)
439679.00	3765435.00	2.30038	(12112508)
	439684.00	3765435.00	2.30904 (12112508)
439689.00	3765435.00	2.32645	(12011417)
	439694.00	3765435.00	2.35153 (12011417)
439699.00	3765435.00	2.37515	(12011417)
	439704.00	3765435.00	2.39731 (12011417)
439709.00	3765435.00	2.41794	(12011417)
	439714.00	3765435.00	2.43693 (12011417)
439719.00	3765435.00	2.45355	(12011417)
	439729.00	3765435.00	2.48203 (12011417)
439734.00	3765435.00	2.49395	(12011417)
	439739.00	3765435.00	2.50304 (12011417)
439744.00	3765435.00	2.51000	(12011417)
	439749.00	3765435.00	2.51492 (12011417)
439774.00	3765435.00	2.50881	(12011417)
	439779.00	3765435.00	2.50151 (12011417)
439784.00	3765435.00	2.49257	(12011417)
	439789.00	3765435.00	2.48158 (12011417)
439794.00	3765435.00	2.48259	(13121718)
	439799.00	3765435.00	2.49694 (13121718)
439804.00	3765435.00	2.50814	(13121718)
	439809.00	3765435.00	2.51625 (13121718)
439814.00	3765435.00	2.52250	(13121718)
	439819.00	3765435.00	2.52625 (13121718)

439824.00	3765435.00	2.52737	(13121718)
	439829.00	3765435.00	2.52646 (13121718)
439834.00	3765435.00	2.52307	(13121718)
	439839.00	3765435.00	2.52570 (12011808)
439844.00	3765435.00	2.53268	(12011808)
	439849.00	3765435.00	2.53687 (12011808)
439854.00	3765435.00	2.53865	(12011808)
	439859.00	3765435.00	2.53820 (12011808)
439674.00	3765440.00	2.32369	(12112508)
	439679.00	3765440.00	2.33716 (12112508)
439684.00	3765440.00	2.34803	(12112508)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*  
 INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_2.5 IN  
 MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439689.00	3765440.00	2.35786	(12112508)
439694.00	3765440.00	2.36550	(12112508)
439699.00	3765440.00	2.39035	(12011417)
439704.00	3765440.00	2.41592	(12011417)
439709.00	3765440.00	2.43932	(12011417)
439714.00	3765440.00	2.46173	(12011417)
439719.00	3765440.00	2.48204	(12011417)
439729.00	3765440.00	2.51726	(12011417)
439734.00	3765440.00	2.53147	(12011417)
439739.00	3765440.00	2.54420	(12011417)
439744.00	3765440.00	2.55461	(12011417)
439749.00	3765440.00	2.56294	(12011417)
439774.00	3765440.00	2.57084	(12011417)
439779.00	3765440.00	2.56574	(12011417)
439784.00	3765440.00	2.55857	(12011417)
439789.00	3765440.00	2.54941	(12011417)
439794.00	3765440.00	2.53846	(12011417)

439799.00	3765440.00	2.53120	(13121718)
	439804.00	3765440.00	2.54569 (13121718)
439809.00	3765440.00	2.55740	(13121718)
	439814.00	3765440.00	2.56596 (13121718)
439819.00	3765440.00	2.57202	(13121718)
	439824.00	3765440.00	2.57510 (13121718)
439829.00	3765440.00	2.57633	(13121718)
	439834.00	3765440.00	2.57525 (13121718)
439839.00	3765440.00	2.57113	(13121718)
	439844.00	3765440.00	2.57463 (12011808)
439849.00	3765440.00	2.58086	(12011808)
	439854.00	3765440.00	2.58447 (12011808)
439859.00	3765440.00	2.58558	(12011808)
	439674.00	3765445.00	2.35292 (12112508)
439679.00	3765445.00	2.36889	(12112508)
	439684.00	3765445.00	2.38337 (12112508)
439689.00	3765445.00	2.39661	(12112508)
	439694.00	3765445.00	2.40801 (12112508)
439699.00	3765445.00	2.41729	(12112508)
	439704.00	3765445.00	2.43027 (12011417)
439709.00	3765445.00	2.45758	(12011417)
	439714.00	3765445.00	2.48271 (12011417)
439719.00	3765445.00	2.50664	(12011417)
	439729.00	3765445.00	2.54878 (12011417)
439734.00	3765445.00	2.56699	(12011417)
	439739.00	3765445.00	2.58272 (12011417)
439744.00	3765445.00	2.59661	(12011417)
	439749.00	3765445.00	2.60777 (12011417)
439774.00	3765445.00	2.63110	(12011417)
	439779.00	3765445.00	2.62866 (12011417)
439784.00	3765445.00	2.62451	(12011417)
	439789.00	3765445.00	2.61772 (12011417)
439794.00	3765445.00	2.60881	(12011417)
	439799.00	3765445.00	2.59747 (12011417)
439804.00	3765445.00	2.58472	(12011417)
	439809.00	3765445.00	2.59654 (13121718)
439814.00	3765445.00	2.60828	(13121718)
	439819.00	3765445.00	2.61735 (13121718)
439824.00	3765445.00	2.62328	(13121718)
	439829.00	3765445.00	2.62658 (13121718)
439834.00	3765445.00	2.62701	(13121718)
	439839.00	3765445.00	2.62560 (13121718)
439844.00	3765445.00	2.62164	(13121718)
	439849.00	3765445.00	2.62534 (12011808)
439854.00	3765445.00	2.63100	(12011808)
	439859.00	3765445.00	2.63442 (12011808)
439674.00	3765450.00	2.37860	(12112508)
	439679.00	3765450.00	2.39731 (12112508)
439684.00	3765450.00	2.41517	(12112508)
	439689.00	3765450.00	2.43083 (12112508)
439694.00	3765450.00	2.44585	(12112508)
	439699.00	3765450.00	2.45869 (12112508)

439704.00	3765450.00	2.47030	(12112508)
	439709.00	3765450.00	2.47940 (12112508)
439714.00	3765450.00	2.50018	(12011417)
	439719.00	3765450.00	2.52736 (12011417)
439729.00	3765450.00	2.57631	(12011417)
	439734.00	3765450.00	2.59846 (12011417)
439739.00	3765450.00	2.61789	(12011417)
	439744.00	3765450.00	2.63579 (12011417)
439749.00	3765450.00	2.65098	(12011417)
	439774.00	3765450.00	2.69093 (12011417)
439844.00	3765450.00	2.67765	(13121718)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*  
 INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439849.00	3765450.00	2.67351	(13121718)
439854.00	3765450.00	2.67709	(12011808)
439859.00	3765450.00	2.68231	(12011808)
439674.00	3765455.00	2.39824	(12112508)
439679.00	3765455.00	2.42096	(12112508)
439684.00	3765455.00	2.44227	(12112508)
439689.00	3765455.00	2.46225	(12112508)
439694.00	3765455.00	2.48023	(12112508)
439699.00	3765455.00	2.49639	(12112508)
439704.00	3765455.00	2.51092	(12112508)
439709.00	3765455.00	2.52399	(12112508)
439714.00	3765455.00	2.53501	(12112508)
439719.00	3765455.00	2.54439	(12112508)
439729.00	3765455.00	2.60066	(12011417)
439734.00	3765455.00	2.62607	(12011417)
439739.00	3765455.00	2.64978	(12011417)
439744.00	3765455.00	2.67077	(12011417)

439749.00	3765455.00	2.69001	(12011417)
	439844.00	3765455.00	2.73500 (13121718)
439849.00	3765455.00	2.73207	(13121718)
	439854.00	3765455.00	2.72737 (13121718)
439859.00	3765455.00	2.73189	(12011808)
	439674.00	3765460.00	2.41408 (12112508)
439679.00	3765460.00	2.44027	(12112508)
	439684.00	3765460.00	2.46420 (12112508)
439689.00	3765460.00	2.48771	(12112508)
	439694.00	3765460.00	2.50932 (12112508)
439699.00	3765460.00	2.53013	(12112508)
	439704.00	3765460.00	2.54836 (12112508)
439709.00	3765460.00	2.56499	(12112508)
	439714.00	3765460.00	2.57913 (12112508)
439719.00	3765460.00	2.59204	(12112508)
	439729.00	3765460.00	2.62001 (12011417)
439734.00	3765460.00	2.64944	(12011417)
	439739.00	3765460.00	2.67740 (12011417)
439744.00	3765460.00	2.70302	(12011417)
	439749.00	3765460.00	2.72576 (12011417)
439789.00	3765460.00	2.81790	(12011417)
	439794.00	3765460.00	2.81786 (12011417)
439799.00	3765460.00	2.81420	(12011417)
	439804.00	3765460.00	2.80816 (12011417)
439809.00	3765460.00	2.79965	(12011417)
	439814.00	3765460.00	2.78891 (12011417)
439819.00	3765460.00	2.77626	(12011417)
	439824.00	3765460.00	2.76273 (13121718)
439829.00	3765460.00	2.77481	(13121718)
	439844.00	3765460.00	2.79202 (13121718)
439849.00	3765460.00	2.79178	(13121718)
	439854.00	3765460.00	2.78818 (13121718)
439859.00	3765460.00	2.78324	(13121718)
	439674.00	3765465.00	2.42425 (12112508)
439679.00	3765465.00	2.45354	(12112508)
	439684.00	3765465.00	2.48220 (12112508)
439689.00	3765465.00	2.50900	(12112508)
	439694.00	3765465.00	2.53418 (12112508)
439699.00	3765465.00	2.55792	(12112508)
	439704.00	3765465.00	2.58019 (12112508)
439709.00	3765465.00	2.60098	(12112508)
	439714.00	3765465.00	2.62005 (12112508)
439719.00	3765465.00	2.63651	(12112508)
	439729.00	3765465.00	2.66308 (12112508)
439734.00	3765465.00	2.67385	(12112508)
	439739.00	3765465.00	2.69983 (12011417)
439744.00	3765465.00	2.73013	(12011417)
	439749.00	3765465.00	2.75741 (12011417)
439789.00	3765465.00	2.88245	(12011417)
	439794.00	3765465.00	2.88522 (12011417)
439799.00	3765465.00	2.88533	(12011417)
	439804.00	3765465.00	2.88254 (12011417)

439809.00	3765465.00	2.87698	(12011417)
	439814.00	3765465.00	2.86885 (12011417)
439819.00	3765465.00	2.85753	(12011417)
	439824.00	3765465.00	2.84485 (12011417)
439829.00	3765465.00	2.82970	(12011417)
	439844.00	3765465.00	2.84915 (13121718)
439849.00	3765465.00	2.85144	(13121718)
	439854.00	3765465.00	2.85084 (13121718)
439859.00	3765465.00	2.84700	(13121718)
	439674.00	3765470.00	2.42937 (12112508)
439679.00	3765470.00	2.46161	(12112508)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*  
 INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439684.00	3765470.00	2.49342	(12112508)
439689.00	3765470.00	2.52366	(12112508)
439694.00	3765470.00	2.55358	(12112508)
439699.00	3765470.00	2.58132	(12112508)
439704.00	3765470.00	2.60790	(12112508)
439709.00	3765470.00	2.63187	(12112508)
439714.00	3765470.00	2.65497	(12112508)
439719.00	3765470.00	2.67560	(12112508)
439729.00	3765470.00	2.71173	(12112508)
439734.00	3765470.00	2.72602	(12112508)
439739.00	3765470.00	2.73826	(12112508)
439744.00	3765470.00	2.75236	(12011417)
439749.00	3765470.00	2.78442	(12011417)
439789.00	3765470.00	2.94527	(12011417)
439794.00	3765470.00	2.95221	(12011417)
439799.00	3765470.00	2.95548	(12011417)
439804.00	3765470.00	2.95609	(12011417)

439809.00	3765470.00	2.95331	(12011417)
	439814.00	3765470.00	2.94856 (12011417)
439819.00	3765470.00	2.94056	(12011417)
	439824.00	3765470.00	2.92960 (12011417)
439829.00	3765470.00	2.91637	(12011417)
	439844.00	3765470.00	2.90682 (13121718)
439849.00	3765470.00	2.91174	(13121718)
	439854.00	3765470.00	2.91407 (13121718)
439859.00	3765470.00	2.91174	(13121718)
	439674.00	3765475.00	2.42774 (12112508)
439679.00	3765475.00	2.46445	(12112508)
	439684.00	3765475.00	2.49973 (12112508)
439689.00	3765475.00	2.53377	(12112508)
	439694.00	3765475.00	2.56661 (12112508)
439699.00	3765475.00	2.59821	(12112508)
	439704.00	3765475.00	2.62866 (12112508)
439709.00	3765475.00	2.65784	(12112508)
	439714.00	3765475.00	2.68536 (12112508)
439719.00	3765475.00	2.71036	(12112508)
	439729.00	3765475.00	2.75456 (12112508)
439734.00	3765475.00	2.77327	(12112508)
	439739.00	3765475.00	2.79063 (12112508)
439744.00	3765475.00	2.80488	(12112508)
	439749.00	3765475.00	2.81643 (12112508)
439754.00	3765475.00	2.84085	(12011417)
	439789.00	3765475.00	3.00512 (12011417)
439794.00	3765475.00	3.01611	(12011417)
	439799.00	3765475.00	3.02438 (12011417)
439804.00	3765475.00	3.02883	(12011417)
	439809.00	3765475.00	3.03008 (12011417)
439814.00	3765475.00	3.02787	(12011417)
	439819.00	3765475.00	3.02278 (12011417)
439824.00	3765475.00	3.01498	(12011417)
	439829.00	3765475.00	3.00436 (12011417)
439269.00	3764900.00	0.79417	(13020408)
	439369.00	3764900.00	0.82197 (15111218)
439469.00	3764900.00	0.87465	(14100607)
	439569.00	3764900.00	0.95929 (13120808)
439669.00	3764900.00	0.96176	(13120808)
	439769.00	3764900.00	0.89762 (12010217)
439869.00	3764900.00	0.96847	(12010217)
	439969.00	3764900.00	0.90814 (12010217)
440069.00	3764900.00	0.89198	(13123108)
	440169.00	3764900.00	0.87850 (12121717)
440269.00	3764900.00	0.84493	(12111319)
	439269.00	3765000.00	0.87515 (13121718)
439369.00	3765000.00	0.90742	(13020408)
	439469.00	3765000.00	0.94567 (15111218)
439569.00	3765000.00	1.00530	(14100607)
	439669.00	3765000.00	1.11113 (13120808)
439769.00	3765000.00	1.05361	(13120808)
	439869.00	3765000.00	1.07555 (12010217)

439969.00	3765000.00	1.06247	(12010217)
	440069.00	3765000.00	0.99046 (13123108)
440169.00	3765000.00	0.97236	(12121717)
	440269.00	3765000.00	0.94132 (13012419)
439269.00	3765100.00	0.95594	(12011417)
	439369.00	3765100.00	1.01369 (13121718)
439469.00	3765100.00	1.05630	(13020408)
	439569.00	3765100.00	1.11184 (15111218)
439669.00	3765100.00	1.19549	(13120808)
	439769.00	3765100.00	1.28400 (13120808)
439869.00	3765100.00	1.18869	(12010217)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*  
 INCLUDING SOURCE(S):  
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 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
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 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439969.00	3765100.00	1.23508	(12010217)
440069.00	3765100.00	1.11448	(13123108)
440169.00	3765100.00	1.09006	(12121717)
440269.00	3765100.00	1.07380	(13012419)
439269.00	3765200.00	1.10272	(12011417)
439369.00	3765200.00	1.18217	(12011417)
439469.00	3765200.00	1.19330	(14010708)
439569.00	3765200.00	1.28295	(13121718)
439669.00	3765200.00	1.34339	(15111218)
439769.00	3765200.00	1.48215	(13120808)
439869.00	3765200.00	1.47316	(13120808)
439969.00	3765200.00	1.44030	(12010217)
440069.00	3765200.00	1.36268	(12010217)
440169.00	3765200.00	1.25521	(13123108)
440269.00	3765200.00	1.29102	(15010717)
439269.00	3765300.00	1.18560	(13121618)
439369.00	3765300.00	1.31066	(12112508)

439469.00	3765300.00	1.44479	(12011417)
	439569.00	3765300.00	1.55490 (12011417)
439669.00	3765300.00	1.63665	(13121718)
	439769.00	3765300.00	1.67592 (15111218)
439869.00	3765300.00	1.82906	(13120808)
	439969.00	3765300.00	1.71501 (12010217)
440069.00	3765300.00	1.66851	(12010217)
	440169.00	3765300.00	1.48568 (12010217)
440269.00	3765300.00	1.58569	(15010717)
	439269.00	3765400.00	1.43292 (15111218)
439369.00	3765400.00	1.49162	(13120808)
	439469.00	3765400.00	1.53169 (12111318)
439569.00	3765400.00	1.86199	(12112508)
	439669.00	3765400.00	2.12939 (12011417)
439769.00	3765400.00	2.20886	(13121718)
	439869.00	3765400.00	2.26703 (13120808)
439969.00	3765400.00	2.26317	(13120808)
	440069.00	3765400.00	2.10592 (12010217)
440169.00	3765400.00	1.98168	(15010717)
	440269.00	3765400.00	1.96814 (13121617)
439269.00	3765500.00	1.95361	(12011417)
	439369.00	3765500.00	1.90023 (15111218)
439469.00	3765500.00	1.92041	(13120808)
	439569.00	3765500.00	1.99726 (12010708)
439669.00	3765500.00	2.50914	(12111318)
	439769.00	3765500.00	3.17174 (12112508)
439869.00	3765500.00	3.37930	(12011417)
	439969.00	3765500.00	3.23930 (13120808)
440069.00	3765500.00	3.03135	(13120808)
	440169.00	3765500.00	2.77679 (16010608)
440269.00	3765500.00	2.78974	(15113017)
	439269.00	3765600.00	2.66387 (12111318)
439369.00	3765600.00	3.11454	(12011417)
	439469.00	3765600.00	2.91895 (13121718)
439569.00	3765600.00	2.78500	(12010217)
	439669.00	3765600.00	3.00827 (16121918)
439769.00	3765600.00	4.16378	(13121208)
	439869.00	3765600.00	6.41011 (12111318)
439969.00	3765600.00	7.36062	(12011417)
	440069.00	3765600.00	5.93789 (13120808)
440169.00	3765600.00	5.47126	(12011608)
	440269.00	3765600.00	4.88882 (14101107)
439269.00	3765700.00	4.44473	(14012908)
	439369.00	3765700.00	6.09058 (16121918)
439469.00	3765700.00	9.30488	(12101307)
	439569.00	3765700.00	6.16985 (12011417)
439669.00	3765700.00	4.70317	(12010217)
	439769.00	3765700.00	3.99213 (12010217)
439869.00	3765700.00	5.29710	(12111317)
	439969.00	3765700.00	6.62654 (15120818)
440069.00	3765700.00	8.23024	(15120818)
	440169.00	3765700.00	11.96012 (13111217)

440269.00	3765700.00	20.62437	(13111217)
	439269.00	3765800.00	4.18772 (12111317)
439369.00	3765800.00	5.82499	(12111317)
	439469.00	3765800.00	6.05319 (12111317)
439569.00	3765800.00	6.68819	(12111317)
	439669.00	3765800.00	8.09639 (15120818)
439769.00	3765800.00	10.72225	(15120818)
	439869.00	3765800.00	17.66955 (13111217)
439969.00	3765800.00	7.53330	(14121418)
	440069.00	3765800.00	4.37011 (13111218)
440169.00	3765800.00	4.30415	(13111218)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEVA \*\*\*  
 INCLUDING SOURCE(S):  
 A0000089 , A0000090 , A0000091 , A0000092 ,  
 A0000093 ,  
 A0000094 , A0000095 , A0000096 ,  
 A0000097 , A0000098 , A0000099 , A0000100 ,  
 A0000101 ,  
 A0000102 , A0000103 , A0000104 ,  
 A0000105 , A0000106 , A0000107 , A0000108 ,  
 A0000109 ,  
 A0000110 , A0000111 , A0000112 ,  
 A0000113 , A0000114 , A0000115 ,  
 A0000116 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
440269.00	3765800.00	4.42246	(13111217)
439269.00	3765900.00	2.93442	(12100707)
439369.00	3765900.00	3.08534	(15120818)
439469.00	3765900.00	3.25678	(15120818)
439569.00	3765900.00	3.36571	(15120818)
439669.00	3765900.00	3.48176	(15112217)
439769.00	3765900.00	3.31195	(13111218)
439869.00	3765900.00	3.37187	(13111217)
439969.00	3765900.00	3.47892	(13111217)
440069.00	3765900.00	2.97520	(12011717)
440169.00	3765900.00	2.29522	(12120419)
440269.00	3765900.00	2.45150	(12122117)
439649.00	3765310.00	1.64144	(13121718)
439679.00	3765310.00	1.68121	(13121718)
439709.00	3765310.00	1.68979	(12011808)
439739.00	3765310.00	1.72526	(12011808)
439769.00	3765310.00	1.72095	(12011808)

439799.00	3765310.00	1.73488	(13120808)
	439829.00	3765310.00	1.82908 (13120808)
439859.00	3765310.00	1.86571	(13120808)
	439889.00	3765310.00	1.86191 (13120808)
439649.00	3765340.00	1.75309	(12011417)
	439679.00	3765340.00	1.77730 (13121718)
439709.00	3765340.00	1.82922	(13121718)
	439739.00	3765340.00	1.83783 (13121718)
439769.00	3765340.00	1.87378	(12011808)
	439799.00	3765340.00	1.86509 (12011808)
439829.00	3765340.00	1.91134	(13120808)
	439859.00	3765340.00	1.98229 (13120808)
439889.00	3765340.00	1.99557	(13120808)
	439649.00	3765370.00	1.94415 (12011417)
439679.00	3765370.00	1.95232	(12011417)
	439709.00	3765370.00	1.93646 (13121718)
439739.00	3765370.00	2.00225	(13121718)
	439769.00	3765370.00	2.01560 (13121718)
439799.00	3765370.00	2.04668	(12011808)
	439829.00	3765370.00	2.03042 (12011808)
439859.00	3765370.00	2.10408	(13120808)
	439889.00	3765370.00	2.14372 (13120808)
439649.00	3765400.00	2.07059	(12011417)
	439679.00	3765400.00	2.15163 (12011417)
439709.00	3765400.00	2.18409	(12011417)
	439739.00	3765400.00	2.16169 (12011417)
439769.00	3765400.00	2.20886	(13121718)
	439799.00	3765400.00	2.22476 (13121718)
439829.00	3765400.00	2.25007	(12011808)
	439859.00	3765400.00	2.22712 (13120808)
439889.00	3765400.00	2.31090	(13120808)
	439649.00	3765430.00	2.19840 (12112508)
439679.00	3765430.00	2.26547	(12011417)
	439709.00	3765430.00	2.39272 (12011417)
439739.00	3765430.00	2.45850	(12011417)
	439769.00	3765430.00	2.45393 (12011417)
439799.00	3765430.00	2.46037	(13121718)
	439829.00	3765430.00	2.47591 (13121718)
439859.00	3765430.00	2.49071	(12011808)
	439889.00	3765430.00	2.50140 (13120808)
439649.00	3765460.00	2.26860	(12112508)
	439679.00	3765460.00	2.44027 (12112508)
439709.00	3765460.00	2.56499	(12112508)
	439739.00	3765460.00	2.67740 (12011417)
439769.00	3765460.00	2.79359	(12011417)
	439799.00	3765460.00	2.81420 (12011417)
439829.00	3765460.00	2.77481	(13121718)
	439859.00	3765460.00	2.78324 (13121718)
439889.00	3765460.00	2.77983	(12011808)
	439649.00	3765490.00	2.36470 (12111318)
439679.00	3765490.00	2.47452	(12111318)
	439709.00	3765490.00	2.69628 (12112508)

439739.00	3765490.00	2.91465	(12112508)
439769.00	3765490.00	3.05171	(12112508)
439799.00	3765490.00	3.21528	(12011417)
439829.00	3765490.00	3.27223	(12011417)
439859.00	3765490.00	3.19872	(12011417)
439889.00	3765490.00	3.17488	(12011808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439674.00	3765310.00	8.94148	(13121718)
439679.00	3765310.00	8.94050	(13121718)
439684.00	3765310.00	8.93483	(13121718)
439689.00	3765310.00	8.93321	(13121718)
439694.00	3765310.00	8.92577	(13121718)
439699.00	3765310.00	8.91506	(13121718)
439704.00	3765310.00	8.90421	(13121718)
439709.00	3765310.00	8.89138	(13121718)
439714.00	3765310.00	8.88001	(13121718)
439719.00	3765310.00	8.86060	(13121718)
439729.00	3765310.00	8.82261	(13121718)
439734.00	3765310.00	8.80309	(13121718)
439739.00	3765310.00	8.77948	(13121718)
439744.00	3765310.00	8.75379	(13121718)
439749.00	3765310.00	8.72696	(13121718)
439764.00	3765310.00	8.68617	(15111218)
439769.00	3765310.00	8.68414	(15111218)

439774.00	3765310.00	8.68817	(15111218)
	439779.00	3765310.00	8.68386 (15111218)
439784.00	3765310.00	8.68202	(15111218)
	439789.00	3765310.00	8.67523 (15111218)
439794.00	3765310.00	8.69225	(13120808)
	439799.00	3765310.00	8.72730 (13120808)
439804.00	3765310.00	8.75566	(13120808)
	439809.00	3765310.00	8.78535 (13120808)
439814.00	3765310.00	8.81014	(13120808)
	439819.00	3765310.00	8.83316 (13120808)
439824.00	3765310.00	8.85418	(13120808)
	439829.00	3765310.00	8.87117 (13120808)
439839.00	3765310.00	8.89955	(13120808)
	439844.00	3765310.00	8.91113 (13120808)
439849.00	3765310.00	8.91809	(13120808)
	439854.00	3765310.00	8.92588 (13120808)
439859.00	3765310.00	8.92811	(13120808)
	439864.00	3765310.00	8.93035 (13120808)
439869.00	3765310.00	8.93298	(13120808)
	439874.00	3765310.00	8.93005 (13120808)
439879.00	3765310.00	8.92897	(13120808)
	439884.00	3765310.00	8.92496 (13120808)
439674.00	3765315.00	9.03918	(13121718)
	439679.00	3765315.00	9.03763 (13121718)
439684.00	3765315.00	9.03629	(13121718)
	439689.00	3765315.00	9.03005 (13121718)
439694.00	3765315.00	9.02871	(13121718)
	439699.00	3765315.00	9.02239 (13121718)
439704.00	3765315.00	9.01347	(13121718)
	439709.00	3765315.00	9.00067 (13121718)
439714.00	3765315.00	8.98900	(13121718)
	439719.00	3765315.00	8.97613 (13121718)
439729.00	3765315.00	8.94189	(13121718)
	439734.00	3765315.00	8.92086 (13121718)
439739.00	3765315.00	8.90087	(13121718)
	439744.00	3765315.00	8.87702 (13121718)
439749.00	3765315.00	8.85274	(13121718)
	439764.00	3765315.00	8.76627 (13121718)
439769.00	3765315.00	8.77182	(15111218)
	439774.00	3765315.00	8.77024 (15111218)
439779.00	3765315.00	8.77321	(15111218)
	439784.00	3765315.00	8.76870 (15111218)
439789.00	3765315.00	8.76695	(15111218)
	439794.00	3765315.00	8.75913 (15111218)
439799.00	3765315.00	8.78610	(13120808)
	439804.00	3765315.00	8.82141 (13120808)
439809.00	3765315.00	8.84930	(13120808)
	439814.00	3765315.00	8.87809 (13120808)
439819.00	3765315.00	8.90272	(13120808)
	439824.00	3765315.00	8.92427 (13120808)
439829.00	3765315.00	8.94451	(13120808)
	439839.00	3765315.00	8.97649 (13120808)

439844.00	3765315.00	8.98545	(13120808)
	439849.00	3765315.00	8.99980 (13120808)
439854.00	3765315.00	9.00300	(13120808)
	439859.00	3765315.00	9.01028 (13120808)
439864.00	3765315.00	9.01213	(13120808)
	439869.00	3765315.00	9.01432 (13120808)
439874.00	3765315.00	9.01372	(13120808)
	439879.00	3765315.00	9.01239 (13120808)
439884.00	3765315.00	9.00964	(13120808)
	439674.00	3765320.00	9.12814 (13121718)
439679.00	3765320.00	9.13375	(13121718)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439684.00	3765320.00	9.13441	(13121718)
439689.00	3765320.00	9.13530	(13121718)
439694.00	3765320.00	9.12838	(13121718)
439699.00	3765320.00	9.12662	(13121718)
439704.00	3765320.00	9.12038	(13121718)
439709.00	3765320.00	9.11411	(13121718)
439714.00	3765320.00	9.10012	(13121718)
439719.00	3765320.00	9.08896	(13121718)
439729.00	3765320.00	9.06023	(13121718)
439734.00	3765320.00	9.04349	(13121718)
439739.00	3765320.00	9.02050	(13121718)
439744.00	3765320.00	9.00233	(13121718)
439749.00	3765320.00	8.97523	(13121718)
439764.00	3765320.00	8.89798	(13121718)
439769.00	3765320.00	8.86462	(13121718)
439774.00	3765320.00	8.85803	(15111218)
439779.00	3765320.00	8.85846	(15111218)

439784.00	3765320.00	8.85890	(15111218)
	439789.00	3765320.00	8.85536 (15111218)
439794.00	3765320.00	8.85261	(15111218)
	439799.00	3765320.00	8.84882 (13120808)
439804.00	3765320.00	8.88285	(13120808)
	439809.00	3765320.00	8.91604 (13120808)
439814.00	3765320.00	8.94572	(13120808)
	439819.00	3765320.00	8.97322 (13120808)
439824.00	3765320.00	8.99619	(13120808)
	439829.00	3765320.00	9.01769 (13120808)
439839.00	3765320.00	9.05156	(13120808)
	439844.00	3765320.00	9.06728 (13120808)
439849.00	3765320.00	9.07511	(13120808)
	439854.00	3765320.00	9.08633 (13120808)
439859.00	3765320.00	9.09094	(13120808)
	439864.00	3765320.00	9.09705 (13120808)
439869.00	3765320.00	9.09624	(13120808)
	439874.00	3765320.00	9.10102 (13120808)
439879.00	3765320.00	9.09664	(13120808)
	439884.00	3765320.00	9.09433 (13120808)
439674.00	3765325.00	9.22503	(13121718)
	439679.00	3765325.00	9.22667 (13121718)
439684.00	3765325.00	9.23134	(13121718)
	439689.00	3765325.00	9.23183 (13121718)
439694.00	3765325.00	9.23563	(13121718)
	439699.00	3765325.00	9.22961 (13121718)
439704.00	3765325.00	9.22628	(13121718)
	439709.00	3765325.00	9.21988 (13121718)
439714.00	3765325.00	9.21506	(13121718)
	439719.00	3765325.00	9.20257 (13121718)
439729.00	3765325.00	9.17693	(13121718)
	439734.00	3765325.00	9.16115 (13121718)
439739.00	3765325.00	9.14638	(13121718)
	439744.00	3765325.00	9.12249 (13121718)
439749.00	3765325.00	9.10536	(13121718)
	439754.00	3765325.00	9.07640 (13121718)
439769.00	3765325.00	9.00063	(13121718)
	439774.00	3765325.00	8.96717 (13121718)
439779.00	3765325.00	8.94547	(15111218)
	439784.00	3765325.00	8.94763 (15111218)
439789.00	3765325.00	8.94701	(15111218)
	439794.00	3765325.00	8.94362 (15111218)
439799.00	3765325.00	8.93987	(15111218)
	439804.00	3765325.00	8.94678 (13120808)
439809.00	3765325.00	8.98170	(13120808)
	439814.00	3765325.00	9.01410 (13120808)
439819.00	3765325.00	9.04218	(13120808)
	439824.00	3765325.00	9.07029 (13120808)
439829.00	3765325.00	9.09175	(13120808)
	439839.00	3765325.00	9.13084 (13120808)
439844.00	3765325.00	9.14522	(13120808)
	439849.00	3765325.00	9.15687 (13120808)

439854.00	3765325.00	9.16734	(13120808)
	439859.00	3765325.00	9.17544 (13120808)
439864.00	3765325.00	9.17833	(13120808)
	439869.00	3765325.00	9.18468 (13120808)
439874.00	3765325.00	9.18299	(13120808)
	439879.00	3765325.00	9.18563 (13120808)
439884.00	3765325.00	9.18167	(13120808)
	439674.00	3765330.00	9.31499 (13121718)
439679.00	3765330.00	9.32449	(13121718)
	439684.00	3765330.00	9.32822 (13121718)
439689.00	3765330.00	9.33091	(13121718)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439694.00	3765330.00	9.33231	(13121718)
439699.00	3765330.00	9.33632	(13121718)
439704.00	3765330.00	9.33353	(13121718)
439709.00	3765330.00	9.32912	(13121718)
439714.00	3765330.00	9.32208	(13121718)
439719.00	3765330.00	9.31717	(13121718)
439729.00	3765330.00	9.29529	(13121718)
439734.00	3765330.00	9.28039	(13121718)
439739.00	3765330.00	9.26525	(13121718)
439744.00	3765330.00	9.24978	(13121718)
439749.00	3765330.00	9.22825	(13121718)
439754.00	3765330.00	9.20907	(13121718)
439774.00	3765330.00	9.10432	(13121718)
439779.00	3765330.00	9.07245	(13121718)
439784.00	3765330.00	9.03967	(13121718)
439789.00	3765330.00	9.03886	(15111218)
439794.00	3765330.00	9.03770	(15111218)

439799.00	3765330.00	9.03418	(15111218)
	439804.00	3765330.00	9.02999 (15111218)
439809.00	3765330.00	9.04740	(13120808)
	439814.00	3765330.00	9.08173 (13120808)
439819.00	3765330.00	9.11449	(13120808)
	439824.00	3765330.00	9.14141 (13120808)
439829.00	3765330.00	9.16849	(13120808)
	439839.00	3765330.00	9.21077 (13120808)
439844.00	3765330.00	9.22419	(13120808)
	439849.00	3765330.00	9.24141 (13120808)
439854.00	3765330.00	9.24939	(13120808)
	439859.00	3765330.00	9.25990 (13120808)
439864.00	3765330.00	9.26573	(13120808)
	439869.00	3765330.00	9.26808 (13120808)
439874.00	3765330.00	9.27277	(13120808)
	439879.00	3765330.00	9.27143 (13120808)
439884.00	3765330.00	9.27345	(13120808)
	439674.00	3765335.00	9.40376 (13121718)
439679.00	3765335.00	9.41535	(13121718)
	439684.00	3765335.00	9.42371 (13121718)
439689.00	3765335.00	9.43325	(13121718)
	439694.00	3765335.00	9.43314 (13121718)
439699.00	3765335.00	9.43594	(13121718)
	439704.00	3765335.00	9.43787 (13121718)
439709.00	3765335.00	9.43862	(13121718)
	439714.00	3765335.00	9.43484 (13121718)
439719.00	3765335.00	9.42677	(13121718)
	439729.00	3765335.00	9.41189 (13121718)
439734.00	3765335.00	9.40325	(13121718)
	439739.00	3765335.00	9.38614 (13121718)
439744.00	3765335.00	9.37245	(13121718)
	439749.00	3765335.00	9.35455 (13121718)
439774.00	3765335.00	9.23815	(13121718)
	439779.00	3765335.00	9.21063 (13121718)
439784.00	3765335.00	9.17927	(13121718)
	439789.00	3765335.00	9.14569 (13121718)
439794.00	3765335.00	9.13157	(15111218)
	439839.00	3765335.00	9.28750 (13120808)
439844.00	3765335.00	9.30943	(13120808)
	439849.00	3765335.00	9.32147 (13120808)
439854.00	3765335.00	9.33722	(13120808)
	439859.00	3765335.00	9.34372 (13120808)
439864.00	3765335.00	9.35493	(13120808)
	439869.00	3765335.00	9.35750 (13120808)
439874.00	3765335.00	9.36097	(13120808)
	439879.00	3765335.00	9.36323 (13120808)
439884.00	3765335.00	9.36096	(13120808)
	439674.00	3765340.00	9.50005 (13121718)
439679.00	3765340.00	9.50542	(13121718)
	439684.00	3765340.00	9.51906 (13121718)
439689.00	3765340.00	9.52495	(13121718)
	439694.00	3765340.00	9.53822 (13121718)

439699.00	3765340.00	9.53942	(13121718)
	439704.00	3765340.00	9.54226 (13121718)
439709.00	3765340.00	9.54363	(13121718)
	439714.00	3765340.00	9.54437 (13121718)
439719.00	3765340.00	9.54418	(13121718)
	439729.00	3765340.00	9.53022 (13121718)
439734.00	3765340.00	9.51864	(13121718)
	439739.00	3765340.00	9.51219 (13121718)
439744.00	3765340.00	9.49527	(13121718)
	439749.00	3765340.00	9.48192 (13121718)
439774.00	3765340.00	9.37430	(13121718)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_2.5 IN  
 MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439779.00	3765340.00	9.34613	(13121718)
439784.00	3765340.00	9.31887	(13121718)
439789.00	3765340.00	9.28847	(13121718)
439794.00	3765340.00	9.25488	(13121718)
439839.00	3765340.00	9.37021	(13120808)
439844.00	3765340.00	9.38947	(13120808)
439849.00	3765340.00	9.40906	(13120808)
439854.00	3765340.00	9.41998	(13120808)
439859.00	3765340.00	9.43525	(13120808)
439864.00	3765340.00	9.44020	(13120808)
439869.00	3765340.00	9.45032	(13120808)
439874.00	3765340.00	9.45071	(13120808)
439879.00	3765340.00	9.45519	(13120808)
439884.00	3765340.00	9.45354	(13120808)
439674.00	3765345.00	9.66384	(12011417)
439679.00	3765345.00	9.63153	(12011417)
439684.00	3765345.00	9.61150	(13121718)

439689.00	3765345.00	9.62417	(13121718)
	439694.00	3765345.00	9.63097 (13121718)
439699.00	3765345.00	9.64244	(13121718)
	439704.00	3765345.00	9.64925 (13121718)
439709.00	3765345.00	9.65068	(13121718)
	439714.00	3765345.00	9.65241 (13121718)
439719.00	3765345.00	9.65149	(13121718)
	439729.00	3765345.00	9.64553 (13121718)
439734.00	3765345.00	9.64037	(13121718)
	439739.00	3765345.00	9.62896 (13121718)
439744.00	3765345.00	9.62252	(13121718)
	439749.00	3765345.00	9.60700 (13121718)
439774.00	3765345.00	9.51112	(13121718)
	439779.00	3765345.00	9.48562 (13121718)
439784.00	3765345.00	9.45781	(13121718)
	439789.00	3765345.00	9.42848 (13121718)
439794.00	3765345.00	9.40024	(13121718)
	439839.00	3765345.00	9.45220 (13120808)
439844.00	3765345.00	9.47446	(13120808)
	439849.00	3765345.00	9.49284 (13120808)
439854.00	3765345.00	9.51067	(13120808)
	439859.00	3765345.00	9.52059 (13120808)
439864.00	3765345.00	9.53340	(13120808)
	439869.00	3765345.00	9.53770 (13120808)
439874.00	3765345.00	9.54793	(13120808)
	439879.00	3765345.00	9.54551 (13120808)
439884.00	3765345.00	9.55114	(13120808)
	439674.00	3765350.00	9.83553 (12011417)
439679.00	3765350.00	9.80280	(12011417)
	439684.00	3765350.00	9.77127 (12011417)
439689.00	3765350.00	9.73434	(12011417)
	439694.00	3765350.00	9.73173 (13121718)
439699.00	3765350.00	9.74020	(13121718)
	439704.00	3765350.00	9.74901 (13121718)
439709.00	3765350.00	9.75914	(13121718)
	439714.00	3765350.00	9.76254 (13121718)
439719.00	3765350.00	9.76421	(13121718)
	439729.00	3765350.00	9.76455 (13121718)
439734.00	3765350.00	9.75865	(13121718)
	439739.00	3765350.00	9.75411 (13121718)
439744.00	3765350.00	9.74184	(13121718)
	439749.00	3765350.00	9.73615 (13121718)
439774.00	3765350.00	9.64661	(13121718)
	439779.00	3765350.00	9.62550 (13121718)
439784.00	3765350.00	9.59936	(13121718)
	439789.00	3765350.00	9.57233 (13121718)
439794.00	3765350.00	9.54163	(13121718)
	439839.00	3765350.00	9.53385 (13120808)
439844.00	3765350.00	9.55981	(13120808)
	439849.00	3765350.00	9.57990 (13120808)
439854.00	3765350.00	9.59857	(13120808)
	439859.00	3765350.00	9.61282 (13120808)

439864.00	3765350.00	9.62323	(13120808)
	439869.00	3765350.00	9.63467 (13120808)
439874.00	3765350.00	9.63762	(13120808)
	439879.00	3765350.00	9.64592 (13120808)
439884.00	3765350.00	9.64349	(13120808)
	439674.00	3765355.00	10.00764 (12011417)
439679.00	3765355.00	9.97835	(12011417)
	439684.00	3765355.00	9.94514 (12011417)
439689.00	3765355.00	9.91356	(12011417)
	439694.00	3765355.00	9.87769 (12011417)
439699.00	3765355.00	9.84372	(13121718)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_2.5 IN  
 MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439704.00	3765355.00	9.85223	(13121718)
439709.00	3765355.00	9.85977	(13121718)
439714.00	3765355.00	9.86990	(13121718)
439719.00	3765355.00	9.87662	(13121718)
439729.00	3765355.00	9.87707	(13121718)
439734.00	3765355.00	9.87816	(13121718)
439739.00	3765355.00	9.87317	(13121718)
439744.00	3765355.00	9.87112	(13121718)
439749.00	3765355.00	9.85683	(13121718)
439774.00	3765355.00	9.78689	(13121718)
439779.00	3765355.00	9.76337	(13121718)
439784.00	3765355.00	9.74077	(13121718)
439789.00	3765355.00	9.71653	(13121718)
439794.00	3765355.00	9.68821	(13121718)
439839.00	3765355.00	9.62016	(13120808)
439844.00	3765355.00	9.64352	(13120808)
439849.00	3765355.00	9.67010	(13120808)

439854.00	3765355.00	9.68768	(13120808)
	439859.00	3765355.00	9.70604 (13120808)
439864.00	3765355.00	9.71827	(13120808)
	439869.00	3765355.00	9.72810 (13120808)
439874.00	3765355.00	9.73576	(13120808)
	439879.00	3765355.00	9.73993 (13120808)
439884.00	3765355.00	9.74462	(13120808)
	439674.00	3765360.00	10.17741 (12011417)
439679.00	3765360.00	10.15089	(12011417)
	439684.00	3765360.00	10.12424 (12011417)
439689.00	3765360.00	10.09134	(12011417)
	439694.00	3765360.00	10.05977 (12011417)
439699.00	3765360.00	10.02296	(12011417)
	439704.00	3765360.00	9.98898 (12011417)
439709.00	3765360.00	9.96773	(13121718)
	439714.00	3765360.00	9.97495 (13121718)
439719.00	3765360.00	9.98379	(13121718)
	439729.00	3765360.00	9.99670 (13121718)
439734.00	3765360.00	9.99524	(13121718)
	439739.00	3765360.00	9.99485 (13121718)
439744.00	3765360.00	9.99002	(13121718)
	439749.00	3765360.00	9.98880 (13121718)
439774.00	3765360.00	9.92475	(13121718)
	439779.00	3765360.00	9.90480 (13121718)
439784.00	3765360.00	9.88403	(13121718)
	439789.00	3765360.00	9.85797 (13121718)
439794.00	3765360.00	9.83540	(13121718)
	439799.00	3765360.00	9.80707 (13121718)
439804.00	3765360.00	9.77763	(13121718)
	439809.00	3765360.00	9.74467 (13121718)
439814.00	3765360.00	9.71312	(13121718)
	439839.00	3765360.00	9.70255 (13120808)
439844.00	3765360.00	9.73420	(13120808)
	439849.00	3765360.00	9.75627 (13120808)
439854.00	3765360.00	9.78198	(13120808)
	439859.00	3765360.00	9.79718 (13120808)
439864.00	3765360.00	9.81465	(13120808)
	439869.00	3765360.00	9.82399 (13120808)
439874.00	3765360.00	9.83508	(13120808)
	439879.00	3765360.00	9.83967 (13120808)
439884.00	3765360.00	9.84467	(13120808)
	439674.00	3765365.00	10.34743 (12011417)
439679.00	3765365.00	10.32308	(12011417)
	439684.00	3765365.00	10.29762 (12011417)
439689.00	3765365.00	10.27090	(12011417)
	439694.00	3765365.00	10.24097 (12011417)
439699.00	3765365.00	10.20991	(12011417)
	439704.00	3765365.00	10.17326 (12011417)
439709.00	3765365.00	10.13803	(12011417)
	439714.00	3765365.00	10.09932 (12011417)
439719.00	3765365.00	10.09419	(13121718)
	439729.00	3765365.00	10.10902 (13121718)

439734.00	3765365.00	10.11523	(13121718)
	439739.00	3765365.00	10.11771 (13121718)
439744.00	3765365.00	10.11468	(13121718)
	439749.00	3765365.00	10.11157 (13121718)
439774.00	3765365.00	10.06334	(13121718)
	439779.00	3765365.00	10.04699 (13121718)
439784.00	3765365.00	10.02666	(13121718)
	439789.00	3765365.00	10.00601 (13121718)
439794.00	3765365.00	9.98015	(13121718)
	439799.00	3765365.00	9.95621 (13121718)
439804.00	3765365.00	9.92842	(13121718)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439809.00	3765365.00	9.89927	(13121718)
439814.00	3765365.00	9.86673	(13121718)
439839.00	3765365.00	9.78870	(13120808)
439844.00	3765365.00	9.82029	(13120808)
439849.00	3765365.00	9.85078	(13120808)
439854.00	3765365.00	9.86985	(13120808)
439859.00	3765365.00	9.89598	(13120808)
439864.00	3765365.00	9.90910	(13120808)
439869.00	3765365.00	9.92654	(13120808)
439874.00	3765365.00	9.93269	(13120808)
439879.00	3765365.00	9.94394	(13120808)
439884.00	3765365.00	9.94562	(13120808)
439674.00	3765370.00	10.51604	(12011417)
439679.00	3765370.00	10.49661	(12011417)
439684.00	3765370.00	10.47321	(12011417)
439689.00	3765370.00	10.44746	(12011417)
439694.00	3765370.00	10.42170	(12011417)

439699.00	3765370.00	10.39188	(12011417)
	439704.00	3765370.00	10.36392 (12011417)
439709.00	3765370.00	10.32728	(12011417)
	439714.00	3765370.00	10.29128 (12011417)
439719.00	3765370.00	10.25223	(12011417)
	439729.00	3765370.00	10.22173 (13121718)
439734.00	3765370.00	10.23106	(13121718)
	439739.00	3765370.00	10.23506 (13121718)
439744.00	3765370.00	10.24200	(13121718)
	439749.00	3765370.00	10.23837 (13121718)
439774.00	3765370.00	10.20165	(13121718)
	439779.00	3765370.00	10.18818 (13121718)
439784.00	3765370.00	10.17097	(13121718)
	439789.00	3765370.00	10.15102 (13121718)
439794.00	3765370.00	10.13070	(13121718)
	439799.00	3765370.00	10.10542 (13121718)
439804.00	3765370.00	10.07956	(13121718)
	439809.00	3765370.00	10.05217 (13121718)
439814.00	3765370.00	10.02353	(13121718)
	439839.00	3765370.00	9.87527 (13120808)
439844.00	3765370.00	9.91124	(13120808)
	439849.00	3765370.00	9.94014 (13120808)
439854.00	3765370.00	9.96941	(13120808)
	439859.00	3765370.00	9.98867 (13120808)
439864.00	3765370.00	10.01250	(13120808)
	439869.00	3765370.00	10.02154 (13120808)
439874.00	3765370.00	10.03980	(13120808)
	439879.00	3765370.00	10.04291 (13120808)
439884.00	3765370.00	10.05321	(13120808)
	439674.00	3765375.00	10.68346 (12011417)
439679.00	3765375.00	10.66625	(12011417)
	439684.00	3765375.00	10.64798 (12011417)
439689.00	3765375.00	10.62767	(12011417)
	439694.00	3765375.00	10.60197 (12011417)
439699.00	3765375.00	10.57563	(12011417)
	439704.00	3765375.00	10.54655 (12011417)
439709.00	3765375.00	10.51844	(12011417)
	439714.00	3765375.00	10.48419 (12011417)
439719.00	3765375.00	10.44960	(12011417)
	439729.00	3765375.00	10.37178 (12011417)
439734.00	3765375.00	10.34693	(13121718)
	439739.00	3765375.00	10.35714 (13121718)
439744.00	3765375.00	10.35872	(13121718)
	439749.00	3765375.00	10.36808 (13121718)
439754.00	3765375.00	10.36551	(13121718)
	439774.00	3765375.00	10.34259 (13121718)
439779.00	3765375.00	10.33022	(13121718)
	439784.00	3765375.00	10.31541 (13121718)
439789.00	3765375.00	10.29875	(13121718)
	439794.00	3765375.00	10.27827 (13121718)
439799.00	3765375.00	10.25799	(13121718)
	439804.00	3765375.00	10.23356 (13121718)

439809.00	3765375.00	10.20762	(13121718)
	439814.00	3765375.00	10.17881 (13121718)
439839.00	3765375.00	10.01055	(13121718)
	439844.00	3765375.00	10.00021 (13120808)
439849.00	3765375.00	10.03583	(13120808)
	439854.00	3765375.00	10.06391 (13120808)
439859.00	3765375.00	10.08934	(13120808)
	439864.00	3765375.00	10.10770 (13120808)
439869.00	3765375.00	10.13095	(13120808)
	439874.00	3765375.00	10.13859 (13120808)
439879.00	3765375.00	10.15390	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_2.5 IN  
 MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439884.00	3765375.00	10.15667	(13120808)
439774.00	3765380.00	10.48209	(13121718)
439779.00	3765380.00	10.47275	(13121718)
439784.00	3765380.00	10.46168	(13121718)
439789.00	3765380.00	10.44625	(13121718)
439794.00	3765380.00	10.42911	(13121718)
439799.00	3765380.00	10.40881	(13121718)
439804.00	3765380.00	10.38769	(13121718)
439809.00	3765380.00	10.36521	(13121718)
439814.00	3765380.00	10.33736	(13121718)
439769.00	3765385.00	10.62889	(13121718)
439819.00	3765385.00	10.47046	(13121718)
439769.00	3765400.00	11.08992	(12011417)
439844.00	3765400.00	10.82953	(13121718)
439849.00	3765400.00	10.80113	(13121718)
439674.00	3765405.00	11.65648	(12011417)
439714.00	3765405.00	11.63336	(12011417)

439719.00	3765405.00	11.61922	(12011417)
	439734.00	3765405.00	11.55684 (12011417)
439749.00	3765405.00	11.47242	(12011417)
	439754.00	3765405.00	11.43747 (12011417)
439774.00	3765405.00	11.27399	(12011417)
	439779.00	3765405.00	11.22461 (12011417)
439784.00	3765405.00	11.19996	(13121718)
	439789.00	3765405.00	11.19652 (13121718)
439794.00	3765405.00	11.19695	(13121718)
	439799.00	3765405.00	11.18754 (13121718)
439804.00	3765405.00	11.18218	(13121718)
	439809.00	3765405.00	11.16666 (13121718)
439814.00	3765405.00	11.15439	(13121718)
	439819.00	3765405.00	11.13350 (13121718)
439824.00	3765405.00	11.11569	(13121718)
	439829.00	3765405.00	11.09116 (13121718)
439834.00	3765405.00	11.06821	(13121718)
	439839.00	3765405.00	11.03729 (13121718)
439844.00	3765405.00	11.00937	(13121718)
	439849.00	3765405.00	10.97614 (13121718)
439854.00	3765405.00	10.94794	(13121718)
	439859.00	3765405.00	10.90662 (13121718)
439674.00	3765410.00	11.81067	(12011417)
	439679.00	3765410.00	11.82048 (12011417)
439684.00	3765410.00	11.83035	(12011417)
	439689.00	3765410.00	11.83391 (12011417)
439694.00	3765410.00	11.83754	(12011417)
	439699.00	3765410.00	11.83612 (12011417)
439704.00	3765410.00	11.83657	(12011417)
	439709.00	3765410.00	11.83114 (12011417)
439714.00	3765410.00	11.82337	(12011417)
	439719.00	3765410.00	11.81115 (12011417)
439729.00	3765410.00	11.78394	(12011417)
	439734.00	3765410.00	11.76517 (12011417)
439739.00	3765410.00	11.74108	(12011417)
	439744.00	3765410.00	11.71480 (12011417)
439749.00	3765410.00	11.68771	(12011417)
	439774.00	3765410.00	11.50628 (12011417)
439779.00	3765410.00	11.46185	(12011417)
	439784.00	3765410.00	11.41352 (12011417)
439789.00	3765410.00	11.36379	(12011417)
	439794.00	3765410.00	11.34994 (13121718)
439799.00	3765410.00	11.35075	(13121718)
	439804.00	3765410.00	11.34078 (13121718)
439809.00	3765410.00	11.33446	(13121718)
	439814.00	3765410.00	11.31985 (13121718)
439819.00	3765410.00	11.30705	(13121718)
	439824.00	3765410.00	11.28648 (13121718)
439829.00	3765410.00	11.26699	(13121718)
	439834.00	3765410.00	11.24343 (13121718)
439839.00	3765410.00	11.21957	(13121718)
	439844.00	3765410.00	11.18921 (13121718)

439849.00	3765410.00	11.16043	(13121718)
	439854.00	3765410.00	11.12626 (13121718)
439859.00	3765410.00	11.09775	(13121718)
	439674.00	3765415.00	11.96369 (12011417)
439679.00	3765415.00	11.97772	(12011417)
	439684.00	3765415.00	11.98848 (12011417)
439689.00	3765415.00	12.00076	(12011417)
	439694.00	3765415.00	12.00747 (12011417)
439699.00	3765415.00	12.01286	(12011417)
	439704.00	3765415.00	12.01303 (12011417)
439709.00	3765415.00	12.01363	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_2.5 IN  
 MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439714.00	3765415.00	12.01053	(12011417)
439719.00	3765415.00	12.00534	(12011417)
439729.00	3765415.00	11.98286	(12011417)
439734.00	3765415.00	11.96791	(12011417)
439739.00	3765415.00	11.95066	(12011417)
439744.00	3765415.00	11.93025	(12011417)
439749.00	3765415.00	11.90603	(12011417)
439774.00	3765415.00	11.73861	(12011417)
439779.00	3765415.00	11.69719	(12011417)
439784.00	3765415.00	11.65448	(12011417)
439789.00	3765415.00	11.60738	(12011417)
439794.00	3765415.00	11.55669	(12011417)
439799.00	3765415.00	11.50820	(13121718)
439804.00	3765415.00	11.50779	(13121718)
439809.00	3765415.00	11.49801	(13121718)
439814.00	3765415.00	11.49110	(13121718)
439819.00	3765415.00	11.47787	(13121718)

439824.00	3765415.00	11.46277	(13121718)
	439829.00	3765415.00	11.44474 (13121718)
439834.00	3765415.00	11.42384	(13121718)
	439839.00	3765415.00	11.39922 (13121718)
439844.00	3765415.00	11.37468	(13121718)
	439849.00	3765415.00	11.34544 (13121718)
439854.00	3765415.00	11.31623	(13121718)
	439859.00	3765415.00	11.28064 (13121718)
439674.00	3765420.00	12.11184	(12011417)
	439679.00	3765420.00	12.13235 (12011417)
439684.00	3765420.00	12.14805	(12011417)
	439689.00	3765420.00	12.16186 (12011417)
439694.00	3765420.00	12.17289	(12011417)
	439699.00	3765420.00	12.18431 (12011417)
439704.00	3765420.00	12.19132	(12011417)
	439709.00	3765420.00	12.19526 (12011417)
439714.00	3765420.00	12.19653	(12011417)
	439719.00	3765420.00	12.19397 (12011417)
439729.00	3765420.00	12.18458	(12011417)
	439734.00	3765420.00	12.17372 (12011417)
439739.00	3765420.00	12.15756	(12011417)
	439744.00	3765420.00	12.14056 (12011417)
439749.00	3765420.00	12.12333	(12011417)
	439774.00	3765420.00	11.97608 (12011417)
439779.00	3765420.00	11.93706	(12011417)
	439784.00	3765420.00	11.89371 (12011417)
439789.00	3765420.00	11.85120	(12011417)
	439794.00	3765420.00	11.80609 (12011417)
439799.00	3765420.00	11.75567	(12011417)
	439804.00	3765420.00	11.70255 (12011417)
439809.00	3765420.00	11.66944	(13121718)
	439814.00	3765420.00	11.66061 (13121718)
439819.00	3765420.00	11.65323	(13121718)
	439824.00	3765420.00	11.63968 (13121718)
439829.00	3765420.00	11.62461	(13121718)
	439834.00	3765420.00	11.60663 (13121718)
439839.00	3765420.00	11.58414	(13121718)
	439844.00	3765420.00	11.56073 (13121718)
439849.00	3765420.00	11.53337	(13121718)
	439854.00	3765420.00	11.50528 (13121718)
439859.00	3765420.00	11.47637	(13121718)
	439674.00	3765425.00	12.26003 (12011417)
439679.00	3765425.00	12.28078	(12011417)
	439684.00	3765425.00	12.30383 (12011417)
439689.00	3765425.00	12.32349	(12011417)
	439694.00	3765425.00	12.33966 (12011417)
439699.00	3765425.00	12.35240	(12011417)
	439704.00	3765425.00	12.36354 (12011417)
439709.00	3765425.00	12.37434	(12011417)
	439714.00	3765425.00	12.38109 (12011417)
439719.00	3765425.00	12.38461	(12011417)
	439729.00	3765425.00	12.38117 (12011417)

439734.00	3765425.00	12.37575	(12011417)
	439739.00	3765425.00	12.36891 (12011417)
439744.00	3765425.00	12.35445	(12011417)
	439749.00	3765425.00	12.33834 (12011417)
439774.00	3765425.00	12.21119	(12011417)
	439779.00	3765425.00	12.17760 (12011417)
439784.00	3765425.00	12.13929	(12011417)
	439789.00	3765425.00	12.09838 (12011417)
439794.00	3765425.00	12.05256	(12011417)
	439799.00	3765425.00	12.00804 (12011417)
439804.00	3765425.00	11.95903	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439809.00	3765425.00	11.90740	(12011417)
439814.00	3765425.00	11.85141	(12011417)
439819.00	3765425.00	11.82839	(13121718)
439824.00	3765425.00	11.81885	(13121718)
439829.00	3765425.00	11.80692	(13121718)
439834.00	3765425.00	11.79048	(13121718)
439839.00	3765425.00	11.77297	(13121718)
439844.00	3765425.00	11.75046	(13121718)
439849.00	3765425.00	11.72633	(13121718)
439854.00	3765425.00	11.69743	(13121718)
439859.00	3765425.00	11.66868	(13121718)
439674.00	3765430.00	12.40314	(12011417)
439679.00	3765430.00	12.43178	(12011417)
439684.00	3765430.00	12.45464	(12011417)
439689.00	3765430.00	12.47864	(12011417)
439694.00	3765430.00	12.50020	(12011417)
439699.00	3765430.00	12.52107	(12011417)

439704.00	3765430.00	12.53671	(12011417)
	439709.00	3765430.00	12.55030 (12011417)
439714.00	3765430.00	12.56073	(12011417)
	439719.00	3765430.00	12.57085 (12011417)
439729.00	3765430.00	12.57942	(12011417)
	439734.00	3765430.00	12.57754 (12011417)
439739.00	3765430.00	12.57222	(12011417)
	439744.00	3765430.00	12.56681 (12011417)
439749.00	3765430.00	12.55730	(12011417)
	439774.00	3765430.00	12.45181 (12011417)
439779.00	3765430.00	12.41889	(12011417)
	439784.00	3765430.00	12.38405 (12011417)
439789.00	3765430.00	12.34723	(12011417)
	439794.00	3765430.00	12.30809 (12011417)
439799.00	3765430.00	12.26260	(12011417)
	439804.00	3765430.00	12.21533 (12011417)
439809.00	3765430.00	12.16782	(12011417)
	439814.00	3765430.00	12.11618 (12011417)
439819.00	3765430.00	12.06216	(12011417)
	439824.00	3765430.00	12.00365 (12011417)
439829.00	3765430.00	11.99104	(13121718)
	439834.00	3765430.00	11.97932 (13121718)
439839.00	3765430.00	11.96093	(13121718)
	439844.00	3765430.00	11.94347 (13121718)
439849.00	3765430.00	11.92017	(13121718)
	439854.00	3765430.00	11.89651 (13121718)
439859.00	3765430.00	11.86745	(13121718)
	439674.00	3765435.00	12.54422 (12011417)
439679.00	3765435.00	12.57462	(12011417)
	439684.00	3765435.00	12.60664 (12011417)
439689.00	3765435.00	12.63483	(12011417)
	439694.00	3765435.00	12.66020 (12011417)
439699.00	3765435.00	12.68259	(12011417)
	439704.00	3765435.00	12.70518 (12011417)
439709.00	3765435.00	12.72554	(12011417)
	439714.00	3765435.00	12.74203 (12011417)
439719.00	3765435.00	12.75426	(12011417)
	439729.00	3765435.00	12.77357 (12011417)
439734.00	3765435.00	12.77944	(12011417)
	439739.00	3765435.00	12.78005 (12011417)
439744.00	3765435.00	12.77605	(12011417)
	439749.00	3765435.00	12.77178 (12011417)
439774.00	3765435.00	12.68979	(12011417)
	439779.00	3765435.00	12.66413 (12011417)
439784.00	3765435.00	12.63383	(12011417)
	439789.00	3765435.00	12.59749 (12011417)
439794.00	3765435.00	12.56032	(12011417)
	439799.00	3765435.00	12.52152 (12011417)
439804.00	3765435.00	12.47824	(12011417)
	439809.00	3765435.00	12.42994 (12011417)
439814.00	3765435.00	12.38062	(12011417)
	439819.00	3765435.00	12.33018 (12011417)

439824.00	3765435.00	12.27774	(12011417)
	439829.00	3765435.00	12.21980 (12011417)
439834.00	3765435.00	12.16899	(13121718)
	439839.00	3765435.00	12.15631 (13121718)
439844.00	3765435.00	12.13781	(13121718)
	439849.00	3765435.00	12.11921 (13121718)
439854.00	3765435.00	12.09444	(13121718)
	439859.00	3765435.00	12.07044 (13121718)
439674.00	3765440.00	12.68348	(12011417)
	439679.00	3765440.00	12.71943 (12011417)
439684.00	3765440.00	12.75099	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_2.5 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439689.00	3765440.00	12.78369	(12011417)
439694.00	3765440.00	12.81642	(12011417)
439699.00	3765440.00	12.84554	(12011417)
439704.00	3765440.00	12.87172	(12011417)
439709.00	3765440.00	12.89413	(12011417)
439714.00	3765440.00	12.91795	(12011417)
439719.00	3765440.00	12.93695	(12011417)
439729.00	3765440.00	12.96619	(12011417)
439734.00	3765440.00	12.97614	(12011417)
439739.00	3765440.00	12.98288	(12011417)
439744.00	3765440.00	12.98752	(12011417)
439749.00	3765440.00	12.98770	(12011417)
439774.00	3765440.00	12.93082	(12011417)
439779.00	3765440.00	12.90715	(12011417)
439784.00	3765440.00	12.88140	(12011417)
439789.00	3765440.00	12.85318	(12011417)
439794.00	3765440.00	12.81932	(12011417)

439799.00	3765440.00	12.78031	(12011417)
	439804.00	3765440.00	12.74102 (12011417)
439809.00	3765440.00	12.69923	(12011417)
	439814.00	3765440.00	12.65259 (12011417)
439819.00	3765440.00	12.60185	(12011417)
	439824.00	3765440.00	12.54951 (12011417)
439829.00	3765440.00	12.49780	(12011417)
	439834.00	3765440.00	12.44216 (12011417)
439839.00	3765440.00	12.38234	(12011417)
	439844.00	3765440.00	12.33922 (13121718)
439849.00	3765440.00	12.32009	(13121718)
	439854.00	3765440.00	12.30155 (13121718)
439859.00	3765440.00	12.27462	(13121718)
	439674.00	3765445.00	12.81680 (12011417)
439679.00	3765445.00	12.85868	(12011417)
	439684.00	3765445.00	12.89708 (12011417)
439689.00	3765445.00	12.93464	(12011417)
	439694.00	3765445.00	12.96636 (12011417)
439699.00	3765445.00	13.00173	(12011417)
	439704.00	3765445.00	13.03487 (12011417)
439709.00	3765445.00	13.06584	(12011417)
	439714.00	3765445.00	13.09029 (12011417)
439719.00	3765445.00	13.11470	(12011417)
	439729.00	3765445.00	13.15699 (12011417)
439734.00	3765445.00	13.17467	(12011417)
	439739.00	3765445.00	13.18441 (12011417)
439744.00	3765445.00	13.19451	(12011417)
	439749.00	3765445.00	13.19956 (12011417)
439774.00	3765445.00	13.17191	(12011417)
	439779.00	3765445.00	13.15469 (12011417)
439784.00	3765445.00	13.13319	(12011417)
	439789.00	3765445.00	13.10529 (12011417)
439794.00	3765445.00	13.07873	(12011417)
	439799.00	3765445.00	13.04550 (12011417)
439804.00	3765445.00	13.00929	(12011417)
	439809.00	3765445.00	12.96690 (12011417)
439814.00	3765445.00	12.92585	(12011417)
	439819.00	3765445.00	12.87989 (12011417)
439824.00	3765445.00	12.83202	(12011417)
	439829.00	3765445.00	12.77656 (12011417)
439834.00	3765445.00	12.72305	(12011417)
	439839.00	3765445.00	12.66905 (12011417)
439844.00	3765445.00	12.61005	(12011417)
	439849.00	3765445.00	12.54837 (12011417)
439854.00	3765445.00	12.50543	(13121718)
	439859.00	3765445.00	12.48826 (13121718)
439674.00	3765450.00	12.95201	(12011417)
	439679.00	3765450.00	12.99350 (12011417)
439684.00	3765450.00	13.03569	(12011417)
	439689.00	3765450.00	13.07825 (12011417)
439694.00	3765450.00	13.11947	(12011417)
	439699.00	3765450.00	13.15670 (12011417)

439704.00	3765450.00	13.19283	(12011417)
	439709.00	3765450.00	13.22685 (12011417)
439714.00	3765450.00	13.26305	(12011417)
	439719.00	3765450.00	13.29162 (12011417)
439729.00	3765450.00	13.34294	(12011417)
	439734.00	3765450.00	13.36661 (12011417)
439739.00	3765450.00	13.38574	(12011417)
	439744.00	3765450.00	13.40151 (12011417)
439749.00	3765450.00	13.41241	(12011417)
	439774.00	3765450.00	13.41167 (12011417)
439844.00	3765450.00	12.90162	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

\*\*\* CONC OF PM\_2.5 IN  
 MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439849.00	3765450.00	12.84264	(12011417)
439854.00	3765450.00	12.78386	(12011417)
439859.00	3765450.00	12.71746	(12011417)
439674.00	3765455.00	13.07859	(12011417)
439679.00	3765455.00	13.12857	(12011417)
439684.00	3765455.00	13.17463	(12011417)
439689.00	3765455.00	13.22047	(12011417)
439694.00	3765455.00	13.26257	(12011417)
439699.00	3765455.00	13.30822	(12011417)
439704.00	3765455.00	13.35069	(12011417)
439709.00	3765455.00	13.39095	(12011417)
439714.00	3765455.00	13.42753	(12011417)
439719.00	3765455.00	13.46341	(12011417)
439729.00	3765455.00	13.52922	(12011417)
439734.00	3765455.00	13.55774	(12011417)
439739.00	3765455.00	13.58010	(12011417)
439744.00	3765455.00	13.60463	(12011417)

439749.00	3765455.00	13.62156	(12011417)
	439844.00	3765455.00	13.20004 (12011417)
439849.00	3765455.00	13.14144	(12011417)
	439854.00	3765455.00	13.08185 (12011417)
439859.00	3765455.00	13.02378	(12011417)
	439674.00	3765460.00	13.20907 (12011417)
439679.00	3765460.00	13.25630	(12011417)
	439684.00	3765460.00	13.30850 (12011417)
439689.00	3765460.00	13.35790	(12011417)
	439694.00	3765460.00	13.40962 (12011417)
439699.00	3765460.00	13.45491	(12011417)
	439704.00	3765460.00	13.50071 (12011417)
439709.00	3765460.00	13.54820	(12011417)
	439714.00	3765460.00	13.59299 (12011417)
439719.00	3765460.00	13.63499	(12011417)
	439729.00	3765460.00	13.70893 (12011417)
439734.00	3765460.00	13.74422	(12011417)
	439739.00	3765460.00	13.77679 (12011417)
439744.00	3765460.00	13.80382	(12011417)
	439749.00	3765460.00	13.82873 (12011417)
439789.00	3765460.00	13.88150	(12011417)
	439794.00	3765460.00	13.86747 (12011417)
439799.00	3765460.00	13.84853	(12011417)
	439804.00	3765460.00	13.82710 (12011417)
439809.00	3765460.00	13.80000	(12011417)
	439814.00	3765460.00	13.76827 (12011417)
439819.00	3765460.00	13.73086	(12011417)
	439824.00	3765460.00	13.69449 (12011417)
439829.00	3765460.00	13.65109	(12011417)
	439844.00	3765460.00	13.50317 (12011417)
439849.00	3765460.00	13.44786	(12011417)
	439854.00	3765460.00	13.39352 (12011417)
439859.00	3765460.00	13.32807	(12011417)
	439674.00	3765465.00	13.33050 (12011417)
439679.00	3765465.00	13.38774	(12011417)
	439684.00	3765465.00	13.44034 (12011417)
439689.00	3765465.00	13.49441	(12011417)
	439694.00	3765465.00	13.54625 (12011417)
439699.00	3765465.00	13.60213	(12011417)
	439704.00	3765465.00	13.65338 (12011417)
439709.00	3765465.00	13.70190	(12011417)
	439714.00	3765465.00	13.74965 (12011417)
439719.00	3765465.00	13.79868	(12011417)
	439729.00	3765465.00	13.88805 (12011417)
439734.00	3765465.00	13.92754	(12011417)
	439739.00	3765465.00	13.96356 (12011417)
439744.00	3765465.00	14.00279	(12011417)
	439749.00	3765465.00	14.03205 (12011417)
439789.00	3765465.00	14.14005	(12011417)
	439794.00	3765465.00	14.13349 (12011417)
439799.00	3765465.00	14.12143	(12011417)
	439804.00	3765465.00	14.10280 (12011417)

439809.00	3765465.00	14.08134	(12011417)
	439814.00	3765465.00	14.05589 (12011417)
439819.00	3765465.00	14.02590	(12011417)
	439824.00	3765465.00	13.99000 (12011417)
439829.00	3765465.00	13.94851	(12011417)
	439844.00	3765465.00	13.81242 (12011417)
439849.00	3765465.00	13.75670	(12011417)
	439854.00	3765465.00	13.70362 (12011417)
439859.00	3765465.00	13.64823	(12011417)
	439674.00	3765470.00	13.45891 (12011417)
439679.00	3765470.00	13.51161	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_2.5 IN  
 MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439684.00	3765470.00	13.57065	(12011417)
439689.00	3765470.00	13.62773	(12011417)
439694.00	3765470.00	13.68671	(12011417)
439699.00	3765470.00	13.74061	(12011417)
439704.00	3765470.00	13.79714	(12011417)
439709.00	3765470.00	13.85375	(12011417)
439714.00	3765470.00	13.90804	(12011417)
439719.00	3765470.00	13.95979	(12011417)
439729.00	3765470.00	14.05988	(12011417)
439734.00	3765470.00	14.10904	(12011417)
439739.00	3765470.00	14.15265	(12011417)
439744.00	3765470.00	14.19454	(12011417)
439749.00	3765470.00	14.23191	(12011417)
439789.00	3765470.00	14.39889	(12011417)
439794.00	3765470.00	14.39989	(12011417)
439799.00	3765470.00	14.39319	(12011417)
439804.00	3765470.00	14.38398	(12011417)

439809.00	3765470.00	14.36819	(12011417)
	439814.00	3765470.00	14.34525 (12011417)
439819.00	3765470.00	14.32104	(12011417)
	439824.00	3765470.00	14.29061 (12011417)
439829.00	3765470.00	14.25802	(12011417)
	439844.00	3765470.00	14.12716 (12011417)
439849.00	3765470.00	14.07935	(12011417)
	439854.00	3765470.00	14.02467 (12011417)
439859.00	3765470.00	13.96632	(12011417)
	439674.00	3765475.00	13.57954 (12011417)
439679.00	3765475.00	13.63871	(12011417)
	439684.00	3765475.00	13.70117 (12011417)
439689.00	3765475.00	13.75717	(12011417)
	439694.00	3765475.00	13.82043 (12011417)
439699.00	3765475.00	13.88045	(12011417)
	439704.00	3765475.00	13.94273 (12011417)
439709.00	3765475.00	13.99899	(12011417)
	439714.00	3765475.00	14.05860 (12011417)
439719.00	3765475.00	14.11780	(12011417)
	439729.00	3765475.00	14.23062 (12011417)
439734.00	3765475.00	14.28044	(12011417)
	439739.00	3765475.00	14.33639 (12011417)
439744.00	3765475.00	14.38245	(12011417)
	439749.00	3765475.00	14.43233 (12011417)
439754.00	3765475.00	14.47161	(12011417)
	439789.00	3765475.00	14.65984 (12011417)
439794.00	3765475.00	14.66625	(12011417)
	439799.00	3765475.00	14.66933 (12011417)
439804.00	3765475.00	14.66463	(12011417)
	439809.00	3765475.00	14.65546 (12011417)
439814.00	3765475.00	14.64267	(12011417)
	439819.00	3765475.00	14.62115 (12011417)
439824.00	3765475.00	14.59620	(12011417)
	439829.00	3765475.00	14.56358 (12011417)
439269.00	3764900.00	5.23970	(12010217)
	439369.00	3764900.00	5.40494 (12010217)
439469.00	3764900.00	5.34940	(12010217)
	439569.00	3764900.00	5.24901 (13120808)
439669.00	3764900.00	5.24749	(12010217)
	439769.00	3764900.00	5.37724 (12010217)
439869.00	3764900.00	5.44881	(12010217)
	439969.00	3764900.00	5.30822 (12010217)
440069.00	3764900.00	5.04877	(15010717)
	440169.00	3764900.00	5.24369 (15010717)
440269.00	3764900.00	5.33691	(15010717)
	439269.00	3765000.00	5.62687 (12010217)
439369.00	3765000.00	5.91815	(12010217)
	439469.00	3765000.00	5.89876 (12010217)
439569.00	3765000.00	5.73761	(12010217)
	439669.00	3765000.00	5.81925 (13120808)
439769.00	3765000.00	5.82199	(12010217)
	439869.00	3765000.00	5.98918 (12010217)

439969.00	3765000.00	5.94235	(12010217)
440069.00	3765000.00	5.69558	(15010717)
440169.00	3765000.00	5.81519	(15010717)
440269.00	3765000.00	5.87200	(15010717)
439269.00	3765100.00	6.33489	(13121718)
439369.00	3765100.00	6.53585	(12010217)
439469.00	3765100.00	6.60071	(12010217)
439569.00	3765100.00	6.40722	(12010217)
439669.00	3765100.00	6.41884	(13120808)
439769.00	3765100.00	6.52057	(13120808)
439869.00	3765100.00	6.63166	(12010217)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_2.5 IN  
 MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439969.00	3765100.00	6.68793	(12010217)
440069.00	3765100.00	6.46162	(12010217)
440169.00	3765100.00	6.48147	(15010717)
440269.00	3765100.00	6.53289	(15010717)
439269.00	3765200.00	7.56141	(12011417)
439369.00	3765200.00	7.39246	(12011417)
439469.00	3765200.00	7.50361	(12010217)
439569.00	3765200.00	7.32720	(12010217)
439669.00	3765200.00	7.17737	(15111218)
439769.00	3765200.00	7.42789	(13120808)
439869.00	3765200.00	7.43094	(12010217)
439969.00	3765200.00	7.62070	(12010217)
440069.00	3765200.00	7.48094	(12010217)
440169.00	3765200.00	7.33625	(15010717)
440269.00	3765200.00	7.40953	(15010717)
439269.00	3765300.00	8.93236	(12011417)
439369.00	3765300.00	8.94140	(12011417)

439469.00	3765300.00	9.01623	(12011417)
	439569.00	3765300.00	8.86352 (12011417)
439669.00	3765300.00	8.75374	(13121718)
	439769.00	3765300.00	8.52193 (15111218)
439869.00	3765300.00	8.77214	(13120808)
	439969.00	3765300.00	8.89562 (12010217)
440069.00	3765300.00	8.81503	(12010217)
	440169.00	3765300.00	8.57046 (15010717)
440269.00	3765300.00	8.62552	(15010717)
	439269.00	3765400.00	10.99166 (12011417)
439369.00	3765400.00	10.70909	(12011417)
	439469.00	3765400.00	10.71917 (12011417)
439569.00	3765400.00	11.11706	(12011417)
	439669.00	3765400.00	11.49530 (12011417)
439769.00	3765400.00	11.08992	(12011417)
	439869.00	3765400.00	10.67406 (13120808)
439969.00	3765400.00	10.85775	(12010217)
	440069.00	3765400.00	10.78214 (12010217)
440169.00	3765400.00	10.55563	(12010217)
	440269.00	3765400.00	10.53546 (15113017)
439269.00	3765500.00	14.75567	(12011417)
	439369.00	3765500.00	14.40637 (12011417)
439469.00	3765500.00	13.76469	(12011417)
	439569.00	3765500.00	13.62256 (12010217)
439669.00	3765500.00	14.13475	(12011417)
	439769.00	3765500.00	15.65985 (12011417)
439869.00	3765500.00	15.98461	(12011417)
	439969.00	3765500.00	14.61442 (12011417)
440069.00	3765500.00	14.30474	(12010217)
	440169.00	3765500.00	14.03692 (15113017)
440269.00	3765500.00	14.09782	(15011517)
	439269.00	3765600.00	20.99381 (12111318)
439369.00	3765600.00	22.61056	(12011417)
	439469.00	3765600.00	22.44693 (12011417)
439569.00	3765600.00	21.29361	(12011417)
	439669.00	3765600.00	20.80445 (12010217)
439769.00	3765600.00	21.61761	(12111318)
	439869.00	3765600.00	25.71414 (12111318)
439969.00	3765600.00	28.44807	(12011417)
	440069.00	3765600.00	25.87661 (12011417)
440169.00	3765600.00	25.00441	(15112218)
	440269.00	3765600.00	25.18364 (15112218)
439269.00	3765700.00	70.62459	(14120118)
	439369.00	3765700.00	76.31866 (16121918)
439469.00	3765700.00	102.62547	(14120118)
	439569.00	3765700.00	82.54507 (14120118)
439669.00	3765700.00	79.13982	(15112218)
	439769.00	3765700.00	79.26666 (15112218)
439869.00	3765700.00	79.69381	(14012117)
	439969.00	3765700.00	79.77437 (14012117)
440069.00	3765700.00	80.40730	(14012117)
	440169.00	3765700.00	81.28138 (14120118)

440269.00	3765700.00	87.66309	(14120118)
	439269.00	3765800.00	32.18092 (12111317)
439369.00	3765800.00	34.60051	(12111317)
	439469.00	3765800.00	34.20689 (12111317)
439569.00	3765800.00	34.49399	(12111317)
	439669.00	3765800.00	36.37473 (15120818)
439769.00	3765800.00	40.82967	(13111217)
	439869.00	3765800.00	54.28118 (13111217)
439969.00	3765800.00	35.13925	(14121418)
	440069.00	3765800.00	29.93616 (14121418)
440169.00	3765800.00	28.16121	(13111217)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_2.5 IN  
 MICROGRAMS/M\*\*3 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
440269.00	3765800.00	29.68409	(13111217)
439269.00	3765900.00	18.20071	(15120818)
439369.00	3765900.00	18.29832	(15120818)
439469.00	3765900.00	18.20591	(15120818)
439569.00	3765900.00	18.00893	(15120818)
439669.00	3765900.00	17.84868	(15112217)
439769.00	3765900.00	17.64899	(13111217)
439869.00	3765900.00	19.00960	(13111217)
439969.00	3765900.00	19.24868	(13111217)
440069.00	3765900.00	18.57573	(12011717)
440169.00	3765900.00	17.33242	(12011717)
440269.00	3765900.00	16.43487	(12011717)
439649.00	3765310.00	8.93023	(13121718)
439679.00	3765310.00	8.94050	(13121718)
439709.00	3765310.00	8.89138	(13121718)
439739.00	3765310.00	8.77948	(13121718)
439769.00	3765310.00	8.68414	(15111218)

439799.00	3765310.00	8.72730	(13120808)
	439829.00	3765310.00	8.87117 (13120808)
439859.00	3765310.00	8.92811	(13120808)
	439889.00	3765310.00	8.92130 (13120808)
439649.00	3765340.00	9.64874	(12011417)
	439679.00	3765340.00	9.50542 (13121718)
439709.00	3765340.00	9.54363	(13121718)
	439739.00	3765340.00	9.51219 (13121718)
439769.00	3765340.00	9.39935	(13121718)
	439799.00	3765340.00	9.22573 (15111218)
439829.00	3765340.00	9.32089	(13120808)
	439859.00	3765340.00	9.43525 (13120808)
439889.00	3765340.00	9.45381	(13120808)
	439649.00	3765370.00	10.58508 (12011417)
439679.00	3765370.00	10.49661	(12011417)
	439709.00	3765370.00	10.32728 (12011417)
439739.00	3765370.00	10.23506	(13121718)
	439769.00	3765370.00	10.21557 (13121718)
439799.00	3765370.00	10.10542	(13121718)
	439829.00	3765370.00	9.92290 (13121718)
439859.00	3765370.00	9.98867	(13120808)
	439889.00	3765370.00	10.05406 (13120808)
439649.00	3765400.00	11.45976	(12011417)
	439679.00	3765400.00	11.49920 (12011417)
439709.00	3765400.00	11.46006	(12011417)
	439739.00	3765400.00	11.32346 (12011417)
439769.00	3765400.00	11.08992	(12011417)
	439799.00	3765400.00	11.03246 (13121718)
439829.00	3765400.00	10.92070	(13121718)
	439859.00	3765400.00	10.73033 (13121718)
439889.00	3765400.00	10.74523	(13120808)
	439649.00	3765430.00	12.24732 (12011417)
439679.00	3765430.00	12.43178	(12011417)
	439709.00	3765430.00	12.55030 (12011417)
439739.00	3765430.00	12.57222	(12011417)
	439769.00	3765430.00	12.47901 (12011417)
439799.00	3765430.00	12.26260	(12011417)
	439829.00	3765430.00	11.99104 (13121718)
439859.00	3765430.00	11.86745	(13121718)
	439889.00	3765430.00	11.66666 (13121718)
439649.00	3765460.00	12.95483	(12011417)
	439679.00	3765460.00	13.25630 (12011417)
439709.00	3765460.00	13.54820	(12011417)
	439739.00	3765460.00	13.77679 (12011417)
439769.00	3765460.00	13.88940	(12011417)
	439799.00	3765460.00	13.84853 (12011417)
439829.00	3765460.00	13.65109	(12011417)
	439859.00	3765460.00	13.32807 (12011417)
439889.00	3765460.00	12.99695	(13121718)
	439649.00	3765490.00	13.65508 (12011417)
439679.00	3765490.00	14.01093	(12011417)
	439709.00	3765490.00	14.42691 (12011417)

439739.00	3765490.00	14.85917	(12011417)
439769.00	3765490.00	15.24096	(12011417)
439799.00	3765490.00	15.48813	(12011417)
439829.00	3765490.00	15.52416	(12011417)
439859.00	3765490.00	15.33214	(12011417)
439889.00	3765490.00	15.00431	(12011417)

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE SUMMARY OF  
 MAXIMUM PERIOD ( 43848 HRS) RESULTS \*\*\*

\*\* CONC OF PM\_2.5 IN  
 \*\*  
 MICROGRAMS/M\*\*3

NETWORK		AVERAGE CONC	
GROUP ID	RECEPTOR	(XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE GRID-ID
EXH	1ST HIGHEST VALUE IS	8.02168	AT ( 440269.00,
3765700.00,	289.00, 289.00,	0.00)	DC
	2ND HIGHEST VALUE IS	7.56523	AT ( 439569.00,
3765700.00,	289.00, 289.00,	0.00)	DC
	3RD HIGHEST VALUE IS	7.08246	AT ( 439469.00,
3765700.00,	289.00, 289.00,	0.00)	DC
	4TH HIGHEST VALUE IS	6.77010	AT ( 440169.00,
3765700.00,	289.00, 289.00,	0.00)	DC
	5TH HIGHEST VALUE IS	6.67604	AT ( 439669.00,
3765700.00,	289.00, 289.00,	0.00)	DC
	6TH HIGHEST VALUE IS	6.28150	AT ( 439769.00,
3765700.00,	289.00, 289.00,	0.00)	DC
	7TH HIGHEST VALUE IS	6.15807	AT ( 440069.00,
3765700.00,	289.00, 289.00,	0.00)	DC
	8TH HIGHEST VALUE IS	5.91312	AT ( 439869.00,
3765700.00,	289.00, 289.00,	0.00)	DC
	9TH HIGHEST VALUE IS	5.76266	AT ( 439969.00,
3765700.00,	289.00, 289.00,	0.00)	DC
	10TH HIGHEST VALUE IS	4.51295	AT ( 439369.00,
3765700.00,	289.00, 289.00,	0.00)	DC
EVAP	1ST HIGHEST VALUE IS	7.49644	AT ( 440269.00,
3765700.00,	289.00, 289.00,	0.00)	DC
	2ND HIGHEST VALUE IS	5.84784	AT ( 440169.00,
3765700.00,	289.00, 289.00,	0.00)	DC
	3RD HIGHEST VALUE IS	4.99170	AT ( 440069.00,
3765700.00,	289.00, 289.00,	0.00)	DC
	4TH HIGHEST VALUE IS	4.33857	AT ( 439569.00,
3765700.00,	289.00, 289.00,	0.00)	DC

3765700.00,	5TH HIGHEST VALUE IS	4.29164	AT (	439969.00,
289.00,				0.00) DC
3765700.00,	6TH HIGHEST VALUE IS	4.26516	AT (	439669.00,
289.00,				0.00) DC
3765700.00,	7TH HIGHEST VALUE IS	4.22817	AT (	439769.00,
289.00,				0.00) DC
3765700.00,	8TH HIGHEST VALUE IS	4.15175	AT (	439869.00,
289.00,				0.00) DC
3765700.00,	9TH HIGHEST VALUE IS	4.07275	AT (	439469.00,
289.00,				0.00) DC
3765800.00,	10TH HIGHEST VALUE IS	3.86597	AT (	439869.00,
289.00,				0.00) DC
FREEEXH 3765700.00,	1ST HIGHEST VALUE IS	5.23339	AT (	440269.00,
289.00,				0.00) DC
3765700.00,	2ND HIGHEST VALUE IS	5.20211	AT (	440169.00,
289.00,				0.00) DC
3765700.00,	3RD HIGHEST VALUE IS	5.16995	AT (	440069.00,
289.00,				0.00) DC
3765700.00,	4TH HIGHEST VALUE IS	5.11092	AT (	439969.00,
289.00,				0.00) DC
3765700.00,	5TH HIGHEST VALUE IS	5.05422	AT (	439869.00,
289.00,				0.00) DC
3765700.00,	6TH HIGHEST VALUE IS	4.98531	AT (	439769.00,
289.00,				0.00) DC
3765700.00,	7TH HIGHEST VALUE IS	4.86807	AT (	439669.00,
289.00,				0.00) DC
3765700.00,	8TH HIGHEST VALUE IS	4.72540	AT (	439569.00,
289.00,				0.00) DC
3765700.00,	9TH HIGHEST VALUE IS	4.52490	AT (	439469.00,
289.00,				0.00) DC
3765700.00,	10TH HIGHEST VALUE IS	4.32925	AT (	439369.00,
289.00,				0.00) DC
ONOFFEXH 3765700.00,	1ST HIGHEST VALUE IS	2.83983	AT (	439569.00,
289.00,				0.00) DC
3765700.00,	2ND HIGHEST VALUE IS	2.78830	AT (	440269.00,
289.00,				0.00) DC
3765700.00,	3RD HIGHEST VALUE IS	2.55756	AT (	439469.00,
289.00,				0.00) DC
3765800.00,	4TH HIGHEST VALUE IS	2.19339	AT (	439869.00,
289.00,				0.00) DC
3765700.00,	5TH HIGHEST VALUE IS	1.80797	AT (	439669.00,
289.00,				0.00) DC
3765700.00,	6TH HIGHEST VALUE IS	1.56800	AT (	440169.00,
289.00,				0.00) DC
3765700.00,	7TH HIGHEST VALUE IS	1.29619	AT (	439769.00,
289.00,				0.00) DC
3765800.00,	8TH HIGHEST VALUE IS	1.25365	AT (	439769.00,
289.00,				0.00) DC
3765700.00,	9TH HIGHEST VALUE IS	0.98812	AT (	440069.00,
289.00,				0.00) DC

10TH HIGHEST VALUE IS 0.85891 AT ( 439869.00,  
3765700.00, 289.00, 289.00, 0.00) DC

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 \*\*\* 08:30:01

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE SUMMARY OF  
 MAXIMUM PERIOD ( 43848 HRS) RESULTS \*\*\*

\*\* CONC OF PM\_2.5 IN  
 \*\*  
 MICROGRAMS/M\*\*3

NETWORK		AVERAGE CONC	
GROUP ID	RECEPTOR	(XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE GRID-ID
FREEEVAP	1ST HIGHEST VALUE IS	3.91286 AT ( 440269.00,	
3765700.00,	289.00, 289.00,	0.00) DC	
	2ND HIGHEST VALUE IS	3.89913 AT ( 440169.00,	
3765700.00,	289.00, 289.00,	0.00) DC	
	3RD HIGHEST VALUE IS	3.87835 AT ( 440069.00,	
3765700.00,	289.00, 289.00,	0.00) DC	
	4TH HIGHEST VALUE IS	3.82780 AT ( 439969.00,	
3765700.00,	289.00, 289.00,	0.00) DC	
	5TH HIGHEST VALUE IS	3.77977 AT ( 439869.00,	
3765700.00,	289.00, 289.00,	0.00) DC	
	6TH HIGHEST VALUE IS	3.72200 AT ( 439769.00,	
3765700.00,	289.00, 289.00,	0.00) DC	
	7TH HIGHEST VALUE IS	3.61893 AT ( 439669.00,	
3765700.00,	289.00, 289.00,	0.00) DC	
	8TH HIGHEST VALUE IS	3.49248 AT ( 439569.00,	
3765700.00,	289.00, 289.00,	0.00) DC	
	9TH HIGHEST VALUE IS	3.31373 AT ( 439469.00,	
3765700.00,	289.00, 289.00,	0.00) DC	
	10TH HIGHEST VALUE IS	3.14515 AT ( 439369.00,	
3765700.00,	289.00, 289.00,	0.00) DC	
ONOFFEVA	1ST HIGHEST VALUE IS	3.58358 AT ( 440269.00,	
3765700.00,	289.00, 289.00,	0.00) DC	
	2ND HIGHEST VALUE IS	2.65078 AT ( 439869.00,	
3765800.00,	289.00, 289.00,	0.00) DC	
	3RD HIGHEST VALUE IS	1.94871 AT ( 440169.00,	
3765700.00,	289.00, 289.00,	0.00) DC	
	4TH HIGHEST VALUE IS	1.41727 AT ( 439769.00,	
3765800.00,	289.00, 289.00,	0.00) DC	

3765700.00,	5TH HIGHEST VALUE IS	1.11334 AT (	440069.00,
289.00,		0.00) DC	
3765800.00,	6TH HIGHEST VALUE IS	0.88694 AT (	439669.00,
289.00,		0.00) DC	
3765800.00,	7TH HIGHEST VALUE IS	0.88228 AT (	439969.00,
289.00,		0.00) DC	
3765700.00,	8TH HIGHEST VALUE IS	0.84610 AT (	439569.00,
289.00,		0.00) DC	
3765700.00,	9TH HIGHEST VALUE IS	0.75902 AT (	439469.00,
289.00,		0.00) DC	
3765700.00,	10TH HIGHEST VALUE IS	0.64623 AT (	439669.00,
289.00,		0.00) DC	
ALL	1ST HIGHEST VALUE IS	15.51813 AT (	440269.00,
3765700.00,		0.00) DC	
3765700.00,	2ND HIGHEST VALUE IS	12.61795 AT (	440169.00,
289.00,		0.00) DC	
3765700.00,	3RD HIGHEST VALUE IS	11.90380 AT (	439569.00,
289.00,		0.00) DC	
3765700.00,	4TH HIGHEST VALUE IS	11.15521 AT (	439469.00,
289.00,		0.00) DC	
3765700.00,	5TH HIGHEST VALUE IS	11.14977 AT (	440069.00,
289.00,		0.00) DC	
3765700.00,	6TH HIGHEST VALUE IS	10.94120 AT (	439669.00,
289.00,		0.00) DC	
3765700.00,	7TH HIGHEST VALUE IS	10.50967 AT (	439769.00,
289.00,		0.00) DC	
3765700.00,	8TH HIGHEST VALUE IS	10.06488 AT (	439869.00,
289.00,		0.00) DC	
3765700.00,	9TH HIGHEST VALUE IS	10.05430 AT (	439969.00,
289.00,		0.00) DC	
3765800.00,	10TH HIGHEST VALUE IS	8.05806 AT (	439869.00,
289.00,		0.00) DC	

\*\*\* RECEPTOR TYPES: GC = GRIDCART  
 GP = GRIDPOLR  
 DC = DISCCART  
 DP = DISCPOLR

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE SUMMARY

OF HIGHEST 1-HR RESULTS \*\*\*

			** CONC OF PM <sub>2.5</sub> IN	
MICROGRAMS/M**3			**	
			DATE	
NETWORK			AVERAGE CONC	(YYMMDDHH)
GROUP ID			OF TYPE	GRID-ID
RECEPTOR	(XR, YR, ZELEV, ZHILL, ZFLAG)			
- - - - -				
- - - - -				
EXH	HIGH	1ST HIGH VALUE IS	64.80176	ON 14012908: AT
(	439469.00,	3765700.00, 289.00,	289.00,	0.00) DC
EVAP	HIGH	1ST HIGH VALUE IS	44.95572	ON 14120118: AT
(	440269.00,	3765700.00, 289.00,	289.00,	0.00) DC
FREEEXH	HIGH	1ST HIGH VALUE IS	41.07030	ON 14101107: AT
(	440269.00,	3765700.00, 289.00,	289.00,	0.00) DC
ONOFFEXH	HIGH	1ST HIGH VALUE IS	29.56830	ON 14101007: AT
(	439469.00,	3765700.00, 289.00,	289.00,	0.00) DC
FREEEVAP	HIGH	1ST HIGH VALUE IS	36.07950	ON 14012117: AT
(	440269.00,	3765700.00, 289.00,	289.00,	0.00) DC
ONOFFEVA	HIGH	1ST HIGH VALUE IS	20.62437	ON 13111217: AT
(	440269.00,	3765700.00, 289.00,	289.00,	0.00) DC
ALL	HIGH	1ST HIGH VALUE IS	102.62547	ON 14120118: AT
(	439469.00,	3765700.00, 289.00,	289.00,	0.00) DC

\*\*\* RECEPTOR TYPES: GC = GRIDCART  
 GP = GRIDPOLR  
 DC = DISCCART  
 DP = DISCPOLR

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* Message Summary : AERMOD Model Execution \*\*\*

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)  
A Total of 2 Warning Message(s)  
A Total of 1628 Informational Message(s)  
  
A Total of 43848 Hours Were Processed  
  
A Total of 1278 Calm Hours Identified  
  
A Total of 350 Missing Hours Identified ( 0.80  
Percent)

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*  
\*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*  
ME W186 2290 MEOPEN: THRESH\_1MIN 1-min ASOS wind speed  
threshold used 0.50  
ME W187 2290 MEOPEN: ADJ\_U\* Option for Stable Low Winds  
used in AERMET

\*\*\*\*\*  
\*\*\* AERMOD Finishes Successfully \*\*\*  
\*\*\*\*\*

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** Lakes Environmental AERMOD MPI
**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 10.2.1
** Lakes Environmental Software Inc.
** Date: 10/5/2022
** File: C:\Lakes\Ontario_PUD-Legacy_Ops-HRA-DPM_20221005
\Ontario_PUD-Legacy_Ops-HRA-DPM_20221005.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
  TITLEONE C:\Lakes\Ontario_PUD-Legacy_Ops-HRA_20221004
\Ontario_PUD-Legacy_Ops-
  MODELOPT CONC FLAT
  AVERTIME 1 PERIOD
  URBANOPT 2035210 San_Bernardio_County
  POLLUTID PM_10
  RUNORNOT RUN
  ERRORFIL Ontario_PUD-Legacy_Ops-HRA-DPM_20221005.err
CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** -----
-----
** Line Source Represented by Area Sources
** LINE AREA Source ID = ARLN01
** DESCRSRC SR 60 WB Freeway DPM Ex
** PREFIX
** Length of Side = 18.29
** Ratio = 10
** Vertical Dimension = 3.20
** Emission Rate = 0.0000307319
** Nodes = 5
** 440650.044, 3765727.326, 260.07, 3.40
** 440119.780, 3765731.800, 261.41, 3.40
** 439661.922, 3765732.944, 260.96, 3.40

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\*\* 439171.250, 3765734.039, 252.11, 3.40  
\*\* 438870.985, 3765732.123, 258.88, 3.40  
\*\* -----

-----  
LOCATION A0000012 AREA 440650.121 3765736.471 0.0  
LOCATION A0000013 AREA 440473.366 3765737.962 0.0  
LOCATION A0000014 AREA 440296.612 3765739.454 0.0  
LOCATION A0000015 AREA 440119.803 3765740.945 0.0  
LOCATION A0000016 AREA 439967.184 3765741.327 0.0  
LOCATION A0000017 AREA 439814.564 3765741.708 0.0  
LOCATION A0000018 AREA 439661.942 3765742.089 0.0  
LOCATION A0000019 AREA 439498.385 3765742.454 0.0  
LOCATION A0000020 AREA 439334.828 3765742.819 0.0  
LOCATION A0000021 AREA 439171.191 3765743.184 0.0  
LOCATION A0000022 AREA 439021.059 3765742.226 0.0

\*\* End of LINE AREA Source ID = ARLN01

\*\* -----

-----  
\*\* Line Source Represented by Area Sources

\*\* LINE AREA Source ID = ARLN02

\*\* DESCRSRC SR 60 EB Freeway DPM Ex

\*\* PREFIX

\*\* Length of Side = 18.29

\*\* Ratio = 10

\*\* Vertical Dimension = 3.20

\*\* Emission Rate = 0.0000307481

\*\* Nodes = 6

\*\* 438872.217, 3765713.798, 258.90, 3.40

\*\* 439571.019, 3765709.354, 260.53, 3.40

\*\* 439744.944, 3765708.790, 261.20, 3.40

\*\* 440090.503, 3765708.356, 261.51, 3.40

\*\* 440405.345, 3765708.356, 260.60, 3.40

\*\* 440650.831, 3765711.094, 260.06, 3.40

\*\* -----

-----  
LOCATION A0000001 AREA 438872.159 3765704.654 0.0  
LOCATION A0000002 AREA 439046.860 3765703.543 0.0  
LOCATION A0000003 AREA 439221.560 3765702.432 0.0  
LOCATION A0000004 AREA 439396.261 3765701.321 0.0  
LOCATION A0000005 AREA 439570.990 3765700.210 0.0  
LOCATION A0000006 AREA 439744.932 3765699.646 0.0  
LOCATION A0000007 AREA 439917.712 3765699.429 0.0  
LOCATION A0000008 AREA 440090.503 3765699.212 0.0  
LOCATION A0000009 AREA 440247.924 3765699.212 0.0  
LOCATION A0000010 AREA 440405.447 3765699.212 0.0  
LOCATION A0000011 AREA 440528.190 3765700.581 0.0

\*\* End of LINE AREA Source ID = ARLN02

\*\* -----

-----  
\*\* Line Source Represented by Area Sources

\*\* LINE AREA Source ID = ARLN03

\*\* DESCRSRC SR 60 WB On-Ramp DPM Ex

```

** PREFIX
** Length of Side = 3.96
** Ratio = 10
** Vertical Dimension = 3.20
** Emission Rate = 0.0005311802
** Nodes = 6
** 439895.137, 3765792.036, 254.44, 3.40
** 439830.262, 3765782.314, 255.62, 3.40
** 439602.637, 3765750.155, 260.12, 3.40
** 439556.367, 3765746.633, 260.49, 3.40
** 439478.285, 3765744.597, 260.25, 3.40
** 439423.199, 3765742.703, 260.08, 3.40
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LOCATION A0000023      AREA      439894.844 3765793.995 0.0
LOCATION A0000024      AREA      439862.406 3765789.134 0.0
LOCATION A0000025      AREA      439829.985 3765784.276 0.0
LOCATION A0000026      AREA      439792.048 3765778.916 0.0
LOCATION A0000027      AREA      439754.110 3765773.556 0.0
LOCATION A0000028      AREA      439716.172 3765768.196 0.0
LOCATION A0000029      AREA      439678.235 3765762.836 0.0
LOCATION A0000030      AREA      439640.297 3765757.477 0.0
LOCATION A0000031      AREA      439602.486 3765752.131 0.0
LOCATION A0000032      AREA      439579.352 3765750.369 0.0
LOCATION A0000033      AREA      439556.316 3765748.613 0.0
LOCATION A0000034      AREA      439517.274 3765747.595 0.0
LOCATION A0000035      AREA      439478.217 3765746.577 0.0
LOCATION A0000036      AREA      439450.674 3765745.630 0.0

```

```

** End of LINE AREA Source ID = ARLN03
** -----

```

```

-----
** Line Source Represented by Area Sources
** LINE AREA Source ID = ARLN04
** DESCRSRC SR 60 EB Offramp DPM Ex
** PREFIX

```

```

** Length of Side = 7.62
** Ratio = 10
** Vertical Dimension = 3.20
** Emission Rate = 0.0003007914
** Nodes = 5
** 439895.389, 3765645.743, 252.80, 3.40
** 439818.641, 3765660.066, 254.56, 3.40
** 439755.474, 3765672.004, 257.06, 3.40
** 439662.806, 3765681.323, 259.67, 3.40
** 439463.024, 3765701.522, 260.17, 3.40
** -----

```

```

-----
LOCATION A0000037      AREA      439896.088 3765649.489 0.0
LOCATION A0000038      AREA      439857.714 3765656.650 0.0
LOCATION A0000039      AREA      439819.349 3765663.810 0.0
LOCATION A0000040      AREA      439755.856 3765675.795 0.0
LOCATION A0000041      AREA      439709.522 3765680.454 0.0

```

```

LOCATION A0000042      AREA      439663.190 3765685.113 0.0
LOCATION A0000043      AREA      439596.595 3765691.846 0.0
LOCATION A0000044      AREA      439530.001 3765698.580 0.0
** End of LINE AREA Source ID = ARLN04
** -----

```

```

-----
** Line Source Represented by Area Sources

```

```

** LINE AREA Source ID = ARLN05
** DESCRSRC SR 60 EB On-Ramp DPM Ex

```

```

** PREFIX
** Length of Side = 3.96
** Ratio = 10
** Vertical Dimension = 3.20
** Emission Rate = 0.000496591
** Nodes = 7

```

```

** 439941.297, 3765645.292, 253.26, 3.40
** 439993.010, 3765652.773, 253.93, 3.40
** 440155.834, 3765673.927, 258.66, 3.40
** 440268.609, 3765688.074, 259.90, 3.40
** 440322.372, 3765691.635, 260.22, 3.40
** 440354.630, 3765692.689, 260.13, 3.40
** 440446.541, 3765695.419, 259.97, 3.40
** -----

```

```

-----
LOCATION A0000045      AREA      439941.581 3765643.331 0.0
LOCATION A0000046      AREA      439967.437 3765647.072 0.0
LOCATION A0000047      AREA      439993.265 3765650.809 0.0
LOCATION A0000048      AREA      440025.830 3765655.039 0.0
LOCATION A0000049      AREA      440058.395 3765659.270 0.0
LOCATION A0000050      AREA      440090.960 3765663.501 0.0
LOCATION A0000051      AREA      440123.524 3765667.732 0.0
LOCATION A0000052      AREA      440156.081 3765671.961 0.0
LOCATION A0000053      AREA      440193.672 3765676.677 0.0
LOCATION A0000054      AREA      440231.264 3765681.392 0.0
LOCATION A0000055      AREA      440268.740 3765686.097 0.0
LOCATION A0000056      AREA      440295.621 3765687.877 0.0
LOCATION A0000057      AREA      440322.437 3765689.655 0.0
LOCATION A0000058      AREA      440354.688 3765690.708 0.0
LOCATION A0000059      AREA      440385.325 3765691.619 0.0
LOCATION A0000060      AREA      440415.962 3765692.529 0.0

```

```

** End of LINE AREA Source ID = ARLN05
** -----

```

```

-----
** Line Source Represented by Area Sources

```

```

** LINE AREA Source ID = ARLN06
** DESCRSRC SR 60 WB Off-ramp DPM Ex

```

```

** PREFIX
** Length of Side = 11.58
** Ratio = 10
** Vertical Dimension = 3.20
** Emission Rate = 0.0001897523
** Nodes = 6

```

\*\* 440392.606, 3765738.840, 260.54, 3.40  
 \*\* 440310.837, 3765747.261, 260.35, 3.40  
 \*\* 440224.880, 3765756.031, 259.69, 3.40  
 \*\* 440137.544, 3765763.271, 258.13, 3.40  
 \*\* 440102.580, 3765767.415, 257.28, 3.40  
 \*\* 439940.966, 3765792.538, 254.87, 3.40

\*\* -----  
 -----

LOCATION A0000061	AREA	440393.199	3765744.601	0.0
LOCATION A0000062	AREA	440311.425	3765753.022	0.0
LOCATION A0000063	AREA	440225.359	3765761.802	0.0
LOCATION A0000064	AREA	440138.226	3765769.022	0.0
LOCATION A0000065	AREA	440103.469	3765773.137	0.0
LOCATION A0000066	AREA	440022.663	3765785.699	0.0

\*\* End of LINE AREA Source ID = ARLN06

\*\* Source Parameters \*\*

\*\* LINE AREA Source ID = ARLN01

SRCPARAM A0000012	0.0000307319	3.400	176.761
18.290 -179.517	3.200		
SRCPARAM A0000013	0.0000307319	3.400	176.761
18.290 -179.517	3.200		
SRCPARAM A0000014	0.0000307319	3.400	176.761
18.290 -179.517	3.200		
SRCPARAM A0000015	0.0000307319	3.400	152.620
18.290 -179.857	3.200		
SRCPARAM A0000016	0.0000307319	3.400	152.620
18.290 -179.857	3.200		
SRCPARAM A0000017	0.0000307319	3.400	152.620
18.290 -179.857	3.200		
SRCPARAM A0000018	0.0000307319	3.400	163.558
18.290 -179.872	3.200		
SRCPARAM A0000019	0.0000307319	3.400	163.558
18.290 -179.872	3.200		
SRCPARAM A0000020	0.0000307319	3.400	163.558
18.290 -179.872	3.200		
SRCPARAM A0000021	0.0000307319	3.400	150.135
18.290 179.634	3.200		
SRCPARAM A0000022	0.0000307319	3.400	150.135
18.290 179.634	3.200		

\*\* -----  
 -----

\*\* LINE AREA Source ID = ARLN02

SRCPARAM A0000001	0.0000307481	3.400	174.704
18.288 0.364	3.200		
SRCPARAM A0000002	0.0000307481	3.400	174.704
18.288 0.364	3.200		
SRCPARAM A0000003	0.0000307481	3.400	174.704
18.288 0.364	3.200		
SRCPARAM A0000004	0.0000307481	3.400	174.704
18.288 0.364	3.200		
SRCPARAM A0000005	0.0000307481	3.400	173.925
18.288 0.186	3.200		

	SRCPARAM A0000006	0.0000307481	3.400	172.780
18.288	0.072	3.200		
	SRCPARAM A0000007	0.0000307481	3.400	172.780
18.288	0.072	3.200		
	SRCPARAM A0000008	0.0000307481	3.400	157.421
18.288	0.000	3.200		
	SRCPARAM A0000009	0.0000307481	3.400	157.421
18.288	0.000	3.200		
	SRCPARAM A0000010	0.0000307481	3.400	122.750
18.288	-0.639	3.200		
	SRCPARAM A0000011	0.0000307481	3.400	122.750
18.288	-0.639	3.200		

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\*\* LINE AREA Source ID = ARLN03

	SRCPARAM A0000023	0.0005311802	3.400	32.800
3.962	171.477	3.200		
	SRCPARAM A0000024	0.0005311802	3.400	32.800
3.962	171.477	3.200		
	SRCPARAM A0000025	0.0005311802	3.400	38.314
3.962	171.958	3.200		
	SRCPARAM A0000026	0.0005311802	3.400	38.314
3.962	171.958	3.200		
	SRCPARAM A0000027	0.0005311802	3.400	38.314
3.962	171.958	3.200		
	SRCPARAM A0000028	0.0005311802	3.400	38.314
3.962	171.958	3.200		
	SRCPARAM A0000029	0.0005311802	3.400	38.314
3.962	171.958	3.200		
	SRCPARAM A0000030	0.0005311802	3.400	38.314
3.962	171.958	3.200		
	SRCPARAM A0000031	0.0005311802	3.400	23.202
3.962	175.647	3.200		
	SRCPARAM A0000032	0.0005311802	3.400	23.202
3.962	175.647	3.200		
	SRCPARAM A0000033	0.0005311802	3.400	39.055
3.962	178.506	3.200		
	SRCPARAM A0000034	0.0005311802	3.400	39.055
3.962	178.506	3.200		
	SRCPARAM A0000035	0.0005311802	3.400	27.559
3.962	178.031	3.200		
	SRCPARAM A0000036	0.0005311802	3.400	27.559
3.962	178.031	3.200		

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\*\* LINE AREA Source ID = ARLN04

	SRCPARAM A0000037	0.0003007914	3.400	39.036
7.620	-169.429	3.200		
	SRCPARAM A0000038	0.0003007914	3.400	39.036
7.620	-169.429	3.200		
	SRCPARAM A0000039	0.0003007914	3.400	64.285
7.620	-169.298	3.200		

SRCPARAM A0000040	0.0003007914	3.400	46.568
7.620 -174.258	3.200		
SRCPARAM A0000041	0.0003007914	3.400	46.568
7.620 -174.258	3.200		
SRCPARAM A0000042	0.0003007914	3.400	66.934
7.620 -174.227	3.200		
SRCPARAM A0000043	0.0003007914	3.400	66.934
7.620 -174.227	3.200		
SRCPARAM A0000044	0.0003007914	3.400	66.934
7.620 -174.227	3.200		
** -----			
-----			
** LINE AREA Source ID = ARLN05			
SRCPARAM A0000045	0.000496591	3.400	26.125
3.962 -8.232	3.200		
SRCPARAM A0000046	0.000496591	3.400	26.125
3.962 -8.232	3.200		
SRCPARAM A0000047	0.000496591	3.400	32.839
3.962 -7.402	3.200		
SRCPARAM A0000048	0.000496591	3.400	32.839
3.962 -7.402	3.200		
SRCPARAM A0000049	0.000496591	3.400	32.839
3.962 -7.402	3.200		
SRCPARAM A0000050	0.000496591	3.400	32.839
3.962 -7.402	3.200		
SRCPARAM A0000051	0.000496591	3.400	32.839
3.962 -7.402	3.200		
SRCPARAM A0000052	0.000496591	3.400	37.886
3.962 -7.150	3.200		
SRCPARAM A0000053	0.000496591	3.400	37.886
3.962 -7.150	3.200		
SRCPARAM A0000054	0.000496591	3.400	37.886
3.962 -7.150	3.200		
SRCPARAM A0000055	0.000496591	3.400	26.940
3.962 -3.790	3.200		
SRCPARAM A0000056	0.000496591	3.400	26.940
3.962 -3.790	3.200		
SRCPARAM A0000057	0.000496591	3.400	32.275
3.962 -1.871	3.200		
SRCPARAM A0000058	0.000496591	3.400	30.651
3.962 -1.702	3.200		
SRCPARAM A0000059	0.000496591	3.400	30.651
3.962 -1.702	3.200		
SRCPARAM A0000060	0.000496591	3.400	30.651
3.962 -1.702	3.200		
** -----			
-----			
** LINE AREA Source ID = ARLN06			
SRCPARAM A0000061	0.0001897523	3.400	82.201
11.582 -174.121	3.200		
SRCPARAM A0000062	0.0001897523	3.400	86.403
11.582 -174.174	3.200		

	SRCPARAM A0000063	0.0001897523	3.400	87.635
11.582	-175.261	3.200		
	SRCPARAM A0000064	0.0001897523	3.400	35.209
11.582	-173.241	3.200		
	SRCPARAM A0000065	0.0001897523	3.400	81.777
11.582	-171.164	3.200		
	SRCPARAM A0000066	0.0001897523	3.400	81.777
11.582	-171.164	3.200		

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URBANSRC ALL

\*\* Variable Emissions Type: "By Hour-of-Day (HROFDY)"

\*\* Variable Emission Scenario: "ARLN01"

EMISFACT A0000012	HROFDY	0.00274	0.00271	0.00264	0.00272
0.00339	0.0043				
EMISFACT A0000012	HROFDY	0.00541	0.00502	0.00591	0.00706
0.00747	0.00731				
EMISFACT A0000012	HROFDY	0.0069	0.0063	0.00496	0.00383
0.00289	0.00262				
EMISFACT A0000012	HROFDY	0.00329	0.00402	0.00426	0.00398
0.0038	0.00314				
EMISFACT A0000013	HROFDY	0.00274	0.00271	0.00264	0.00272
0.00339	0.0043				
EMISFACT A0000013	HROFDY	0.00541	0.00502	0.00591	0.00706
0.00747	0.00731				
EMISFACT A0000013	HROFDY	0.0069	0.0063	0.00496	0.00383
0.00289	0.00262				
EMISFACT A0000013	HROFDY	0.00329	0.00402	0.00426	0.00398
0.0038	0.00314				
EMISFACT A0000014	HROFDY	0.00274	0.00271	0.00264	0.00272
0.00339	0.0043				
EMISFACT A0000014	HROFDY	0.00541	0.00502	0.00591	0.00706
0.00747	0.00731				
EMISFACT A0000014	HROFDY	0.0069	0.0063	0.00496	0.00383
0.00289	0.00262				
EMISFACT A0000014	HROFDY	0.00329	0.00402	0.00426	0.00398
0.0038	0.00314				
EMISFACT A0000015	HROFDY	0.00274	0.00271	0.00264	0.00272
0.00339	0.0043				
EMISFACT A0000015	HROFDY	0.00541	0.00502	0.00591	0.00706
0.00747	0.00731				
EMISFACT A0000015	HROFDY	0.0069	0.0063	0.00496	0.00383
0.00289	0.00262				
EMISFACT A0000015	HROFDY	0.00329	0.00402	0.00426	0.00398
0.0038	0.00314				
EMISFACT A0000016	HROFDY	0.00274	0.00271	0.00264	0.00272
0.00339	0.0043				
EMISFACT A0000016	HROFDY	0.00541	0.00502	0.00591	0.00706
0.00747	0.00731				
EMISFACT A0000016	HROFDY	0.0069	0.0063	0.00496	0.00383
0.00289	0.00262				

EMISFACT A0000016	HROFDY 0.00329 0.00402 0.00426 0.00398
0.0038 0.00314	
EMISFACT A0000017	HROFDY 0.00274 0.00271 0.00264 0.00272
0.00339 0.0043	
EMISFACT A0000017	HROFDY 0.00541 0.00502 0.00591 0.00706
0.00747 0.00731	
EMISFACT A0000017	HROFDY 0.0069 0.0063 0.00496 0.00383
0.00289 0.00262	
EMISFACT A0000017	HROFDY 0.00329 0.00402 0.00426 0.00398
0.0038 0.00314	
EMISFACT A0000018	HROFDY 0.00274 0.00271 0.00264 0.00272
0.00339 0.0043	
EMISFACT A0000018	HROFDY 0.00541 0.00502 0.00591 0.00706
0.00747 0.00731	
EMISFACT A0000018	HROFDY 0.0069 0.0063 0.00496 0.00383
0.00289 0.00262	
EMISFACT A0000018	HROFDY 0.00329 0.00402 0.00426 0.00398
0.0038 0.00314	
EMISFACT A0000019	HROFDY 0.00274 0.00271 0.00264 0.00272
0.00339 0.0043	
EMISFACT A0000019	HROFDY 0.00541 0.00502 0.00591 0.00706
0.00747 0.00731	
EMISFACT A0000019	HROFDY 0.0069 0.0063 0.00496 0.00383
0.00289 0.00262	
EMISFACT A0000019	HROFDY 0.00329 0.00402 0.00426 0.00398
0.0038 0.00314	
EMISFACT A0000020	HROFDY 0.00274 0.00271 0.00264 0.00272
0.00339 0.0043	
EMISFACT A0000020	HROFDY 0.00541 0.00502 0.00591 0.00706
0.00747 0.00731	
EMISFACT A0000020	HROFDY 0.0069 0.0063 0.00496 0.00383
0.00289 0.00262	
EMISFACT A0000020	HROFDY 0.00329 0.00402 0.00426 0.00398
0.0038 0.00314	
EMISFACT A0000021	HROFDY 0.00274 0.00271 0.00264 0.00272
0.00339 0.0043	
EMISFACT A0000021	HROFDY 0.00541 0.00502 0.00591 0.00706
0.00747 0.00731	
EMISFACT A0000021	HROFDY 0.0069 0.0063 0.00496 0.00383
0.00289 0.00262	
EMISFACT A0000021	HROFDY 0.00329 0.00402 0.00426 0.00398
0.0038 0.00314	
EMISFACT A0000022	HROFDY 0.00274 0.00271 0.00264 0.00272
0.00339 0.0043	
EMISFACT A0000022	HROFDY 0.00541 0.00502 0.00591 0.00706
0.00747 0.00731	
EMISFACT A0000022	HROFDY 0.0069 0.0063 0.00496 0.00383
0.00289 0.00262	
EMISFACT A0000022	HROFDY 0.00329 0.00402 0.00426 0.00398
0.0038 0.00314	

\*\* Variable Emissions Type: "By Hour-of-Day (HROFDY)"

```

** Variable Emission Scenario: "ARLN02"
  EMISFACT A0000001      HROFDY 0.0172 0.0124 0.0108 0.0126
0.0203 0.034
  EMISFACT A0000001      HROFDY 0.0431 0.0457 0.0439 0.0414 0.042
0.0439
  EMISFACT A0000001      HROFDY 0.0463 0.0483 0.0501 0.0491
0.0508 0.0506
  EMISFACT A0000001      HROFDY 0.0472 0.0459 0.0417 0.0408
0.0334 0.0248
  EMISFACT A0000002      HROFDY 0.0172 0.0124 0.0108 0.0126
0.0203 0.034
  EMISFACT A0000002      HROFDY 0.0431 0.0457 0.0439 0.0414 0.042
0.0439
  EMISFACT A0000002      HROFDY 0.0463 0.0483 0.0501 0.0491
0.0508 0.0506
  EMISFACT A0000002      HROFDY 0.0472 0.0459 0.0417 0.0408
0.0334 0.0248
  EMISFACT A0000003      HROFDY 0.0172 0.0124 0.0108 0.0126
0.0203 0.034
  EMISFACT A0000003      HROFDY 0.0431 0.0457 0.0439 0.0414 0.042
0.0439
  EMISFACT A0000003      HROFDY 0.0463 0.0483 0.0501 0.0491
0.0508 0.0506
  EMISFACT A0000003      HROFDY 0.0472 0.0459 0.0417 0.0408
0.0334 0.0248
  EMISFACT A0000004      HROFDY 0.0172 0.0124 0.0108 0.0126
0.0203 0.034
  EMISFACT A0000004      HROFDY 0.0431 0.0457 0.0439 0.0414 0.042
0.0439
  EMISFACT A0000004      HROFDY 0.0463 0.0483 0.0501 0.0491
0.0508 0.0506
  EMISFACT A0000004      HROFDY 0.0472 0.0459 0.0417 0.0408
0.0334 0.0248
  EMISFACT A0000005      HROFDY 0.0172 0.0124 0.0108 0.0126
0.0203 0.034
  EMISFACT A0000005      HROFDY 0.0431 0.0457 0.0439 0.0414 0.042
0.0439
  EMISFACT A0000005      HROFDY 0.0463 0.0483 0.0501 0.0491
0.0508 0.0506
  EMISFACT A0000005      HROFDY 0.0472 0.0459 0.0417 0.0408
0.0334 0.0248
  EMISFACT A0000006      HROFDY 0.0172 0.0124 0.0108 0.0126
0.0203 0.034
  EMISFACT A0000006      HROFDY 0.0431 0.0457 0.0439 0.0414 0.042
0.0439
  EMISFACT A0000006      HROFDY 0.0463 0.0483 0.0501 0.0491
0.0508 0.0506
  EMISFACT A0000006      HROFDY 0.0472 0.0459 0.0417 0.0408
0.0334 0.0248
  EMISFACT A0000007      HROFDY 0.0172 0.0124 0.0108 0.0126
0.0203 0.034
  EMISFACT A0000007      HROFDY 0.0431 0.0457 0.0439 0.0414 0.042

```

0.0439	EMISFACT A0000007	HROFDY	0.0463	0.0483	0.0501	0.0491
0.0508	0.0506					
	EMISFACT A0000007	HROFDY	0.0472	0.0459	0.0417	0.0408
0.0334	0.0248					
	EMISFACT A0000008	HROFDY	0.0172	0.0124	0.0108	0.0126
0.0203	0.034					
	EMISFACT A0000008	HROFDY	0.0431	0.0457	0.0439	0.0414 0.042
0.0439						
	EMISFACT A0000008	HROFDY	0.0463	0.0483	0.0501	0.0491
0.0508	0.0506					
	EMISFACT A0000008	HROFDY	0.0472	0.0459	0.0417	0.0408
0.0334	0.0248					
	EMISFACT A0000009	HROFDY	0.0172	0.0124	0.0108	0.0126
0.0203	0.034					
	EMISFACT A0000009	HROFDY	0.0431	0.0457	0.0439	0.0414 0.042
0.0439						
	EMISFACT A0000009	HROFDY	0.0463	0.0483	0.0501	0.0491
0.0508	0.0506					
	EMISFACT A0000009	HROFDY	0.0472	0.0459	0.0417	0.0408
0.0334	0.0248					
	EMISFACT A0000010	HROFDY	0.0172	0.0124	0.0108	0.0126
0.0203	0.034					
	EMISFACT A0000010	HROFDY	0.0431	0.0457	0.0439	0.0414 0.042
0.0439						
	EMISFACT A0000010	HROFDY	0.0463	0.0483	0.0501	0.0491
0.0508	0.0506					
	EMISFACT A0000010	HROFDY	0.0472	0.0459	0.0417	0.0408
0.0334	0.0248					
	EMISFACT A0000011	HROFDY	0.0172	0.0124	0.0108	0.0126
0.0203	0.034					
	EMISFACT A0000011	HROFDY	0.0431	0.0457	0.0439	0.0414 0.042
0.0439						
	EMISFACT A0000011	HROFDY	0.0463	0.0483	0.0501	0.0491
0.0508	0.0506					
	EMISFACT A0000011	HROFDY	0.0472	0.0459	0.0417	0.0408
0.0334	0.0248					

\*\* Variable Emissions Type: "By Hour-of-Day (HROFDY)"  
\*\* Variable Emission Scenario: "ARLN03"

EMISFACT A0000023	HROFDY	0.0000817	0.0000563	0.0000494
0.000088	0.000251	0.000399		
EMISFACT A0000023	HROFDY	0.00045	0.000513	0.000554
0.000568	0.000587	0.000618		
EMISFACT A0000023	HROFDY	0.000603	0.000582	0.000565
0.000548	0.000528	0.000516		
EMISFACT A0000023	HROFDY	0.000421	0.000329	0.000297
0.000258	0.000191	0.000122		
EMISFACT A0000024	HROFDY	0.0000817	0.0000563	0.0000494
0.000088	0.000251	0.000399		
EMISFACT A0000024	HROFDY	0.00045	0.000513	0.000554
0.000568	0.000587	0.000618		

EMISFACT A0000024 HROFDY 0.000603 0.000582 0.000565  
0.000548 0.000528 0.000516  
EMISFACT A0000024 HROFDY 0.000421 0.000329 0.000297  
0.000258 0.000191 0.000122  
EMISFACT A0000025 HROFDY 0.0000817 0.0000563 0.0000494  
0.000088 0.000251 0.000399  
EMISFACT A0000025 HROFDY 0.00045 0.000513 0.000554  
0.000568 0.000587 0.000618  
EMISFACT A0000025 HROFDY 0.000603 0.000582 0.000565  
0.000548 0.000528 0.000516  
EMISFACT A0000025 HROFDY 0.000421 0.000329 0.000297  
0.000258 0.000191 0.000122  
EMISFACT A0000026 HROFDY 0.0000817 0.0000563 0.0000494  
0.000088 0.000251 0.000399  
EMISFACT A0000026 HROFDY 0.00045 0.000513 0.000554  
0.000568 0.000587 0.000618  
EMISFACT A0000026 HROFDY 0.000603 0.000582 0.000565  
0.000548 0.000528 0.000516  
EMISFACT A0000026 HROFDY 0.000421 0.000329 0.000297  
0.000258 0.000191 0.000122  
EMISFACT A0000027 HROFDY 0.0000817 0.0000563 0.0000494  
0.000088 0.000251 0.000399  
EMISFACT A0000027 HROFDY 0.00045 0.000513 0.000554  
0.000568 0.000587 0.000618  
EMISFACT A0000027 HROFDY 0.000603 0.000582 0.000565  
0.000548 0.000528 0.000516  
EMISFACT A0000027 HROFDY 0.000421 0.000329 0.000297  
0.000258 0.000191 0.000122  
EMISFACT A0000028 HROFDY 0.0000817 0.0000563 0.0000494  
0.000088 0.000251 0.000399  
EMISFACT A0000028 HROFDY 0.00045 0.000513 0.000554  
0.000568 0.000587 0.000618  
EMISFACT A0000028 HROFDY 0.000603 0.000582 0.000565  
0.000548 0.000528 0.000516  
EMISFACT A0000028 HROFDY 0.000421 0.000329 0.000297  
0.000258 0.000191 0.000122  
EMISFACT A0000029 HROFDY 0.0000817 0.0000563 0.0000494  
0.000088 0.000251 0.000399  
EMISFACT A0000029 HROFDY 0.00045 0.000513 0.000554  
0.000568 0.000587 0.000618  
EMISFACT A0000029 HROFDY 0.000603 0.000582 0.000565  
0.000548 0.000528 0.000516  
EMISFACT A0000029 HROFDY 0.000421 0.000329 0.000297  
0.000258 0.000191 0.000122  
EMISFACT A0000030 HROFDY 0.0000817 0.0000563 0.0000494  
0.000088 0.000251 0.000399  
EMISFACT A0000030 HROFDY 0.00045 0.000513 0.000554  
0.000568 0.000587 0.000618  
EMISFACT A0000030 HROFDY 0.000603 0.000582 0.000565  
0.000548 0.000528 0.000516  
EMISFACT A0000030 HROFDY 0.000421 0.000329 0.000297  
0.000258 0.000191 0.000122

EMISFACT A0000031	HROFDY	0.0000817	0.0000563	0.0000494
0.000088	0.000251	0.000399		
EMISFACT A0000031	HROFDY	0.00045	0.000513	0.000554
0.000568	0.000587	0.000618		
EMISFACT A0000031	HROFDY	0.000603	0.000582	0.000565
0.000548	0.000528	0.000516		
EMISFACT A0000031	HROFDY	0.000421	0.000329	0.000297
0.000258	0.000191	0.000122		
EMISFACT A0000032	HROFDY	0.0000817	0.0000563	0.0000494
0.000088	0.000251	0.000399		
EMISFACT A0000032	HROFDY	0.00045	0.000513	0.000554
0.000568	0.000587	0.000618		
EMISFACT A0000032	HROFDY	0.000603	0.000582	0.000565
0.000548	0.000528	0.000516		
EMISFACT A0000032	HROFDY	0.000421	0.000329	0.000297
0.000258	0.000191	0.000122		
EMISFACT A0000033	HROFDY	0.0000817	0.0000563	0.0000494
0.000088	0.000251	0.000399		
EMISFACT A0000033	HROFDY	0.00045	0.000513	0.000554
0.000568	0.000587	0.000618		
EMISFACT A0000033	HROFDY	0.000603	0.000582	0.000565
0.000548	0.000528	0.000516		
EMISFACT A0000033	HROFDY	0.000421	0.000329	0.000297
0.000258	0.000191	0.000122		
EMISFACT A0000034	HROFDY	0.0000817	0.0000563	0.0000494
0.000088	0.000251	0.000399		
EMISFACT A0000034	HROFDY	0.00045	0.000513	0.000554
0.000568	0.000587	0.000618		
EMISFACT A0000034	HROFDY	0.000603	0.000582	0.000565
0.000548	0.000528	0.000516		
EMISFACT A0000034	HROFDY	0.000421	0.000329	0.000297
0.000258	0.000191	0.000122		
EMISFACT A0000035	HROFDY	0.0000817	0.0000563	0.0000494
0.000088	0.000251	0.000399		
EMISFACT A0000035	HROFDY	0.00045	0.000513	0.000554
0.000568	0.000587	0.000618		
EMISFACT A0000035	HROFDY	0.000603	0.000582	0.000565
0.000548	0.000528	0.000516		
EMISFACT A0000035	HROFDY	0.000421	0.000329	0.000297
0.000258	0.000191	0.000122		
EMISFACT A0000036	HROFDY	0.0000817	0.0000563	0.0000494
0.000088	0.000251	0.000399		
EMISFACT A0000036	HROFDY	0.00045	0.000513	0.000554
0.000568	0.000587	0.000618		
EMISFACT A0000036	HROFDY	0.000603	0.000582	0.000565
0.000548	0.000528	0.000516		
EMISFACT A0000036	HROFDY	0.000421	0.000329	0.000297
0.000258	0.000191	0.000122		

\*\* Variable Emissions Type: "By Hour-of-Day (HROFDY)"

\*\* Variable Emission Scenario: "ARLN04"

EMISFACT A0000037	HROFDY	0.0000451	0.0000446	0.0000433
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0.0000447 0.0000558 0.0000708  
 EMISFACT A0000037 HROFDY 0.000089 0.0000825 0.0000971  
 0.000116 0.000123 0.00012  
 EMISFACT A0000037 HROFDY 0.000113 0.000104 0.0000815  
 0.000063 0.0000548 0.0000497  
 EMISFACT A0000037 HROFDY 0.0000541 0.0000662 0.0000701  
 0.0000655 0.0000625 0.0000516  
 EMISFACT A0000038 HROFDY 0.0000451 0.0000446 0.0000433  
 0.0000447 0.0000558 0.0000708  
 EMISFACT A0000038 HROFDY 0.000089 0.0000825 0.0000971  
 0.000116 0.000123 0.00012  
 EMISFACT A0000038 HROFDY 0.000113 0.000104 0.0000815  
 0.000063 0.0000548 0.0000497  
 EMISFACT A0000038 HROFDY 0.0000541 0.0000662 0.0000701  
 0.0000655 0.0000625 0.0000516  
 EMISFACT A0000039 HROFDY 0.0000451 0.0000446 0.0000433  
 0.0000447 0.0000558 0.0000708  
 EMISFACT A0000039 HROFDY 0.000089 0.0000825 0.0000971  
 0.000116 0.000123 0.00012  
 EMISFACT A0000039 HROFDY 0.000113 0.000104 0.0000815  
 0.000063 0.0000548 0.0000497  
 EMISFACT A0000039 HROFDY 0.0000541 0.0000662 0.0000701  
 0.0000655 0.0000625 0.0000516  
 EMISFACT A0000040 HROFDY 0.0000451 0.0000446 0.0000433  
 0.0000447 0.0000558 0.0000708  
 EMISFACT A0000040 HROFDY 0.000089 0.0000825 0.0000971  
 0.000116 0.000123 0.00012  
 EMISFACT A0000040 HROFDY 0.000113 0.000104 0.0000815  
 0.000063 0.0000548 0.0000497  
 EMISFACT A0000040 HROFDY 0.0000541 0.0000662 0.0000701  
 0.0000655 0.0000625 0.0000516  
 EMISFACT A0000041 HROFDY 0.0000451 0.0000446 0.0000433  
 0.0000447 0.0000558 0.0000708  
 EMISFACT A0000041 HROFDY 0.000089 0.0000825 0.0000971  
 0.000116 0.000123 0.00012  
 EMISFACT A0000041 HROFDY 0.000113 0.000104 0.0000815  
 0.000063 0.0000548 0.0000497  
 EMISFACT A0000041 HROFDY 0.0000541 0.0000662 0.0000701  
 0.0000655 0.0000625 0.0000516  
 EMISFACT A0000042 HROFDY 0.0000451 0.0000446 0.0000433  
 0.0000447 0.0000558 0.0000708  
 EMISFACT A0000042 HROFDY 0.000089 0.0000825 0.0000971  
 0.000116 0.000123 0.00012  
 EMISFACT A0000042 HROFDY 0.000113 0.000104 0.0000815  
 0.000063 0.0000548 0.0000497  
 EMISFACT A0000042 HROFDY 0.0000541 0.0000662 0.0000701  
 0.0000655 0.0000625 0.0000516  
 EMISFACT A0000043 HROFDY 0.0000451 0.0000446 0.0000433  
 0.0000447 0.0000558 0.0000708  
 EMISFACT A0000043 HROFDY 0.000089 0.0000825 0.0000971  
 0.000116 0.000123 0.00012  
 EMISFACT A0000043 HROFDY 0.000113 0.000104 0.0000815

0.000063 0.0000548 0.0000497  
EMISFACT A0000043 HROFDY 0.0000541 0.0000662 0.0000701  
0.0000655 0.0000625 0.0000516  
EMISFACT A0000044 HROFDY 0.0000451 0.0000446 0.0000433  
0.0000447 0.0000558 0.0000708  
EMISFACT A0000044 HROFDY 0.000089 0.0000825 0.0000971  
0.000116 0.000123 0.00012  
EMISFACT A0000044 HROFDY 0.000113 0.000104 0.0000815  
0.000063 0.0000548 0.0000497  
EMISFACT A0000044 HROFDY 0.0000541 0.0000662 0.0000701  
0.0000655 0.0000625 0.0000516

\*\* Variable Emissions Type: "By Hour-of-Day (HROFDY)"

\*\* Variable Emission Scenario: "ARLN05"

EMISFACT A0000045 HROFDY 0.000314 0.00031 0.000301  
0.000311 0.000388 0.000492  
EMISFACT A0000045 HROFDY 0.000619 0.000574 0.000676  
0.000808 0.000855 0.000836  
EMISFACT A0000045 HROFDY 0.000789 0.00072 0.000567  
0.000438 0.000381 0.000345  
EMISFACT A0000045 HROFDY 0.000376 0.00046 0.000488  
0.000456 0.000435 0.000359  
EMISFACT A0000046 HROFDY 0.000314 0.00031 0.000301  
0.000311 0.000388 0.000492  
EMISFACT A0000046 HROFDY 0.000619 0.000574 0.000676  
0.000808 0.000855 0.000836  
EMISFACT A0000046 HROFDY 0.000789 0.00072 0.000567  
0.000438 0.000381 0.000345  
EMISFACT A0000046 HROFDY 0.000376 0.00046 0.000488  
0.000456 0.000435 0.000359  
EMISFACT A0000047 HROFDY 0.000314 0.00031 0.000301  
0.000311 0.000388 0.000492  
EMISFACT A0000047 HROFDY 0.000619 0.000574 0.000676  
0.000808 0.000855 0.000836  
EMISFACT A0000047 HROFDY 0.000789 0.00072 0.000567  
0.000438 0.000381 0.000345  
EMISFACT A0000047 HROFDY 0.000376 0.00046 0.000488  
0.000456 0.000435 0.000359  
EMISFACT A0000048 HROFDY 0.000314 0.00031 0.000301  
0.000311 0.000388 0.000492  
EMISFACT A0000048 HROFDY 0.000619 0.000574 0.000676  
0.000808 0.000855 0.000836  
EMISFACT A0000048 HROFDY 0.000789 0.00072 0.000567  
0.000438 0.000381 0.000345  
EMISFACT A0000048 HROFDY 0.000376 0.00046 0.000488  
0.000456 0.000435 0.000359  
EMISFACT A0000049 HROFDY 0.000314 0.00031 0.000301  
0.000311 0.000388 0.000492  
EMISFACT A0000049 HROFDY 0.000619 0.000574 0.000676  
0.000808 0.000855 0.000836  
EMISFACT A0000049 HROFDY 0.000789 0.00072 0.000567  
0.000438 0.000381 0.000345

EMISFACT A0000049 HROFDY 0.000376 0.00046 0.000488  
0.000456 0.000435 0.000359  
EMISFACT A0000050 HROFDY 0.000314 0.00031 0.000301  
0.000311 0.000388 0.000492  
EMISFACT A0000050 HROFDY 0.000619 0.000574 0.000676  
0.000808 0.000855 0.000836  
EMISFACT A0000050 HROFDY 0.000789 0.00072 0.000567  
0.000438 0.000381 0.000345  
EMISFACT A0000050 HROFDY 0.000376 0.00046 0.000488  
0.000456 0.000435 0.000359  
EMISFACT A0000051 HROFDY 0.000314 0.00031 0.000301  
0.000311 0.000388 0.000492  
EMISFACT A0000051 HROFDY 0.000619 0.000574 0.000676  
0.000808 0.000855 0.000836  
EMISFACT A0000051 HROFDY 0.000789 0.00072 0.000567  
0.000438 0.000381 0.000345  
EMISFACT A0000051 HROFDY 0.000376 0.00046 0.000488  
0.000456 0.000435 0.000359  
EMISFACT A0000052 HROFDY 0.000314 0.00031 0.000301  
0.000311 0.000388 0.000492  
EMISFACT A0000052 HROFDY 0.000619 0.000574 0.000676  
0.000808 0.000855 0.000836  
EMISFACT A0000052 HROFDY 0.000789 0.00072 0.000567  
0.000438 0.000381 0.000345  
EMISFACT A0000052 HROFDY 0.000376 0.00046 0.000488  
0.000456 0.000435 0.000359  
EMISFACT A0000053 HROFDY 0.000314 0.00031 0.000301  
0.000311 0.000388 0.000492  
EMISFACT A0000053 HROFDY 0.000619 0.000574 0.000676  
0.000808 0.000855 0.000836  
EMISFACT A0000053 HROFDY 0.000789 0.00072 0.000567  
0.000438 0.000381 0.000345  
EMISFACT A0000053 HROFDY 0.000376 0.00046 0.000488  
0.000456 0.000435 0.000359  
EMISFACT A0000054 HROFDY 0.000314 0.00031 0.000301  
0.000311 0.000388 0.000492  
EMISFACT A0000054 HROFDY 0.000619 0.000574 0.000676  
0.000808 0.000855 0.000836  
EMISFACT A0000054 HROFDY 0.000789 0.00072 0.000567  
0.000438 0.000381 0.000345  
EMISFACT A0000054 HROFDY 0.000376 0.00046 0.000488  
0.000456 0.000435 0.000359  
EMISFACT A0000055 HROFDY 0.000314 0.00031 0.000301  
0.000311 0.000388 0.000492  
EMISFACT A0000055 HROFDY 0.000619 0.000574 0.000676  
0.000808 0.000855 0.000836  
EMISFACT A0000055 HROFDY 0.000789 0.00072 0.000567  
0.000438 0.000381 0.000345  
EMISFACT A0000055 HROFDY 0.000376 0.00046 0.000488  
0.000456 0.000435 0.000359  
EMISFACT A0000056 HROFDY 0.000314 0.00031 0.000301  
0.000311 0.000388 0.000492

EMISFACT A0000056	HROFDY	0.000619	0.000574	0.000676
0.000808	0.000855	0.000836		
EMISFACT A0000056	HROFDY	0.000789	0.00072	0.000567
0.000438	0.000381	0.000345		
EMISFACT A0000056	HROFDY	0.000376	0.00046	0.000488
0.000456	0.000435	0.000359		
EMISFACT A0000057	HROFDY	0.000314	0.00031	0.000301
0.000311	0.000388	0.000492		
EMISFACT A0000057	HROFDY	0.000619	0.000574	0.000676
0.000808	0.000855	0.000836		
EMISFACT A0000057	HROFDY	0.000789	0.00072	0.000567
0.000438	0.000381	0.000345		
EMISFACT A0000057	HROFDY	0.000376	0.00046	0.000488
0.000456	0.000435	0.000359		
EMISFACT A0000058	HROFDY	0.000314	0.00031	0.000301
0.000311	0.000388	0.000492		
EMISFACT A0000058	HROFDY	0.000619	0.000574	0.000676
0.000808	0.000855	0.000836		
EMISFACT A0000058	HROFDY	0.000789	0.00072	0.000567
0.000438	0.000381	0.000345		
EMISFACT A0000058	HROFDY	0.000376	0.00046	0.000488
0.000456	0.000435	0.000359		
EMISFACT A0000059	HROFDY	0.000314	0.00031	0.000301
0.000311	0.000388	0.000492		
EMISFACT A0000059	HROFDY	0.000619	0.000574	0.000676
0.000808	0.000855	0.000836		
EMISFACT A0000059	HROFDY	0.000789	0.00072	0.000567
0.000438	0.000381	0.000345		
EMISFACT A0000059	HROFDY	0.000376	0.00046	0.000488
0.000456	0.000435	0.000359		
EMISFACT A0000060	HROFDY	0.000314	0.00031	0.000301
0.000311	0.000388	0.000492		
EMISFACT A0000060	HROFDY	0.000619	0.000574	0.000676
0.000808	0.000855	0.000836		
EMISFACT A0000060	HROFDY	0.000789	0.00072	0.000567
0.000438	0.000381	0.000345		
EMISFACT A0000060	HROFDY	0.000376	0.00046	0.000488
0.000456	0.000435	0.000359		

\*\* Variable Emissions Type: "By Hour-of-Day (HROFDY)"

\*\* Variable Emission Scenario: "ARLN06"

EMISFACT A0000061	HROFDY	0.0000229	0.0000158	0.0000139
0.0000247	0.0000704	0.000112		
EMISFACT A0000061	HROFDY	0.000126	0.000144	0.000155
0.000159	0.000165	0.000173		
EMISFACT A0000061	HROFDY	0.000169	0.000163	0.000158
0.000154	0.000148	0.000145		
EMISFACT A0000061	HROFDY	0.000118	0.0000923	0.0000834
0.0000723	0.0000535	0.0000342		
EMISFACT A0000062	HROFDY	0.0000229	0.0000158	0.0000139
0.0000247	0.0000704	0.000112		
EMISFACT A0000062	HROFDY	0.000126	0.000144	0.000155

0.000159	0.000165	0.000173				
EMISFACT	A0000062	HROFDY	0.000169	0.000163	0.000158	
0.000154	0.000148	0.000145				
EMISFACT	A0000062	HROFDY	0.000118	0.0000923	0.0000834	
0.0000723	0.0000535	0.0000342				
EMISFACT	A0000063	HROFDY	0.0000229	0.0000158	0.0000139	
0.0000247	0.0000704	0.000112				
EMISFACT	A0000063	HROFDY	0.000126	0.000144	0.000155	
0.000159	0.000165	0.000173				
EMISFACT	A0000063	HROFDY	0.000169	0.000163	0.000158	
0.000154	0.000148	0.000145				
EMISFACT	A0000063	HROFDY	0.000118	0.0000923	0.0000834	
0.0000723	0.0000535	0.0000342				
EMISFACT	A0000064	HROFDY	0.0000229	0.0000158	0.0000139	
0.0000247	0.0000704	0.000112				
EMISFACT	A0000064	HROFDY	0.000126	0.000144	0.000155	
0.000159	0.000165	0.000173				
EMISFACT	A0000064	HROFDY	0.000169	0.000163	0.000158	
0.000154	0.000148	0.000145				
EMISFACT	A0000064	HROFDY	0.000118	0.0000923	0.0000834	
0.0000723	0.0000535	0.0000342				
EMISFACT	A0000065	HROFDY	0.0000229	0.0000158	0.0000139	
0.0000247	0.0000704	0.000112				
EMISFACT	A0000065	HROFDY	0.000126	0.000144	0.000155	
0.000159	0.000165	0.000173				
EMISFACT	A0000065	HROFDY	0.000169	0.000163	0.000158	
0.000154	0.000148	0.000145				
EMISFACT	A0000065	HROFDY	0.000118	0.0000923	0.0000834	
0.0000723	0.0000535	0.0000342				
EMISFACT	A0000066	HROFDY	0.0000229	0.0000158	0.0000139	
0.0000247	0.0000704	0.000112				
EMISFACT	A0000066	HROFDY	0.000126	0.000144	0.000155	
0.000159	0.000165	0.000173				
EMISFACT	A0000066	HROFDY	0.000169	0.000163	0.000158	
0.000154	0.000148	0.000145				
EMISFACT	A0000066	HROFDY	0.000118	0.0000923	0.0000834	
0.0000723	0.0000535	0.0000342				
SRCGROUP	Exh	A0000012	A0000013	A0000014	A0000015	A0000016
A0000017						
SRCGROUP	Exh	A0000018	A0000019	A0000020	A0000021	A0000022
A0000001						
SRCGROUP	Exh	A0000002	A0000003	A0000004	A0000005	A0000006
A0000007						
SRCGROUP	Exh	A0000008	A0000009	A0000010	A0000011	A0000023
A0000024						
SRCGROUP	Exh	A0000025	A0000026	A0000027	A0000028	A0000029
A0000030						
SRCGROUP	Exh	A0000031	A0000032	A0000033	A0000034	A0000035
A0000036						
SRCGROUP	Exh	A0000037	A0000038	A0000039	A0000040	A0000041
A0000042						
SRCGROUP	Exh	A0000043	A0000044	A0000045	A0000046	A0000047

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A0000048
  SRCGROUP Exh      A0000049 A0000050 A0000051 A0000052 A0000053
A0000054
  SRCGROUP Exh      A0000055 A0000056 A0000057 A0000058 A0000059
A0000060
  SRCGROUP Exh      A0000061 A0000062 A0000063 A0000064 A0000065
A0000066
  SRCGROUP FreeExh  A0000012 A0000013 A0000014 A0000015 A0000016
A0000017
  SRCGROUP FreeExh  A0000018 A0000019 A0000020 A0000021 A0000022
A0000001
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  SRCGROUP FreeExh  A0000008 A0000009 A0000010 A0000011
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A0000064
  SRCGROUP OnOffExh A0000065 A0000066
  SRCGROUP ALL

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SO FINISHED

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\*\* AERMOD Receptor Pathway

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RE STARTING

\*\* DESCRREC "UCART01" "Receptors generated from Uniform Cartesian Grid"

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DISCCART	439829.00	3765475.00

\*\* DESCRREC "UCART03" "Receptors generated from Uniform Cartesian Grid"

DISCCART	439269.00	3764900.00
DISCCART	439369.00	3764900.00
DISCCART	439469.00	3764900.00
DISCCART	439569.00	3764900.00
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DISCCART	440069.00	3764900.00
DISCCART	440169.00	3764900.00
DISCCART	440269.00	3764900.00
DISCCART	439269.00	3765000.00
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DISCCART	440069.00	3765100.00
DISCCART	440169.00	3765100.00
DISCCART	440269.00	3765100.00
DISCCART	439269.00	3765200.00
DISCCART	439369.00	3765200.00
DISCCART	439469.00	3765200.00
DISCCART	439569.00	3765200.00
DISCCART	439669.00	3765200.00
DISCCART	439769.00	3765200.00
DISCCART	439869.00	3765200.00
DISCCART	439969.00	3765200.00
DISCCART	440069.00	3765200.00
DISCCART	440169.00	3765200.00
DISCCART	440269.00	3765200.00
DISCCART	439269.00	3765300.00
DISCCART	439369.00	3765300.00
DISCCART	439469.00	3765300.00
DISCCART	439569.00	3765300.00
DISCCART	439669.00	3765300.00
DISCCART	439769.00	3765300.00
DISCCART	439869.00	3765300.00
DISCCART	439969.00	3765300.00
DISCCART	440069.00	3765300.00
DISCCART	440169.00	3765300.00
DISCCART	440269.00	3765300.00
DISCCART	439269.00	3765400.00
DISCCART	439369.00	3765400.00
DISCCART	439469.00	3765400.00
DISCCART	439569.00	3765400.00
DISCCART	439669.00	3765400.00
DISCCART	439769.00	3765400.00
DISCCART	439869.00	3765400.00
DISCCART	439969.00	3765400.00
DISCCART	440069.00	3765400.00
DISCCART	440169.00	3765400.00
DISCCART	440269.00	3765400.00
DISCCART	439269.00	3765500.00

DISCCART	439369.00	3765500.00
DISCCART	439469.00	3765500.00
DISCCART	439569.00	3765500.00
DISCCART	439669.00	3765500.00
DISCCART	439769.00	3765500.00
DISCCART	439869.00	3765500.00
DISCCART	439969.00	3765500.00
DISCCART	440069.00	3765500.00
DISCCART	440169.00	3765500.00
DISCCART	440269.00	3765500.00
DISCCART	439269.00	3765600.00
DISCCART	439369.00	3765600.00
DISCCART	439469.00	3765600.00
DISCCART	439569.00	3765600.00
DISCCART	439669.00	3765600.00
DISCCART	439769.00	3765600.00
DISCCART	439869.00	3765600.00
DISCCART	439969.00	3765600.00
DISCCART	440069.00	3765600.00
DISCCART	440169.00	3765600.00
DISCCART	440269.00	3765600.00
DISCCART	439269.00	3765700.00
DISCCART	439369.00	3765700.00
DISCCART	439469.00	3765700.00
DISCCART	439569.00	3765700.00
DISCCART	439669.00	3765700.00
DISCCART	439769.00	3765700.00
DISCCART	439869.00	3765700.00
DISCCART	439969.00	3765700.00
DISCCART	440069.00	3765700.00
DISCCART	440169.00	3765700.00
DISCCART	440269.00	3765700.00
DISCCART	439269.00	3765800.00
DISCCART	439369.00	3765800.00
DISCCART	439469.00	3765800.00
DISCCART	439569.00	3765800.00
DISCCART	439669.00	3765800.00
DISCCART	439769.00	3765800.00
DISCCART	439869.00	3765800.00
DISCCART	439969.00	3765800.00
DISCCART	440069.00	3765800.00
DISCCART	440169.00	3765800.00
DISCCART	440269.00	3765800.00
DISCCART	439269.00	3765900.00
DISCCART	439369.00	3765900.00
DISCCART	439469.00	3765900.00
DISCCART	439569.00	3765900.00
DISCCART	439669.00	3765900.00
DISCCART	439769.00	3765900.00
DISCCART	439869.00	3765900.00
DISCCART	439969.00	3765900.00
DISCCART	440069.00	3765900.00

DISCCART	440169.00	3765900.00
DISCCART	440269.00	3765900.00
** DESCRREC	"UCART02"	"Receptors generated from Uniform Cartesian Grid"
DISCCART	439649.00	3765310.00
DISCCART	439679.00	3765310.00
DISCCART	439709.00	3765310.00
DISCCART	439739.00	3765310.00
DISCCART	439769.00	3765310.00
DISCCART	439799.00	3765310.00
DISCCART	439829.00	3765310.00
DISCCART	439859.00	3765310.00
DISCCART	439889.00	3765310.00
DISCCART	439649.00	3765340.00
DISCCART	439679.00	3765340.00
DISCCART	439709.00	3765340.00
DISCCART	439739.00	3765340.00
DISCCART	439769.00	3765340.00
DISCCART	439799.00	3765340.00
DISCCART	439829.00	3765340.00
DISCCART	439859.00	3765340.00
DISCCART	439889.00	3765340.00
DISCCART	439649.00	3765370.00
DISCCART	439679.00	3765370.00
DISCCART	439709.00	3765370.00
DISCCART	439739.00	3765370.00
DISCCART	439769.00	3765370.00
DISCCART	439799.00	3765370.00
DISCCART	439829.00	3765370.00
DISCCART	439859.00	3765370.00
DISCCART	439889.00	3765370.00
DISCCART	439649.00	3765400.00
DISCCART	439679.00	3765400.00
DISCCART	439709.00	3765400.00
DISCCART	439739.00	3765400.00
DISCCART	439769.00	3765400.00
DISCCART	439799.00	3765400.00
DISCCART	439829.00	3765400.00
DISCCART	439859.00	3765400.00
DISCCART	439889.00	3765400.00
DISCCART	439649.00	3765430.00
DISCCART	439679.00	3765430.00
DISCCART	439709.00	3765430.00
DISCCART	439739.00	3765430.00
DISCCART	439769.00	3765430.00
DISCCART	439799.00	3765430.00
DISCCART	439829.00	3765430.00
DISCCART	439859.00	3765430.00
DISCCART	439889.00	3765430.00
DISCCART	439649.00	3765460.00
DISCCART	439679.00	3765460.00
DISCCART	439709.00	3765460.00

DISCCART	439739.00	3765460.00
DISCCART	439769.00	3765460.00
DISCCART	439799.00	3765460.00
DISCCART	439829.00	3765460.00
DISCCART	439859.00	3765460.00
DISCCART	439889.00	3765460.00
DISCCART	439649.00	3765490.00
DISCCART	439679.00	3765490.00
DISCCART	439709.00	3765490.00
DISCCART	439739.00	3765490.00
DISCCART	439769.00	3765490.00
DISCCART	439799.00	3765490.00
DISCCART	439829.00	3765490.00
DISCCART	439859.00	3765490.00
DISCCART	439889.00	3765490.00

RE FINISHED

\*\*

\*\*\*\*\*

\*\* AERMOD Meteorology Pathway

\*\*\*\*\*

\*\*

\*\*

ME STARTING

SURFFILE "C:\Users\sjremote\Desktop\Ontario\_PUD-Legacy  
\OntarioIntlAirportADJU (1)\KONT\_V9\_ADJU\KONT\_v9.SFC"

PROFFILE "C:\Users\sjremote\Desktop\Ontario\_PUD-Legacy  
\OntarioIntlAirportADJU (1)\KONT\_V9\_ADJU\KONT\_v9.PFL"

SURFDATA 3102 2012 Ontario\_Apt

UAIRDATA 3190 2012

PROFBASE 289.0 METERS

ME FINISHED

\*\*

\*\*\*\*\*

\*\* AERMOD Output Pathway

\*\*\*\*\*

\*\*

\*\*

OU STARTING

RECTABLE ALLAVE 1ST

RECTABLE 1 1ST

\*\* Auto-Generated Plotfiles

PLOTFILE 1 ALL 1ST ONTARIO\_PUD-LEGACY\_OPS-HRA-DPM\_20221005.AD  
\01H1GALL.PLT 31

PLOTFILE 1 Exh 1ST ONTARIO\_PUD-LEGACY\_OPS-HRA-DPM\_20221005.AD  
\01H1G001.PLT 32

PLOTFILE 1 FreeExh 1ST ONTARIO\_PUD-LEGACY\_OPS-HRA-DPM\_  
20221005.AD\01H1G002.PLT 33

PLOTFILE 1 OnOffExh 1ST ONTARIO\_PUD-LEGACY\_OPS-HRA-DPM\_  
20221005.AD\01H1G003.PLT 34

PLOTFILE PERIOD ALL ONTARIO\_PUD-LEGACY\_OPS-HRA-DPM\_20221005.AD  
\PE00GALL.PLT 35

PLOTFILE PERIOD Exh ONTARIO\_PUD-LEGACY\_OPS-HRA-DPM\_20221005.AD

```
\PE00G001.PLT 36
  PLOTFILE PERIOD FreeExh ONTARIO_PUD-LEGACY_OPS-HRA-DPM_
20221005.AD\PE00G002.PLT 37
  PLOTFILE PERIOD OnOffExh ONTARIO_PUD-LEGACY_OPS-HRA-DPM_
20221005.AD\PE00G003.PLT 38
  SUMMFILE Ontario_PUD-Legacy_Ops-HRA-DPM_20221005.sum
OU FINISHED
```

\*\*\* Message Summary For AERMOD Model Setup \*\*\*

----- Summary of Total Messages -----

```
A Total of          0 Fatal Error Message(s)
A Total of          2 Warning Message(s)
A Total of          0 Informational Message(s)
```

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*

\*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*

```
ME W186    1734      MEOPEN: THRESH_1MIN 1-min ASOS wind speed
threshold used          0.50
ME W187    1734      MEOPEN: ADJ_U* Option for Stable Low Winds
used in AERMET
```

```
*****
*** SETUP Finishes Successfully ***
*****
```

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
10/05/22  
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\*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* MODEL SETUP

OPTIONS SUMMARY \*\*\*

-----  
-----

\*\*Model Is Setup For Calculation of Average CONCentration  
Values.

-- DEPOSITION LOGIC --

\*\*NO GAS DEPOSITION Data Provided.

\*\*NO PARTICLE DEPOSITION Data Provided.

\*\*Model Uses NO DRY DEPLETION. DRYDPLT = F

\*\*Model Uses NO WET DEPLETION. WETDPLT = F

\*\*Model Uses URBAN Dispersion Algorithm for the SBL for 66  
Source(s),

for Total of 1 Urban Area(s):

Urban Population = 2035210.0 ; Urban Roughness Length =  
1.000 m

\*\*Model Allows User-Specified Options:

1. Stack-tip Downwash.

2. Model Assumes Receptors on FLAT Terrain.

3. Use Calms Processing Routine.

4. Use Missing Data Processing Routine.

5. No Exponential Decay.

6. Urban Roughness Length of 1.0 Meter Used.

\*\*Other Options Specified:

ADJ\_U\* - Use ADJ\_U\* option for SBL in AERMET

CCVR\_Sub - Meteorological data includes CCVR  
substitutions

TEMP\_Sub - Meteorological data includes TEMP  
substitutions

\*\*Model Assumes No FLAGPOLE Receptor Heights.

\*\*The User Specified a Pollutant Type of: PM\_10

\*\*Model Calculates 1 Short Term Average(s) of: 1-HR  
and Calculates PERIOD Averages

\*\*This Run Includes: 66 Source(s); 4 Source Group(s);

and 1115 Receptor(s)  
with: 0 POINT(s), including  
0 POINTCAP(s) and 0 POINTHOR(s)  
and: 0 VOLUME source(s)  
and: 66 AREA type source(s)  
and: 0 LINE source(s)  
and: 0 RLINE/RLINEXT source(s)  
and: 0 OPENPIT source(s)  
and: 0 BUOYANT LINE source(s) with a total  
of 0 line(s)

\*\*Model Set To Continue RUNNING After the Setup Testing.

\*\*The AERMET Input Meteorological Data Version Date: 16216

\*\*Output Options Selected:

Model Outputs Tables of PERIOD Averages by Receptor  
Model Outputs Tables of Highest Short Term Values by  
Receptor (RECTABLE Keyword)  
Model Outputs External File(s) of High Values for  
Plotting (PLOTFILE Keyword)  
Model Outputs Separate Summary File of High Ranked  
Values (SUMMFILE Keyword)

\*\*NOTE: The Following Flags May Appear Following CONC Values:  
c for Calm Hours

m for Missing Hours

b for Both Calm and Missing Hours

\*\*Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) =  
289.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0  
Emission Units =  
GRAMS/SEC ; Emission Rate Unit  
Factor = 0.10000E+07  
Output Units = MICROGRAMS/M\*\*3

\*\*Approximate Storage Requirements of Model = 3.8 MB of  
RAM.

\*\*Input Runstream File: aermod.inp  
\*\*Output Print File: aermod.out

\*\*Detailed Error/Message File: Ontario\_PUD-Legacy\_Ops-HRA-DPM\_  
20221005.err

\*\*File for Summary of Results: Ontario\_PUD-Legacy\_Ops-HRA-DPM\_  
20221005.sum

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* AREA SOURCE

DATA \*\*\*

RELEASE RATE	X-DIM	NUMBER OF AREA	EMISSION RATE (GRAMS/SEC OF AREA)	ORIENT.	COORD (SW CORNER) INIT. (METERS)	URBAN SOURCE	BASE EMISSION SCALAR
SOURCE	PART.	(METERS)	(METERS)	(DEG.)	(METERS)	(METERS)	(METERS) BY
A0000012	0	0.30732E-04	440650.1	3765736.5	289.0		
3.40	176.76	18.29	-179.52	3.20	YES	HROFDY	
A0000013	0	0.30732E-04	440473.4	3765738.0	289.0		
3.40	176.76	18.29	-179.52	3.20	YES	HROFDY	
A0000014	0	0.30732E-04	440296.6	3765739.5	289.0		
3.40	176.76	18.29	-179.52	3.20	YES	HROFDY	
A0000015	0	0.30732E-04	440119.8	3765740.9	289.0		
3.40	152.62	18.29	-179.86	3.20	YES	HROFDY	
A0000016	0	0.30732E-04	439967.2	3765741.3	289.0		
3.40	152.62	18.29	-179.86	3.20	YES	HROFDY	
A0000017	0	0.30732E-04	439814.6	3765741.7	289.0		
3.40	152.62	18.29	-179.86	3.20	YES	HROFDY	
A0000018	0	0.30732E-04	439661.9	3765742.1	289.0		
3.40	163.56	18.29	-179.87	3.20	YES	HROFDY	
A0000019	0	0.30732E-04	439498.4	3765742.5	289.0		
3.40	163.56	18.29	-179.87	3.20	YES	HROFDY	
A0000020	0	0.30732E-04	439334.8	3765742.8	289.0		
3.40	163.56	18.29	-179.87	3.20	YES	HROFDY	
A0000021	0	0.30732E-04	439171.2	3765743.2	289.0		
3.40	150.13	18.29	179.63	3.20	YES	HROFDY	
A0000022	0	0.30732E-04	439021.1	3765742.2	289.0		
3.40	150.13	18.29	179.63	3.20	YES	HROFDY	
A0000001	0	0.30748E-04	438872.2	3765704.7	289.0		
3.40	174.70	18.29	0.36	3.20	YES	HROFDY	
A0000002	0	0.30748E-04	439046.9	3765703.5	289.0		
3.40	174.70	18.29	0.36	3.20	YES	HROFDY	
A0000003	0	0.30748E-04	439221.6	3765702.4	289.0		

3.40	174.70	18.29	0.36	3.20	YES	HROFDY
A0000004		0	0.30748E-04	439396.3	3765701.3	289.0
3.40	174.70	18.29	0.36	3.20	YES	HROFDY
A0000005		0	0.30748E-04	439571.0	3765700.2	289.0
3.40	173.93	18.29	0.19	3.20	YES	HROFDY
A0000006		0	0.30748E-04	439744.9	3765699.6	289.0
3.40	172.78	18.29	0.07	3.20	YES	HROFDY
A0000007		0	0.30748E-04	439917.7	3765699.4	289.0
3.40	172.78	18.29	0.07	3.20	YES	HROFDY
A0000008		0	0.30748E-04	440090.5	3765699.2	289.0
3.40	157.42	18.29	0.00	3.20	YES	HROFDY
A0000009		0	0.30748E-04	440247.9	3765699.2	289.0
3.40	157.42	18.29	0.00	3.20	YES	HROFDY
A0000010		0	0.30748E-04	440405.4	3765699.2	289.0
3.40	122.75	18.29	-0.64	3.20	YES	HROFDY
A0000011		0	0.30748E-04	440528.2	3765700.6	289.0
3.40	122.75	18.29	-0.64	3.20	YES	HROFDY
A0000023		0	0.53118E-03	439894.8	3765794.0	289.0
3.40	32.80	3.96	171.48	3.20	YES	HROFDY
A0000024		0	0.53118E-03	439862.4	3765789.1	289.0
3.40	32.80	3.96	171.48	3.20	YES	HROFDY
A0000025		0	0.53118E-03	439830.0	3765784.3	289.0
3.40	38.31	3.96	171.96	3.20	YES	HROFDY
A0000026		0	0.53118E-03	439792.0	3765778.9	289.0
3.40	38.31	3.96	171.96	3.20	YES	HROFDY
A0000027		0	0.53118E-03	439754.1	3765773.6	289.0
3.40	38.31	3.96	171.96	3.20	YES	HROFDY
A0000028		0	0.53118E-03	439716.2	3765768.2	289.0
3.40	38.31	3.96	171.96	3.20	YES	HROFDY
A0000029		0	0.53118E-03	439678.2	3765762.8	289.0
3.40	38.31	3.96	171.96	3.20	YES	HROFDY
A0000030		0	0.53118E-03	439640.3	3765757.5	289.0
3.40	38.31	3.96	171.96	3.20	YES	HROFDY
A0000031		0	0.53118E-03	439602.5	3765752.1	289.0
3.40	23.20	3.96	175.65	3.20	YES	HROFDY
A0000032		0	0.53118E-03	439579.4	3765750.4	289.0
3.40	23.20	3.96	175.65	3.20	YES	HROFDY
A0000033		0	0.53118E-03	439556.3	3765748.6	289.0
3.40	39.05	3.96	178.51	3.20	YES	HROFDY
A0000034		0	0.53118E-03	439517.3	3765747.6	289.0
3.40	39.05	3.96	178.51	3.20	YES	HROFDY
A0000035		0	0.53118E-03	439478.2	3765746.6	289.0
3.40	27.56	3.96	178.03	3.20	YES	HROFDY
A0000036		0	0.53118E-03	439450.7	3765745.6	289.0
3.40	27.56	3.96	178.03	3.20	YES	HROFDY
A0000037		0	0.30079E-03	439896.1	3765649.5	289.0
3.40	39.04	7.62	-169.43	3.20	YES	HROFDY
A0000038		0	0.30079E-03	439857.7	3765656.6	289.0
3.40	39.04	7.62	-169.43	3.20	YES	HROFDY
A0000039		0	0.30079E-03	439819.3	3765663.8	289.0
3.40	64.28	7.62	-169.30	3.20	YES	HROFDY
A0000040		0	0.30079E-03	439755.9	3765675.8	289.0

3.40	46.57	7.62	-174.26	3.20	YES	HROFDY
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3.40	37.89	3.96	-7.15	3.20	YES	HROFDY
A0000055		0	0.49659E-03	440268.7	3765686.1	289.0
3.40	26.94	3.96	-3.79	3.20	YES	HROFDY
A0000056		0	0.49659E-03	440295.6	3765687.9	289.0
3.40	26.94	3.96	-3.79	3.20	YES	HROFDY
A0000057		0	0.49659E-03	440322.4	3765689.7	289.0
3.40	32.28	3.96	-1.87	3.20	YES	HROFDY
A0000058		0	0.49659E-03	440354.7	3765690.7	289.0
3.40	30.65	3.96	-1.70	3.20	YES	HROFDY
A0000059		0	0.49659E-03	440385.3	3765691.6	289.0
3.40	30.65	3.96	-1.70	3.20	YES	HROFDY
A0000060		0	0.49659E-03	440416.0	3765692.5	289.0
3.40	30.65	3.96	-1.70	3.20	YES	HROFDY
A0000061		0	0.18975E-03	440393.2	3765744.6	289.0
3.40	82.20	11.58	-174.12	3.20	YES	HROFDY
A0000062		0	0.18975E-03	440311.4	3765753.0	289.0
3.40	86.40	11.58	-174.17	3.20	YES	HROFDY
A0000063		0	0.18975E-03	440225.4	3765761.8	289.0
3.40	87.63	11.58	-175.26	3.20	YES	HROFDY
A0000064		0	0.18975E-03	440138.2	3765769.0	289.0
3.40	35.21	11.58	-173.24	3.20	YES	HROFDY
A0000065		0	0.18975E-03	440103.5	3765773.1	289.0
3.40	81.78	11.58	-171.16	3.20	YES	HROFDY
A0000066		0	0.18975E-03	440022.7	3765785.7	289.0
3.40	81.78	11.58	-171.16	3.20	YES	HROFDY

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* SOURCE IDs

DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID					SOURCE		
IDs					-----		
-----					-----		
---					---		
EXH	A0000012	,	A0000013	,	A0000014	,	
A0000015	,	A0000016	,	A0000017	,	A0000018	,
A0000019	,						
	A0000020	,	A0000021	,	A0000022	,	
A0000001	,	A0000002	,	A0000003	,	A0000004	,
A0000005	,						
	A0000006	,	A0000007	,	A0000008	,	
A0000009	,	A0000010	,	A0000011	,	A0000023	,
A0000024	,						
	A0000025	,	A0000026	,	A0000027	,	
A0000028	,	A0000029	,	A0000030	,	A0000031	,
A0000032	,						
	A0000033	,	A0000034	,	A0000035	,	
A0000036	,	A0000037	,	A0000038	,	A0000039	,
A0000040	,						
	A0000041	,	A0000042	,	A0000043	,	
A0000044	,	A0000045	,	A0000046	,	A0000047	,
A0000048	,						
	A0000049	,	A0000050	,	A0000051	,	
A0000052	,	A0000053	,	A0000054	,	A0000055	,
A0000056	,						
	A0000057	,	A0000058	,	A0000059	,	
A0000060	,	A0000061	,	A0000062	,	A0000063	,
A0000064	,						
	A0000065	,	A0000066	,			

FREEEXH	A0000012	,	A0000013	,	A0000014	,
A0000015	,	A0000016	,	A0000017	,	A0000018
A0000019	,					
	A0000020	,	A0000021	,	A0000022	,
A0000001	,	A0000002	,	A0000003	,	A0000004
A0000005	,					
	A0000006	,	A0000007	,	A0000008	,
A0000009	,	A0000010	,	A0000011	,	
	A0000023	,	A0000024	,	A0000025	,
ONOFFEXH	,	A0000027	,	A0000028	,	A0000029
A0000026	,					
A0000030	,					
	A0000031	,	A0000032	,	A0000033	,
A0000034	,	A0000035	,	A0000036	,	A0000037
A0000038	,					
	A0000039	,	A0000040	,	A0000041	,
A0000042	,	A0000043	,	A0000044	,	A0000045
A0000046	,					
	A0000047	,	A0000048	,	A0000049	,
A0000050	,	A0000051	,	A0000052	,	A0000053
A0000054	,					
	A0000055	,	A0000056	,	A0000057	,
A0000058	,	A0000059	,	A0000060	,	A0000061
A0000062	,					
	A0000063	,	A0000064	,	A0000065	,
A0000066	,					
	A0000012	,	A0000013	,	A0000014	,
ALL	,	A0000016	,	A0000017	,	A0000018
A0000015	,					
A0000019	,					
	A0000020	,	A0000021	,	A0000022	,
A0000001	,	A0000002	,	A0000003	,	A0000004
A0000005	,					

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* SOURCE IDs

DEFINING SOURCE GROUPS \*\*\*

SRCGROUP ID					SOURCE
IDs					-----
-----					-----
---					---
A0000009	A0000006	,	A0000007	,	A0000008
A0000024	, A0000010	,	A0000011	,	A0000023
	,				,
A0000028	A0000025	,	A0000026	,	A0000027
A0000032	, A0000029	,	A0000030	,	A0000031
	,				,
A0000036	A0000033	,	A0000034	,	A0000035
A0000040	, A0000037	,	A0000038	,	A0000039
	,				,
A0000044	A0000041	,	A0000042	,	A0000043
A0000048	, A0000045	,	A0000046	,	A0000047
	,				,
A0000052	A0000049	,	A0000050	,	A0000051
A0000056	, A0000053	,	A0000054	,	A0000055
	,				,
A0000060	A0000057	,	A0000058	,	A0000059
A0000064	, A0000061	,	A0000062	,	A0000063
	,				,
	A0000065	,	A0000066	,	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* SOURCE IDs DEFINED

AS URBAN SOURCES \*\*\*

URBAN ID IDs ----- ---	URBAN POP -----	SOURCE -----			
A0000014 A0000018 A0000019	2035210. , A0000015 , ,	A0000012 , A0000016	, A0000013 , A0000017	, , ,	
A0000001 A0000005	, A0000020 , A0000002 ,	, A0000021 , A0000003	, A0000022 , A0000004	, , ,	
A0000009 A0000024	, A0000006 , A0000010 ,	, A0000007 , A0000011	, A0000008 , A0000023	, , ,	
A0000028 A0000032	, A0000025 , A0000029 ,	, A0000026 , A0000030	, A0000027 , A0000031	, , ,	
A0000036 A0000040	, A0000033 , A0000037 ,	, A0000034 , A0000038	, A0000035 , A0000039	, , ,	
A0000044 A0000048	, A0000041 , A0000045 ,	, A0000042 , A0000046	, A0000043 , A0000047	, , ,	
A0000052 A0000056	, A0000049 , A0000053 ,	, A0000050 , A0000054	, A0000051 , A0000055	, , ,	
A0000060 A0000064	, A0000057 , A0000061 ,	, A0000058 , A0000062	, A0000059 , A0000063	, , ,	

A0000065 , A0000066 ,

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000012 ; SOURCE TYPE = AREA :

1	.27400E-02	2	.27100E-02	3	.26400E-02	
4	.27200E-02	5	.33900E-02	6	.43000E-02	
	7	.54100E-02	8	.50200E-02	9	.59100E-02
10	.70600E-02	11	.74700E-02	12	.73100E-02	
	13	.69000E-02	14	.63000E-02	15	.49600E-02
16	.38300E-02	17	.28900E-02	18	.26200E-02	
	19	.32900E-02	20	.40200E-02	21	.42600E-02
22	.39800E-02	23	.38000E-02	24	.31400E-02	

SOURCE ID = A0000013 ; SOURCE TYPE = AREA :

1	.27400E-02	2	.27100E-02	3	.26400E-02	
4	.27200E-02	5	.33900E-02	6	.43000E-02	
	7	.54100E-02	8	.50200E-02	9	.59100E-02
10	.70600E-02	11	.74700E-02	12	.73100E-02	
	13	.69000E-02	14	.63000E-02	15	.49600E-02
16	.38300E-02	17	.28900E-02	18	.26200E-02	
	19	.32900E-02	20	.40200E-02	21	.42600E-02
22	.39800E-02	23	.38000E-02	24	.31400E-02	

SOURCE ID = A0000014 ; SOURCE TYPE = AREA :

1	.27400E-02	2	.27100E-02	3	.26400E-02	
4	.27200E-02	5	.33900E-02	6	.43000E-02	
	7	.54100E-02	8	.50200E-02	9	.59100E-02
10	.70600E-02	11	.74700E-02	12	.73100E-02	
	13	.69000E-02	14	.63000E-02	15	.49600E-02
16	.38300E-02	17	.28900E-02	18	.26200E-02	
	19	.32900E-02	20	.40200E-02	21	.42600E-02
22	.39800E-02	23	.38000E-02	24	.31400E-02	

SOURCE ID = A0000015 ; SOURCE TYPE = AREA :

	1	.27400E-02	2	.27100E-02	3	.26400E-02
4	.27200E-02	5	.33900E-02	6	.43000E-02	
	7	.54100E-02	8	.50200E-02	9	.59100E-02
10	.70600E-02	11	.74700E-02	12	.73100E-02	
	13	.69000E-02	14	.63000E-02	15	.49600E-02
16	.38300E-02	17	.28900E-02	18	.26200E-02	
	19	.32900E-02	20	.40200E-02	21	.42600E-02
22	.39800E-02	23	.38000E-02	24	.31400E-02	

SOURCE ID = A0000016 ; SOURCE TYPE = AREA :

	1	.27400E-02	2	.27100E-02	3	.26400E-02
4	.27200E-02	5	.33900E-02	6	.43000E-02	
	7	.54100E-02	8	.50200E-02	9	.59100E-02
10	.70600E-02	11	.74700E-02	12	.73100E-02	
	13	.69000E-02	14	.63000E-02	15	.49600E-02
16	.38300E-02	17	.28900E-02	18	.26200E-02	
	19	.32900E-02	20	.40200E-02	21	.42600E-02
22	.39800E-02	23	.38000E-02	24	.31400E-02	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000017 ; SOURCE TYPE = AREA :

1	.27400E-02	2	.27100E-02	3	.26400E-02	
4	.27200E-02	5	.33900E-02	6	.43000E-02	
	7	.54100E-02	8	.50200E-02	9	.59100E-02
10	.70600E-02	11	.74700E-02	12	.73100E-02	
	13	.69000E-02	14	.63000E-02	15	.49600E-02
16	.38300E-02	17	.28900E-02	18	.26200E-02	
	19	.32900E-02	20	.40200E-02	21	.42600E-02
22	.39800E-02	23	.38000E-02	24	.31400E-02	

SOURCE ID = A0000018 ; SOURCE TYPE = AREA :

1	.27400E-02	2	.27100E-02	3	.26400E-02	
4	.27200E-02	5	.33900E-02	6	.43000E-02	
	7	.54100E-02	8	.50200E-02	9	.59100E-02
10	.70600E-02	11	.74700E-02	12	.73100E-02	
	13	.69000E-02	14	.63000E-02	15	.49600E-02
16	.38300E-02	17	.28900E-02	18	.26200E-02	
	19	.32900E-02	20	.40200E-02	21	.42600E-02
22	.39800E-02	23	.38000E-02	24	.31400E-02	

SOURCE ID = A0000019 ; SOURCE TYPE = AREA :

1	.27400E-02	2	.27100E-02	3	.26400E-02	
4	.27200E-02	5	.33900E-02	6	.43000E-02	
	7	.54100E-02	8	.50200E-02	9	.59100E-02
10	.70600E-02	11	.74700E-02	12	.73100E-02	
	13	.69000E-02	14	.63000E-02	15	.49600E-02
16	.38300E-02	17	.28900E-02	18	.26200E-02	
	19	.32900E-02	20	.40200E-02	21	.42600E-02
22	.39800E-02	23	.38000E-02	24	.31400E-02	

SOURCE ID = A0000020 ; SOURCE TYPE = AREA :

	1	.27400E-02	2	.27100E-02	3	.26400E-02
4	.27200E-02	5	.33900E-02	6	.43000E-02	
	7	.54100E-02	8	.50200E-02	9	.59100E-02
10	.70600E-02	11	.74700E-02	12	.73100E-02	
	13	.69000E-02	14	.63000E-02	15	.49600E-02
16	.38300E-02	17	.28900E-02	18	.26200E-02	
	19	.32900E-02	20	.40200E-02	21	.42600E-02
22	.39800E-02	23	.38000E-02	24	.31400E-02	

SOURCE ID = A0000021 ; SOURCE TYPE = AREA :

	1	.27400E-02	2	.27100E-02	3	.26400E-02
4	.27200E-02	5	.33900E-02	6	.43000E-02	
	7	.54100E-02	8	.50200E-02	9	.59100E-02
10	.70600E-02	11	.74700E-02	12	.73100E-02	
	13	.69000E-02	14	.63000E-02	15	.49600E-02
16	.38300E-02	17	.28900E-02	18	.26200E-02	
	19	.32900E-02	20	.40200E-02	21	.42600E-02
22	.39800E-02	23	.38000E-02	24	.31400E-02	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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---	---	---	---	---	---

SOURCE ID = A0000022 ; SOURCE TYPE = AREA :

1	.27400E-02	2	.27100E-02	3	.26400E-02	
4	.27200E-02	5	.33900E-02	6	.43000E-02	
	7	.54100E-02	8	.50200E-02	9	.59100E-02
10	.70600E-02	11	.74700E-02	12	.73100E-02	
	13	.69000E-02	14	.63000E-02	15	.49600E-02
16	.38300E-02	17	.28900E-02	18	.26200E-02	
	19	.32900E-02	20	.40200E-02	21	.42600E-02
22	.39800E-02	23	.38000E-02	24	.31400E-02	

SOURCE ID = A0000001 ; SOURCE TYPE = AREA :

1	.17200E-01	2	.12400E-01	3	.10800E-01	
4	.12600E-01	5	.20300E-01	6	.34000E-01	
	7	.43100E-01	8	.45700E-01	9	.43900E-01
10	.41400E-01	11	.42000E-01	12	.43900E-01	
	13	.46300E-01	14	.48300E-01	15	.50100E-01
16	.49100E-01	17	.50800E-01	18	.50600E-01	
	19	.47200E-01	20	.45900E-01	21	.41700E-01
22	.40800E-01	23	.33400E-01	24	.24800E-01	

SOURCE ID = A0000002 ; SOURCE TYPE = AREA :

1	.17200E-01	2	.12400E-01	3	.10800E-01	
4	.12600E-01	5	.20300E-01	6	.34000E-01	
	7	.43100E-01	8	.45700E-01	9	.43900E-01
10	.41400E-01	11	.42000E-01	12	.43900E-01	
	13	.46300E-01	14	.48300E-01	15	.50100E-01
16	.49100E-01	17	.50800E-01	18	.50600E-01	
	19	.47200E-01	20	.45900E-01	21	.41700E-01
22	.40800E-01	23	.33400E-01	24	.24800E-01	

SOURCE ID = A0000003 ; SOURCE TYPE = AREA :

	1	.17200E-01	2	.12400E-01	3	.10800E-01
4	.12600E-01	5	.20300E-01	6	.34000E-01	
	7	.43100E-01	8	.45700E-01	9	.43900E-01
10	.41400E-01	11	.42000E-01	12	.43900E-01	
	13	.46300E-01	14	.48300E-01	15	.50100E-01
16	.49100E-01	17	.50800E-01	18	.50600E-01	
	19	.47200E-01	20	.45900E-01	21	.41700E-01
22	.40800E-01	23	.33400E-01	24	.24800E-01	

SOURCE ID = A0000004 ; SOURCE TYPE = AREA :

	1	.17200E-01	2	.12400E-01	3	.10800E-01
4	.12600E-01	5	.20300E-01	6	.34000E-01	
	7	.43100E-01	8	.45700E-01	9	.43900E-01
10	.41400E-01	11	.42000E-01	12	.43900E-01	
	13	.46300E-01	14	.48300E-01	15	.50100E-01
16	.49100E-01	17	.50800E-01	18	.50600E-01	
	19	.47200E-01	20	.45900E-01	21	.41700E-01
22	.40800E-01	23	.33400E-01	24	.24800E-01	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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---	---	---	---	---	---

SOURCE ID = A0000005 ; SOURCE TYPE = AREA :

1	.17200E-01	2	.12400E-01	3	.10800E-01	
4	.12600E-01	5	.20300E-01	6	.34000E-01	
	7	.43100E-01	8	.45700E-01	9	.43900E-01
10	.41400E-01	11	.42000E-01	12	.43900E-01	
	13	.46300E-01	14	.48300E-01	15	.50100E-01
16	.49100E-01	17	.50800E-01	18	.50600E-01	
	19	.47200E-01	20	.45900E-01	21	.41700E-01
22	.40800E-01	23	.33400E-01	24	.24800E-01	

SOURCE ID = A0000006 ; SOURCE TYPE = AREA :

1	.17200E-01	2	.12400E-01	3	.10800E-01	
4	.12600E-01	5	.20300E-01	6	.34000E-01	
	7	.43100E-01	8	.45700E-01	9	.43900E-01
10	.41400E-01	11	.42000E-01	12	.43900E-01	
	13	.46300E-01	14	.48300E-01	15	.50100E-01
16	.49100E-01	17	.50800E-01	18	.50600E-01	
	19	.47200E-01	20	.45900E-01	21	.41700E-01
22	.40800E-01	23	.33400E-01	24	.24800E-01	

SOURCE ID = A0000007 ; SOURCE TYPE = AREA :

1	.17200E-01	2	.12400E-01	3	.10800E-01	
4	.12600E-01	5	.20300E-01	6	.34000E-01	
	7	.43100E-01	8	.45700E-01	9	.43900E-01
10	.41400E-01	11	.42000E-01	12	.43900E-01	
	13	.46300E-01	14	.48300E-01	15	.50100E-01
16	.49100E-01	17	.50800E-01	18	.50600E-01	
	19	.47200E-01	20	.45900E-01	21	.41700E-01
22	.40800E-01	23	.33400E-01	24	.24800E-01	

SOURCE ID = A0000008 ; SOURCE TYPE = AREA :

	1	.17200E-01	2	.12400E-01	3	.10800E-01
4	.12600E-01	5	.20300E-01	6	.34000E-01	
	7	.43100E-01	8	.45700E-01	9	.43900E-01
10	.41400E-01	11	.42000E-01	12	.43900E-01	
	13	.46300E-01	14	.48300E-01	15	.50100E-01
16	.49100E-01	17	.50800E-01	18	.50600E-01	
	19	.47200E-01	20	.45900E-01	21	.41700E-01
22	.40800E-01	23	.33400E-01	24	.24800E-01	

SOURCE ID = A0000009 ; SOURCE TYPE = AREA :

	1	.17200E-01	2	.12400E-01	3	.10800E-01
4	.12600E-01	5	.20300E-01	6	.34000E-01	
	7	.43100E-01	8	.45700E-01	9	.43900E-01
10	.41400E-01	11	.42000E-01	12	.43900E-01	
	13	.46300E-01	14	.48300E-01	15	.50100E-01
16	.49100E-01	17	.50800E-01	18	.50600E-01	
	19	.47200E-01	20	.45900E-01	21	.41700E-01
22	.40800E-01	23	.33400E-01	24	.24800E-01	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000010 ; SOURCE TYPE = AREA :

1	.17200E-01	2	.12400E-01	3	.10800E-01	
4	.12600E-01	5	.20300E-01	6	.34000E-01	
	7	.43100E-01	8	.45700E-01	9	.43900E-01
10	.41400E-01	11	.42000E-01	12	.43900E-01	
	13	.46300E-01	14	.48300E-01	15	.50100E-01
16	.49100E-01	17	.50800E-01	18	.50600E-01	
	19	.47200E-01	20	.45900E-01	21	.41700E-01
22	.40800E-01	23	.33400E-01	24	.24800E-01	

SOURCE ID = A0000011 ; SOURCE TYPE = AREA :

1	.17200E-01	2	.12400E-01	3	.10800E-01	
4	.12600E-01	5	.20300E-01	6	.34000E-01	
	7	.43100E-01	8	.45700E-01	9	.43900E-01
10	.41400E-01	11	.42000E-01	12	.43900E-01	
	13	.46300E-01	14	.48300E-01	15	.50100E-01
16	.49100E-01	17	.50800E-01	18	.50600E-01	
	19	.47200E-01	20	.45900E-01	21	.41700E-01
22	.40800E-01	23	.33400E-01	24	.24800E-01	

SOURCE ID = A0000023 ; SOURCE TYPE = AREA :

1	.81700E-04	2	.56300E-04	3	.49400E-04	
4	.88000E-04	5	.25100E-03	6	.39900E-03	
	7	.45000E-03	8	.51300E-03	9	.55400E-03
10	.56800E-03	11	.58700E-03	12	.61800E-03	
	13	.60300E-03	14	.58200E-03	15	.56500E-03
16	.54800E-03	17	.52800E-03	18	.51600E-03	
	19	.42100E-03	20	.32900E-03	21	.29700E-03
22	.25800E-03	23	.19100E-03	24	.12200E-03	

SOURCE ID = A0000024 ; SOURCE TYPE = AREA :

	1	.81700E-04	2	.56300E-04	3	.49400E-04
4	.88000E-04	5	.25100E-03	6	.39900E-03	
	7	.45000E-03	8	.51300E-03	9	.55400E-03
10	.56800E-03	11	.58700E-03	12	.61800E-03	
	13	.60300E-03	14	.58200E-03	15	.56500E-03
16	.54800E-03	17	.52800E-03	18	.51600E-03	
	19	.42100E-03	20	.32900E-03	21	.29700E-03
22	.25800E-03	23	.19100E-03	24	.12200E-03	

SOURCE ID = A0000025 ; SOURCE TYPE = AREA :

	1	.81700E-04	2	.56300E-04	3	.49400E-04
4	.88000E-04	5	.25100E-03	6	.39900E-03	
	7	.45000E-03	8	.51300E-03	9	.55400E-03
10	.56800E-03	11	.58700E-03	12	.61800E-03	
	13	.60300E-03	14	.58200E-03	15	.56500E-03
16	.54800E-03	17	.52800E-03	18	.51600E-03	
	19	.42100E-03	20	.32900E-03	21	.29700E-03
22	.25800E-03	23	.19100E-03	24	.12200E-03	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000026 ; SOURCE TYPE = AREA :

1	.81700E-04	2	.56300E-04	3	.49400E-04	
4	.88000E-04	5	.25100E-03	6	.39900E-03	
	7	.45000E-03	8	.51300E-03	9	.55400E-03
10	.56800E-03	11	.58700E-03	12	.61800E-03	
	13	.60300E-03	14	.58200E-03	15	.56500E-03
16	.54800E-03	17	.52800E-03	18	.51600E-03	
	19	.42100E-03	20	.32900E-03	21	.29700E-03
22	.25800E-03	23	.19100E-03	24	.12200E-03	

SOURCE ID = A0000027 ; SOURCE TYPE = AREA :

1	.81700E-04	2	.56300E-04	3	.49400E-04	
4	.88000E-04	5	.25100E-03	6	.39900E-03	
	7	.45000E-03	8	.51300E-03	9	.55400E-03
10	.56800E-03	11	.58700E-03	12	.61800E-03	
	13	.60300E-03	14	.58200E-03	15	.56500E-03
16	.54800E-03	17	.52800E-03	18	.51600E-03	
	19	.42100E-03	20	.32900E-03	21	.29700E-03
22	.25800E-03	23	.19100E-03	24	.12200E-03	

SOURCE ID = A0000028 ; SOURCE TYPE = AREA :

1	.81700E-04	2	.56300E-04	3	.49400E-04	
4	.88000E-04	5	.25100E-03	6	.39900E-03	
	7	.45000E-03	8	.51300E-03	9	.55400E-03
10	.56800E-03	11	.58700E-03	12	.61800E-03	
	13	.60300E-03	14	.58200E-03	15	.56500E-03
16	.54800E-03	17	.52800E-03	18	.51600E-03	
	19	.42100E-03	20	.32900E-03	21	.29700E-03
22	.25800E-03	23	.19100E-03	24	.12200E-03	

SOURCE ID = A0000029 ; SOURCE TYPE = AREA :

	1	.81700E-04	2	.56300E-04	3	.49400E-04
4	.88000E-04	5	.25100E-03	6	.39900E-03	
	7	.45000E-03	8	.51300E-03	9	.55400E-03
10	.56800E-03	11	.58700E-03	12	.61800E-03	
	13	.60300E-03	14	.58200E-03	15	.56500E-03
16	.54800E-03	17	.52800E-03	18	.51600E-03	
	19	.42100E-03	20	.32900E-03	21	.29700E-03
22	.25800E-03	23	.19100E-03	24	.12200E-03	

SOURCE ID = A0000030 ; SOURCE TYPE = AREA :

	1	.81700E-04	2	.56300E-04	3	.49400E-04
4	.88000E-04	5	.25100E-03	6	.39900E-03	
	7	.45000E-03	8	.51300E-03	9	.55400E-03
10	.56800E-03	11	.58700E-03	12	.61800E-03	
	13	.60300E-03	14	.58200E-03	15	.56500E-03
16	.54800E-03	17	.52800E-03	18	.51600E-03	
	19	.42100E-03	20	.32900E-03	21	.29700E-03
22	.25800E-03	23	.19100E-03	24	.12200E-03	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000031 ; SOURCE TYPE = AREA :

1	.81700E-04	2	.56300E-04	3	.49400E-04	
4	.88000E-04	5	.25100E-03	6	.39900E-03	
	7	.45000E-03	8	.51300E-03	9	.55400E-03
10	.56800E-03	11	.58700E-03	12	.61800E-03	
	13	.60300E-03	14	.58200E-03	15	.56500E-03
16	.54800E-03	17	.52800E-03	18	.51600E-03	
	19	.42100E-03	20	.32900E-03	21	.29700E-03
22	.25800E-03	23	.19100E-03	24	.12200E-03	

SOURCE ID = A0000032 ; SOURCE TYPE = AREA :

1	.81700E-04	2	.56300E-04	3	.49400E-04	
4	.88000E-04	5	.25100E-03	6	.39900E-03	
	7	.45000E-03	8	.51300E-03	9	.55400E-03
10	.56800E-03	11	.58700E-03	12	.61800E-03	
	13	.60300E-03	14	.58200E-03	15	.56500E-03
16	.54800E-03	17	.52800E-03	18	.51600E-03	
	19	.42100E-03	20	.32900E-03	21	.29700E-03
22	.25800E-03	23	.19100E-03	24	.12200E-03	

SOURCE ID = A0000033 ; SOURCE TYPE = AREA :

1	.81700E-04	2	.56300E-04	3	.49400E-04	
4	.88000E-04	5	.25100E-03	6	.39900E-03	
	7	.45000E-03	8	.51300E-03	9	.55400E-03
10	.56800E-03	11	.58700E-03	12	.61800E-03	
	13	.60300E-03	14	.58200E-03	15	.56500E-03
16	.54800E-03	17	.52800E-03	18	.51600E-03	
	19	.42100E-03	20	.32900E-03	21	.29700E-03
22	.25800E-03	23	.19100E-03	24	.12200E-03	

SOURCE ID = A0000034 ; SOURCE TYPE = AREA :

	1	.81700E-04	2	.56300E-04	3	.49400E-04
4	.88000E-04	5	.25100E-03	6	.39900E-03	
	7	.45000E-03	8	.51300E-03	9	.55400E-03
10	.56800E-03	11	.58700E-03	12	.61800E-03	
	13	.60300E-03	14	.58200E-03	15	.56500E-03
16	.54800E-03	17	.52800E-03	18	.51600E-03	
	19	.42100E-03	20	.32900E-03	21	.29700E-03
22	.25800E-03	23	.19100E-03	24	.12200E-03	

SOURCE ID = A0000035 ; SOURCE TYPE = AREA :

	1	.81700E-04	2	.56300E-04	3	.49400E-04
4	.88000E-04	5	.25100E-03	6	.39900E-03	
	7	.45000E-03	8	.51300E-03	9	.55400E-03
10	.56800E-03	11	.58700E-03	12	.61800E-03	
	13	.60300E-03	14	.58200E-03	15	.56500E-03
16	.54800E-03	17	.52800E-03	18	.51600E-03	
	19	.42100E-03	20	.32900E-03	21	.29700E-03
22	.25800E-03	23	.19100E-03	24	.12200E-03	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000036 ; SOURCE TYPE = AREA :

1	.81700E-04	2	.56300E-04	3	.49400E-04	
4	.88000E-04	5	.25100E-03	6	.39900E-03	
	7	.45000E-03	8	.51300E-03	9	.55400E-03
10	.56800E-03	11	.58700E-03	12	.61800E-03	
	13	.60300E-03	14	.58200E-03	15	.56500E-03
16	.54800E-03	17	.52800E-03	18	.51600E-03	
	19	.42100E-03	20	.32900E-03	21	.29700E-03
22	.25800E-03	23	.19100E-03	24	.12200E-03	

SOURCE ID = A0000037 ; SOURCE TYPE = AREA :

1	.45100E-04	2	.44600E-04	3	.43300E-04	
4	.44700E-04	5	.55800E-04	6	.70800E-04	
	7	.89000E-04	8	.82500E-04	9	.97100E-04
10	.11600E-03	11	.12300E-03	12	.12000E-03	
	13	.11300E-03	14	.10400E-03	15	.81500E-04
16	.63000E-04	17	.54800E-04	18	.49700E-04	
	19	.54100E-04	20	.66200E-04	21	.70100E-04
22	.65500E-04	23	.62500E-04	24	.51600E-04	

SOURCE ID = A0000038 ; SOURCE TYPE = AREA :

1	.45100E-04	2	.44600E-04	3	.43300E-04	
4	.44700E-04	5	.55800E-04	6	.70800E-04	
	7	.89000E-04	8	.82500E-04	9	.97100E-04
10	.11600E-03	11	.12300E-03	12	.12000E-03	
	13	.11300E-03	14	.10400E-03	15	.81500E-04
16	.63000E-04	17	.54800E-04	18	.49700E-04	
	19	.54100E-04	20	.66200E-04	21	.70100E-04
22	.65500E-04	23	.62500E-04	24	.51600E-04	

SOURCE ID = A0000039 ; SOURCE TYPE = AREA :

	1	.45100E-04	2	.44600E-04	3	.43300E-04
4	.44700E-04	5	.55800E-04	6	.70800E-04	
	7	.89000E-04	8	.82500E-04	9	.97100E-04
10	.11600E-03	11	.12300E-03	12	.12000E-03	
	13	.11300E-03	14	.10400E-03	15	.81500E-04
16	.63000E-04	17	.54800E-04	18	.49700E-04	
	19	.54100E-04	20	.66200E-04	21	.70100E-04
22	.65500E-04	23	.62500E-04	24	.51600E-04	

SOURCE ID = A0000040 ; SOURCE TYPE = AREA :

	1	.45100E-04	2	.44600E-04	3	.43300E-04
4	.44700E-04	5	.55800E-04	6	.70800E-04	
	7	.89000E-04	8	.82500E-04	9	.97100E-04
10	.11600E-03	11	.12300E-03	12	.12000E-03	
	13	.11300E-03	14	.10400E-03	15	.81500E-04
16	.63000E-04	17	.54800E-04	18	.49700E-04	
	19	.54100E-04	20	.66200E-04	21	.70100E-04
22	.65500E-04	23	.62500E-04	24	.51600E-04	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000041 ; SOURCE TYPE = AREA :

1	.45100E-04	2	.44600E-04	3	.43300E-04	
4	.44700E-04	5	.55800E-04	6	.70800E-04	
	7	.89000E-04	8	.82500E-04	9	.97100E-04
10	.11600E-03	11	.12300E-03	12	.12000E-03	
	13	.11300E-03	14	.10400E-03	15	.81500E-04
16	.63000E-04	17	.54800E-04	18	.49700E-04	
	19	.54100E-04	20	.66200E-04	21	.70100E-04
22	.65500E-04	23	.62500E-04	24	.51600E-04	

SOURCE ID = A0000042 ; SOURCE TYPE = AREA :

1	.45100E-04	2	.44600E-04	3	.43300E-04	
4	.44700E-04	5	.55800E-04	6	.70800E-04	
	7	.89000E-04	8	.82500E-04	9	.97100E-04
10	.11600E-03	11	.12300E-03	12	.12000E-03	
	13	.11300E-03	14	.10400E-03	15	.81500E-04
16	.63000E-04	17	.54800E-04	18	.49700E-04	
	19	.54100E-04	20	.66200E-04	21	.70100E-04
22	.65500E-04	23	.62500E-04	24	.51600E-04	

SOURCE ID = A0000043 ; SOURCE TYPE = AREA :

1	.45100E-04	2	.44600E-04	3	.43300E-04	
4	.44700E-04	5	.55800E-04	6	.70800E-04	
	7	.89000E-04	8	.82500E-04	9	.97100E-04
10	.11600E-03	11	.12300E-03	12	.12000E-03	
	13	.11300E-03	14	.10400E-03	15	.81500E-04
16	.63000E-04	17	.54800E-04	18	.49700E-04	
	19	.54100E-04	20	.66200E-04	21	.70100E-04
22	.65500E-04	23	.62500E-04	24	.51600E-04	

SOURCE ID = A0000044 ; SOURCE TYPE = AREA :

	1	.45100E-04	2	.44600E-04	3	.43300E-04
4	.44700E-04	5	.55800E-04	6	.70800E-04	
	7	.89000E-04	8	.82500E-04	9	.97100E-04
10	.11600E-03	11	.12300E-03	12	.12000E-03	
	13	.11300E-03	14	.10400E-03	15	.81500E-04
16	.63000E-04	17	.54800E-04	18	.49700E-04	
	19	.54100E-04	20	.66200E-04	21	.70100E-04
22	.65500E-04	23	.62500E-04	24	.51600E-04	

SOURCE ID = A0000045 ; SOURCE TYPE = AREA :

	1	.31400E-03	2	.31000E-03	3	.30100E-03
4	.31100E-03	5	.38800E-03	6	.49200E-03	
	7	.61900E-03	8	.57400E-03	9	.67600E-03
10	.80800E-03	11	.85500E-03	12	.83600E-03	
	13	.78900E-03	14	.72000E-03	15	.56700E-03
16	.43800E-03	17	.38100E-03	18	.34500E-03	
	19	.37600E-03	20	.46000E-03	21	.48800E-03
22	.45600E-03	23	.43500E-03	24	.35900E-03	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000046 ; SOURCE TYPE = AREA :

1	.31400E-03	2	.31000E-03	3	.30100E-03
4	.31100E-03	5	.38800E-03	6	.49200E-03
	7 .61900E-03	8	.57400E-03	9	.67600E-03
10	.80800E-03	11	.85500E-03	12	.83600E-03
	13 .78900E-03	14	.72000E-03	15	.56700E-03
16	.43800E-03	17	.38100E-03	18	.34500E-03
	19 .37600E-03	20	.46000E-03	21	.48800E-03
22	.45600E-03	23	.43500E-03	24	.35900E-03

SOURCE ID = A0000047 ; SOURCE TYPE = AREA :

1	.31400E-03	2	.31000E-03	3	.30100E-03
4	.31100E-03	5	.38800E-03	6	.49200E-03
	7 .61900E-03	8	.57400E-03	9	.67600E-03
10	.80800E-03	11	.85500E-03	12	.83600E-03
	13 .78900E-03	14	.72000E-03	15	.56700E-03
16	.43800E-03	17	.38100E-03	18	.34500E-03
	19 .37600E-03	20	.46000E-03	21	.48800E-03
22	.45600E-03	23	.43500E-03	24	.35900E-03

SOURCE ID = A0000048 ; SOURCE TYPE = AREA :

1	.31400E-03	2	.31000E-03	3	.30100E-03
4	.31100E-03	5	.38800E-03	6	.49200E-03
	7 .61900E-03	8	.57400E-03	9	.67600E-03
10	.80800E-03	11	.85500E-03	12	.83600E-03
	13 .78900E-03	14	.72000E-03	15	.56700E-03
16	.43800E-03	17	.38100E-03	18	.34500E-03
	19 .37600E-03	20	.46000E-03	21	.48800E-03
22	.45600E-03	23	.43500E-03	24	.35900E-03

SOURCE ID = A0000049 ; SOURCE TYPE = AREA :

	1	.31400E-03	2	.31000E-03	3	.30100E-03
4	.31100E-03	5	.38800E-03	6	.49200E-03	
	7	.61900E-03	8	.57400E-03	9	.67600E-03
10	.80800E-03	11	.85500E-03	12	.83600E-03	
	13	.78900E-03	14	.72000E-03	15	.56700E-03
16	.43800E-03	17	.38100E-03	18	.34500E-03	
	19	.37600E-03	20	.46000E-03	21	.48800E-03
22	.45600E-03	23	.43500E-03	24	.35900E-03	

SOURCE ID = A0000050 ; SOURCE TYPE = AREA :

	1	.31400E-03	2	.31000E-03	3	.30100E-03
4	.31100E-03	5	.38800E-03	6	.49200E-03	
	7	.61900E-03	8	.57400E-03	9	.67600E-03
10	.80800E-03	11	.85500E-03	12	.83600E-03	
	13	.78900E-03	14	.72000E-03	15	.56700E-03
16	.43800E-03	17	.38100E-03	18	.34500E-03	
	19	.37600E-03	20	.46000E-03	21	.48800E-03
22	.45600E-03	23	.43500E-03	24	.35900E-03	

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 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000051 ; SOURCE TYPE = AREA :

1	.31400E-03	2	.31000E-03	3	.30100E-03	
4	.31100E-03	5	.38800E-03	6	.49200E-03	
	7	.61900E-03	8	.57400E-03	9	.67600E-03
10	.80800E-03	11	.85500E-03	12	.83600E-03	
	13	.78900E-03	14	.72000E-03	15	.56700E-03
16	.43800E-03	17	.38100E-03	18	.34500E-03	
	19	.37600E-03	20	.46000E-03	21	.48800E-03
22	.45600E-03	23	.43500E-03	24	.35900E-03	

SOURCE ID = A0000052 ; SOURCE TYPE = AREA :

1	.31400E-03	2	.31000E-03	3	.30100E-03	
4	.31100E-03	5	.38800E-03	6	.49200E-03	
	7	.61900E-03	8	.57400E-03	9	.67600E-03
10	.80800E-03	11	.85500E-03	12	.83600E-03	
	13	.78900E-03	14	.72000E-03	15	.56700E-03
16	.43800E-03	17	.38100E-03	18	.34500E-03	
	19	.37600E-03	20	.46000E-03	21	.48800E-03
22	.45600E-03	23	.43500E-03	24	.35900E-03	

SOURCE ID = A0000053 ; SOURCE TYPE = AREA :

1	.31400E-03	2	.31000E-03	3	.30100E-03	
4	.31100E-03	5	.38800E-03	6	.49200E-03	
	7	.61900E-03	8	.57400E-03	9	.67600E-03
10	.80800E-03	11	.85500E-03	12	.83600E-03	
	13	.78900E-03	14	.72000E-03	15	.56700E-03
16	.43800E-03	17	.38100E-03	18	.34500E-03	
	19	.37600E-03	20	.46000E-03	21	.48800E-03
22	.45600E-03	23	.43500E-03	24	.35900E-03	

SOURCE ID = A0000054 ; SOURCE TYPE = AREA :

	1	.31400E-03	2	.31000E-03	3	.30100E-03
4	.31100E-03	5	.38800E-03	6	.49200E-03	
	7	.61900E-03	8	.57400E-03	9	.67600E-03
10	.80800E-03	11	.85500E-03	12	.83600E-03	
	13	.78900E-03	14	.72000E-03	15	.56700E-03
16	.43800E-03	17	.38100E-03	18	.34500E-03	
	19	.37600E-03	20	.46000E-03	21	.48800E-03
22	.45600E-03	23	.43500E-03	24	.35900E-03	

SOURCE ID = A0000055 ; SOURCE TYPE = AREA :

	1	.31400E-03	2	.31000E-03	3	.30100E-03
4	.31100E-03	5	.38800E-03	6	.49200E-03	
	7	.61900E-03	8	.57400E-03	9	.67600E-03
10	.80800E-03	11	.85500E-03	12	.83600E-03	
	13	.78900E-03	14	.72000E-03	15	.56700E-03
16	.43800E-03	17	.38100E-03	18	.34500E-03	
	19	.37600E-03	20	.46000E-03	21	.48800E-03
22	.45600E-03	23	.43500E-03	24	.35900E-03	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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SOURCE ID = A0000056 ; SOURCE TYPE = AREA :

1	.31400E-03	2	.31000E-03	3	.30100E-03	
4	.31100E-03	5	.38800E-03	6	.49200E-03	
	7	.61900E-03	8	.57400E-03	9	.67600E-03
10	.80800E-03	11	.85500E-03	12	.83600E-03	
	13	.78900E-03	14	.72000E-03	15	.56700E-03
16	.43800E-03	17	.38100E-03	18	.34500E-03	
	19	.37600E-03	20	.46000E-03	21	.48800E-03
22	.45600E-03	23	.43500E-03	24	.35900E-03	

SOURCE ID = A0000057 ; SOURCE TYPE = AREA :

1	.31400E-03	2	.31000E-03	3	.30100E-03	
4	.31100E-03	5	.38800E-03	6	.49200E-03	
	7	.61900E-03	8	.57400E-03	9	.67600E-03
10	.80800E-03	11	.85500E-03	12	.83600E-03	
	13	.78900E-03	14	.72000E-03	15	.56700E-03
16	.43800E-03	17	.38100E-03	18	.34500E-03	
	19	.37600E-03	20	.46000E-03	21	.48800E-03
22	.45600E-03	23	.43500E-03	24	.35900E-03	

SOURCE ID = A0000058 ; SOURCE TYPE = AREA :

1	.31400E-03	2	.31000E-03	3	.30100E-03	
4	.31100E-03	5	.38800E-03	6	.49200E-03	
	7	.61900E-03	8	.57400E-03	9	.67600E-03
10	.80800E-03	11	.85500E-03	12	.83600E-03	
	13	.78900E-03	14	.72000E-03	15	.56700E-03
16	.43800E-03	17	.38100E-03	18	.34500E-03	
	19	.37600E-03	20	.46000E-03	21	.48800E-03
22	.45600E-03	23	.43500E-03	24	.35900E-03	

SOURCE ID = A0000059 ; SOURCE TYPE = AREA :

	1	.31400E-03	2	.31000E-03	3	.30100E-03
4	.31100E-03	5	.38800E-03	6	.49200E-03	
	7	.61900E-03	8	.57400E-03	9	.67600E-03
10	.80800E-03	11	.85500E-03	12	.83600E-03	
	13	.78900E-03	14	.72000E-03	15	.56700E-03
16	.43800E-03	17	.38100E-03	18	.34500E-03	
	19	.37600E-03	20	.46000E-03	21	.48800E-03
22	.45600E-03	23	.43500E-03	24	.35900E-03	

SOURCE ID = A0000060 ; SOURCE TYPE = AREA :

	1	.31400E-03	2	.31000E-03	3	.30100E-03
4	.31100E-03	5	.38800E-03	6	.49200E-03	
	7	.61900E-03	8	.57400E-03	9	.67600E-03
10	.80800E-03	11	.85500E-03	12	.83600E-03	
	13	.78900E-03	14	.72000E-03	15	.56700E-03
16	.43800E-03	17	.38100E-03	18	.34500E-03	
	19	.37600E-03	20	.46000E-03	21	.48800E-03
22	.45600E-03	23	.43500E-03	24	.35900E-03	

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 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.22900E-04	2	.15800E-04	3	.13900E-04
4	.24700E-04	5	.70400E-04	6	.11200E-03
7	.12600E-03	8	.14400E-03	9	.15500E-03
10	.15900E-03	11	.16500E-03	12	.17300E-03
13	.16900E-03	14	.16300E-03	15	.15800E-03
16	.15400E-03	17	.14800E-03	18	.14500E-03
19	.11800E-03	20	.92300E-04	21	.83400E-04
22	.72300E-04	23	.53500E-04	24	.34200E-04

SOURCE ID = A0000061 ; SOURCE TYPE = AREA :

1	.22900E-04	2	.15800E-04	3	.13900E-04
4	.24700E-04	5	.70400E-04	6	.11200E-03
7	.12600E-03	8	.14400E-03	9	.15500E-03
10	.15900E-03	11	.16500E-03	12	.17300E-03
13	.16900E-03	14	.16300E-03	15	.15800E-03
16	.15400E-03	17	.14800E-03	18	.14500E-03
19	.11800E-03	20	.92300E-04	21	.83400E-04
22	.72300E-04	23	.53500E-04	24	.34200E-04

SOURCE ID = A0000062 ; SOURCE TYPE = AREA :

1	.22900E-04	2	.15800E-04	3	.13900E-04
4	.24700E-04	5	.70400E-04	6	.11200E-03
7	.12600E-03	8	.14400E-03	9	.15500E-03
10	.15900E-03	11	.16500E-03	12	.17300E-03
13	.16900E-03	14	.16300E-03	15	.15800E-03
16	.15400E-03	17	.14800E-03	18	.14500E-03
19	.11800E-03	20	.92300E-04	21	.83400E-04
22	.72300E-04	23	.53500E-04	24	.34200E-04

SOURCE ID = A0000063 ; SOURCE TYPE = AREA :

1	.22900E-04	2	.15800E-04	3	.13900E-04
4	.24700E-04	5	.70400E-04	6	.11200E-03
7	.12600E-03	8	.14400E-03	9	.15500E-03
10	.15900E-03	11	.16500E-03	12	.17300E-03
13	.16900E-03	14	.16300E-03	15	.15800E-03
16	.15400E-03	17	.14800E-03	18	.14500E-03
19	.11800E-03	20	.92300E-04	21	.83400E-04
22	.72300E-04	23	.53500E-04	24	.34200E-04

SOURCE ID = A0000064 ; SOURCE TYPE = AREA :

	1	.22900E-04	2	.15800E-04	3	.13900E-04
4	.24700E-04	5	.70400E-04	6	.11200E-03	
	7	.12600E-03	8	.14400E-03	9	.15500E-03
10	.15900E-03	11	.16500E-03	12	.17300E-03	
	13	.16900E-03	14	.16300E-03	15	.15800E-03
16	.15400E-03	17	.14800E-03	18	.14500E-03	
	19	.11800E-03	20	.92300E-04	21	.83400E-04
22	.72300E-04	23	.53500E-04	24	.34200E-04	

SOURCE ID = A0000065 ; SOURCE TYPE = AREA :

	1	.22900E-04	2	.15800E-04	3	.13900E-04
4	.24700E-04	5	.70400E-04	6	.11200E-03	
	7	.12600E-03	8	.14400E-03	9	.15500E-03
10	.15900E-03	11	.16500E-03	12	.17300E-03	
	13	.16900E-03	14	.16300E-03	15	.15800E-03
16	.15400E-03	17	.14800E-03	18	.14500E-03	
	19	.11800E-03	20	.92300E-04	21	.83400E-04
22	.72300E-04	23	.53500E-04	24	.34200E-04	

\*\*\* AERMOD - VERSION 21112 \*\*\*    \*\*\* C:\Lakes\Ontario\_PUD-  
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 \*\*\* AERMET - VERSION 16216 \*\*\*    \*\*\*  
 \*\*\*            12:31:02

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\*\*\* MODELOPTs:        NonDEFAULT    CONC    FLAT    URBAN    ADJ\_U\*

\* SOURCE EMISSION RATE SCALARS WHICH  
 VARY FOR EACH HOUR OF THE DAY \*

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
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---	---	---	---	---	---

SOURCE ID = A0000066		; SOURCE TYPE = AREA		:		
1	.22900E-04	2	.15800E-04	3	.13900E-04	
4	.24700E-04	5	.70400E-04	6	.11200E-03	
	7	.12600E-03	8	.14400E-03	9	.15500E-03
10	.15900E-03	11	.16500E-03	12	.17300E-03	
	13	.16900E-03	14	.16300E-03	15	.15800E-03
16	.15400E-03	17	.14800E-03	18	.14500E-03	
	19	.11800E-03	20	.92300E-04	21	.83400E-04
22	.72300E-04	23	.53500E-04	24	.34200E-04	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
10/05/22  
\*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
\*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

(METERS)

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\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
10/05/22  
\*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
\*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

(METERS)

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

(METERS)

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

(METERS)

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

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\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

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\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* 12:31:02

PAGE 27

\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

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\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

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\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

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\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

(METERS)

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Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

(METERS)

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\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

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Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZHILL, ZFLAG)

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( 439709.0, 3765430.0, 289.0, 289.0, 0.0);  
( 439739.0, 3765430.0, 289.0, 289.0, 0.0);  
( 439769.0, 3765430.0, 289.0, 289.0, 0.0);  
( 439799.0, 3765430.0, 289.0, 289.0, 0.0);  
( 439829.0, 3765430.0, 289.0, 289.0, 0.0);  
( 439859.0, 3765430.0, 289.0, 289.0, 0.0);  
( 439889.0, 3765430.0, 289.0, 289.0, 0.0);  
( 439649.0, 3765460.0, 289.0, 289.0, 0.0);  
( 439679.0, 3765460.0, 289.0, 289.0, 0.0);  
( 439709.0, 3765460.0, 289.0, 289.0, 0.0);  
( 439739.0, 3765460.0, 289.0, 289.0, 0.0);  
( 439769.0, 3765460.0, 289.0, 289.0, 0.0);  
( 439799.0, 3765460.0, 289.0, 289.0, 0.0);  
( 439829.0, 3765460.0, 289.0, 289.0, 0.0);  
( 439859.0, 3765460.0, 289.0, 289.0, 0.0);  
( 439889.0, 3765460.0, 289.0, 289.0, 0.0);  
( 439649.0, 3765490.0, 289.0, 289.0, 0.0);  
( 439679.0, 3765490.0, 289.0, 289.0, 0.0);  
( 439709.0, 3765490.0, 289.0, 289.0, 0.0);  
( 439739.0, 3765490.0, 289.0, 289.0, 0.0);  
( 439769.0, 3765490.0, 289.0, 289.0, 0.0);  
( 439799.0, 3765490.0, 289.0, 289.0, 0.0);  
( 439829.0, 3765490.0, 289.0, 289.0, 0.0);  
( 439859.0, 3765490.0, 289.0, 289.0, 0.0);  
( 439889.0, 3765490.0, 289.0, 289.0, 0.0);

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* METEOROLOGICAL

DAYS SELECTED FOR PROCESSING \*\*\*

(1

=YES; 0=NO)

1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED  
 WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

\*\*\* UPPER BOUND OF FIRST  
 THROUGH FIFTH WIND SPEED CATEGORIES \*\*\*

(METERS/SEC)

5.14, 8.23, 10.80, 1.54, 3.09,

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* UP TO THE FIRST 24 HOURS

OF METEOROLOGICAL DATA \*\*\*

Surface file: C:\Users\sjremote\Desktop\Ontario\_PUD-Legacy  
 \OntarioIntlAirportADJU (1)\KONT\_V9\_ Met Version: 16216  
 Profile file: C:\Users\sjremote\Desktop\Ontario\_PUD-Legacy  
 \OntarioIntlAirportADJU (1)\KONT\_V9\_  
 Surface format: FREE  
 Profile format: FREE  
 Surface station no.: 3102 Upper air  
 station no.: 3190  
 Name: ONTARIO\_APT  
 Name: UNKNOWN  
 Year: 2012  
 Year: 2012

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN
Z0	BOWEN	ALBEDO	REF	WS	WD	HT	REF	TA	HT			
12	01	01	1	01	-16.4	0.171	-9.000	-9.000	-999.	170.		32.3
0.09	1.12	1.00		2.03	43.	7.9	285.9		2.0			
12	01	01	1	02	-18.8	0.194	-9.000	-9.000	-999.	205.		41.3
0.09	1.12	1.00		2.28	34.	7.9	285.4		2.0			
12	01	01	1	03	-17.8	0.182	-9.000	-9.000	-999.	187.		36.5
0.09	1.12	1.00		2.15	24.	7.9	282.0		2.0			
12	01	01	1	04	-9.4	0.128	-9.000	-9.000	-999.	110.		19.6
0.09	1.12	1.00		1.55	41.	7.9	283.1		2.0			
12	01	01	1	05	-16.9	0.173	-9.000	-9.000	-999.	173.		33.0
0.09	1.12	1.00		2.05	39.	7.9	280.4		2.0			
12	01	01	1	06	-8.0	0.117	-9.000	-9.000	-999.	97.		17.8
0.09	1.12	1.00		1.43	21.	7.9	282.0		2.0			
12	01	01	1	07	-7.6	0.115	-9.000	-9.000	-999.	93.		17.4
0.09	1.12	1.00		1.40	31.	7.9	282.5		2.0			
12	01	01	1	08	-13.6	0.184	-9.000	-9.000	-999.	190.		40.5
0.09	1.12	0.54		2.16	34.	7.9	284.2		2.0			
12	01	01	1	09	28.4	0.126	0.300	0.011	33.	108.		-6.2
0.09	1.12	0.32		1.03	29.	7.9	289.2		2.0			
12	01	01	1	10	79.8	0.133	0.607	0.010	99.	116.		-2.6
0.09	1.12	0.25		0.94	173.	7.9	292.5		2.0			
12	01	01	1	11	115.8	0.137	0.932	0.006	246.	121.		-2.0
0.09	1.12	0.22		0.92	172.	7.9	295.4		2.0			

12	01	01	1	12	133.7	0.139	1.197	0.005	453.	125.	-1.8
0.09	1.12	0.21	0.92	146.	7.9	297.5	2.0				
12	01	01	1	13	133.2	0.160	1.354	0.005	657.	153.	-2.7
0.09	1.12	0.21	1.14	117.	7.9	299.9	2.0				
12	01	01	1	14	113.5	0.159	1.454	0.005	955.	151.	-3.1
0.09	1.12	0.23	1.16	285.	7.9	300.9	2.0				
12	01	01	1	15	76.2	0.166	1.350	0.005	1138.	163.	-5.3
0.09	1.12	0.26	1.33	72.	7.9	302.0	2.0				
12	01	01	1	16	23.5	0.175	0.925	0.005	1183.	175.	-19.9
0.09	1.12	0.35	1.65	107.	7.9	301.4	2.0				
12	01	01	1	17	-6.1	0.107	-9.000	-9.000	-999.	86.	18.0
0.09	1.12	0.63	1.31	107.	7.9	298.1	2.0				
12	01	01	1	18	-11.1	0.141	-9.000	-9.000	-999.	127.	22.1
0.09	1.12	1.00	1.69	86.	7.9	293.1	2.0				
12	01	01	1	19	-3.2	0.076	-9.000	-9.000	-999.	51.	11.8
0.09	1.12	1.00	0.91	64.	7.9	292.0	2.0				
12	01	01	1	20	-2.3	0.066	-9.000	-9.000	-999.	41.	11.2
0.09	1.12	1.00	0.74	73.	7.9	288.8	2.0				
12	01	01	1	21	-10.0	0.133	-9.000	-9.000	-999.	116.	20.5
0.09	1.12	1.00	1.60	14.	7.9	288.1	2.0				
12	01	01	1	22	-19.4	0.201	-9.000	-9.000	-999.	216.	44.5
0.09	1.12	1.00	2.36	22.	7.9	287.5	2.0				
12	01	01	1	23	-23.7	0.246	-9.000	-9.000	-999.	293.	66.5
0.09	1.12	1.00	2.86	40.	7.9	287.0	2.0				
12	01	01	1	24	-12.3	0.147	-9.000	-9.000	-999.	139.	23.8
0.09	1.12	1.00	1.76	40.	7.9	283.8	2.0				

First hour of profile data  
 YR MO DY HR HEIGHT F WDIR WSPD AMB\_TMP sigmaA sigmaW  
 sigmaV  
 12 01 01 01 7.9 1 43. 2.03 286.0  
 99.0 -99.00 -99.00

F indicates top of profile (=1) or below (=0)

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439674.00	3765310.00	0.10334
439679.00	3765310.00	0.10335
439684.00	3765310.00	0.10335
439689.00	3765310.00	0.10335
439694.00	3765310.00	0.10335
439699.00	3765310.00	0.10335
439704.00	3765310.00	0.10334
439709.00	3765310.00	0.10334
439714.00	3765310.00	0.10333
439719.00	3765310.00	0.10332
439729.00	3765310.00	0.10330
439734.00	3765310.00	0.10329
439739.00	3765310.00	0.10327
439744.00	3765310.00	0.10325
439749.00	3765310.00	0.10324
439764.00	3765310.00	0.10317
439769.00	3765310.00	0.10314
439774.00	3765310.00	0.10312

	439779.00	3765310.00	0.10309
439784.00	3765310.00	0.10305	
	439789.00	3765310.00	0.10302
439794.00	3765310.00	0.10298	
	439799.00	3765310.00	0.10295
439804.00	3765310.00	0.10291	
	439809.00	3765310.00	0.10286
439814.00	3765310.00	0.10282	
	439819.00	3765310.00	0.10277
439824.00	3765310.00	0.10272	
	439829.00	3765310.00	0.10267
439839.00	3765310.00	0.10256	
	439844.00	3765310.00	0.10250
439849.00	3765310.00	0.10244	
	439854.00	3765310.00	0.10238
439859.00	3765310.00	0.10231	
	439864.00	3765310.00	0.10224
439869.00	3765310.00	0.10217	
	439874.00	3765310.00	0.10209
439879.00	3765310.00	0.10202	
	439884.00	3765310.00	0.10194
439674.00	3765315.00	0.10472	
	439679.00	3765315.00	0.10472
439684.00	3765315.00	0.10473	
	439689.00	3765315.00	0.10473
439694.00	3765315.00	0.10473	
	439699.00	3765315.00	0.10473
439704.00	3765315.00	0.10473	
	439709.00	3765315.00	0.10472
439714.00	3765315.00	0.10472	
	439719.00	3765315.00	0.10471
439729.00	3765315.00	0.10469	
	439734.00	3765315.00	0.10468
439739.00	3765315.00	0.10467	
	439744.00	3765315.00	0.10465
439749.00	3765315.00	0.10464	
	439764.00	3765315.00	0.10458
439769.00	3765315.00	0.10455	
	439774.00	3765315.00	0.10453
439779.00	3765315.00	0.10450	
	439784.00	3765315.00	0.10447
439789.00	3765315.00	0.10444	
	439794.00	3765315.00	0.10440
439799.00	3765315.00	0.10437	
	439804.00	3765315.00	0.10433
439809.00	3765315.00	0.10429	
	439814.00	3765315.00	0.10424
439819.00	3765315.00	0.10420	
	439824.00	3765315.00	0.10415
439829.00	3765315.00	0.10410	
	439839.00	3765315.00	0.10400
439844.00	3765315.00	0.10394	

	439849.00	3765315.00	0.10388
439854.00	3765315.00	0.10382	
	439859.00	3765315.00	0.10375
439864.00	3765315.00	0.10368	
	439869.00	3765315.00	0.10361
439874.00	3765315.00	0.10354	
	439879.00	3765315.00	0.10346
439884.00	3765315.00	0.10339	
	439674.00	3765320.00	0.10612
439679.00	3765320.00	0.10613	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439684.00	3765320.00	0.10614
439689.00	3765320.00	0.10614
439694.00	3765320.00	0.10614
439699.00	3765320.00	0.10614
439704.00	3765320.00	0.10614
439709.00	3765320.00	0.10614
439714.00	3765320.00	0.10614
439719.00	3765320.00	0.10613
439729.00	3765320.00	0.10612
439734.00	3765320.00	0.10611
439739.00	3765320.00	0.10610
439744.00	3765320.00	0.10609
439749.00	3765320.00	0.10607
439764.00	3765320.00	0.10602
439769.00	3765320.00	0.10599
439774.00	3765320.00	0.10597
439779.00	3765320.00	0.10594
439784.00	3765320.00	0.10592

	439789.00	3765320.00	0.10589
439794.00	3765320.00	0.10585	
	439799.00	3765320.00	0.10582
439804.00	3765320.00	0.10578	
	439809.00	3765320.00	0.10574
439814.00	3765320.00	0.10570	
	439819.00	3765320.00	0.10566
439824.00	3765320.00	0.10561	
	439829.00	3765320.00	0.10557
439839.00	3765320.00	0.10546	
	439844.00	3765320.00	0.10541
439849.00	3765320.00	0.10535	
	439854.00	3765320.00	0.10529
439859.00	3765320.00	0.10523	
	439864.00	3765320.00	0.10516
439869.00	3765320.00	0.10509	
	439874.00	3765320.00	0.10502
439879.00	3765320.00	0.10495	
	439884.00	3765320.00	0.10487
439674.00	3765325.00	0.10756	
	439679.00	3765325.00	0.10757
439684.00	3765325.00	0.10758	
	439689.00	3765325.00	0.10758
439694.00	3765325.00	0.10759	
	439699.00	3765325.00	0.10759
439704.00	3765325.00	0.10759	
	439709.00	3765325.00	0.10760
439714.00	3765325.00	0.10759	
	439719.00	3765325.00	0.10759
439729.00	3765325.00	0.10758	
	439734.00	3765325.00	0.10757
439739.00	3765325.00	0.10756	
	439744.00	3765325.00	0.10755
439749.00	3765325.00	0.10754	
	439754.00	3765325.00	0.10752
439769.00	3765325.00	0.10747	
	439774.00	3765325.00	0.10745
439779.00	3765325.00	0.10742	
	439784.00	3765325.00	0.10740
439789.00	3765325.00	0.10737	
	439794.00	3765325.00	0.10734
439799.00	3765325.00	0.10731	
	439804.00	3765325.00	0.10727
439809.00	3765325.00	0.10724	
	439814.00	3765325.00	0.10720
439819.00	3765325.00	0.10716	
	439824.00	3765325.00	0.10711
439829.00	3765325.00	0.10707	
	439839.00	3765325.00	0.10697
439844.00	3765325.00	0.10691	
	439849.00	3765325.00	0.10686
439854.00	3765325.00	0.10680	

	439859.00	3765325.00	0.10674
439864.00	3765325.00	0.10667	
	439869.00	3765325.00	0.10661
439874.00	3765325.00	0.10654	
	439879.00	3765325.00	0.10647
439884.00	3765325.00	0.10639	
	439674.00	3765330.00	0.10903
439679.00	3765330.00	0.10905	
	439684.00	3765330.00	0.10906
439689.00	3765330.00	0.10906	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439694.00	3765330.00	0.10907
439699.00	3765330.00	0.10908
439704.00	3765330.00	0.10908
439709.00	3765330.00	0.10908
439714.00	3765330.00	0.10908
439719.00	3765330.00	0.10908
439729.00	3765330.00	0.10908
439734.00	3765330.00	0.10907
439739.00	3765330.00	0.10906
439744.00	3765330.00	0.10905
439749.00	3765330.00	0.10904
439754.00	3765330.00	0.10903
439774.00	3765330.00	0.10896
439779.00	3765330.00	0.10894
439784.00	3765330.00	0.10891
439789.00	3765330.00	0.10889
439794.00	3765330.00	0.10886
439799.00	3765330.00	0.10883

	439804.00	3765330.00	0.10880
439809.00	3765330.00	0.10876	
	439814.00	3765330.00	0.10873
439819.00	3765330.00	0.10869	
	439824.00	3765330.00	0.10865
439829.00	3765330.00	0.10860	
	439839.00	3765330.00	0.10851
439844.00	3765330.00	0.10846	
	439849.00	3765330.00	0.10840
439854.00	3765330.00	0.10835	
	439859.00	3765330.00	0.10829
439864.00	3765330.00	0.10822	
	439869.00	3765330.00	0.10816
439874.00	3765330.00	0.10809	
	439879.00	3765330.00	0.10802
439884.00	3765330.00	0.10795	
	439674.00	3765335.00	0.11054
439679.00	3765335.00	0.11056	
	439684.00	3765335.00	0.11057
439689.00	3765335.00	0.11058	
	439694.00	3765335.00	0.11059
439699.00	3765335.00	0.11060	
	439704.00	3765335.00	0.11060
439709.00	3765335.00	0.11061	
	439714.00	3765335.00	0.11061
439719.00	3765335.00	0.11061	
	439729.00	3765335.00	0.11061
439734.00	3765335.00	0.11060	
	439739.00	3765335.00	0.11060
439744.00	3765335.00	0.11059	
	439749.00	3765335.00	0.11058
439774.00	3765335.00	0.11051	
	439779.00	3765335.00	0.11049
439784.00	3765335.00	0.11047	
	439789.00	3765335.00	0.11044
439794.00	3765335.00	0.11042	
	439839.00	3765335.00	0.11008
439844.00	3765335.00	0.11003	
	439849.00	3765335.00	0.10998
439854.00	3765335.00	0.10993	
	439859.00	3765335.00	0.10987
439864.00	3765335.00	0.10981	
	439869.00	3765335.00	0.10975
439874.00	3765335.00	0.10968	
	439879.00	3765335.00	0.10961
439884.00	3765335.00	0.10954	
	439674.00	3765340.00	0.11209
439679.00	3765340.00	0.11211	
	439684.00	3765340.00	0.11212
439689.00	3765340.00	0.11213	
	439694.00	3765340.00	0.11214
439699.00	3765340.00	0.11215	

	439704.00	3765340.00	0.11216
439709.00	3765340.00	0.11217	
	439714.00	3765340.00	0.11217
439719.00	3765340.00	0.11217	
	439729.00	3765340.00	0.11218
439734.00	3765340.00	0.11217	
	439739.00	3765340.00	0.11217
439744.00	3765340.00	0.11217	
	439749.00	3765340.00	0.11216
439774.00	3765340.00	0.11210	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439779.00	3765340.00	0.11208
439784.00	3765340.00	0.11206
439789.00	3765340.00	0.11204
439794.00	3765340.00	0.11202
439839.00	3765340.00	0.11170
439844.00	3765340.00	0.11165
439849.00	3765340.00	0.11160
439854.00	3765340.00	0.11155
439859.00	3765340.00	0.11150
439864.00	3765340.00	0.11144
439869.00	3765340.00	0.11138
439874.00	3765340.00	0.11131
439879.00	3765340.00	0.11125
439884.00	3765340.00	0.11118
439674.00	3765345.00	0.11368
439679.00	3765345.00	0.11369
439684.00	3765345.00	0.11371
439689.00	3765345.00	0.11372

	439694.00	3765345.00	0.11374
439699.00	3765345.00	0.11375	
	439704.00	3765345.00	0.11376
439709.00	3765345.00	0.11377	
	439714.00	3765345.00	0.11377
439719.00	3765345.00	0.11378	
	439729.00	3765345.00	0.11378
439734.00	3765345.00	0.11378	
	439739.00	3765345.00	0.11378
439744.00	3765345.00	0.11378	
	439749.00	3765345.00	0.11378
439774.00	3765345.00	0.11373	
	439779.00	3765345.00	0.11371
439784.00	3765345.00	0.11369	
	439789.00	3765345.00	0.11367
439794.00	3765345.00	0.11365	
	439839.00	3765345.00	0.11336
439844.00	3765345.00	0.11331	
	439849.00	3765345.00	0.11327
439854.00	3765345.00	0.11322	
	439859.00	3765345.00	0.11316
439864.00	3765345.00	0.11311	
	439869.00	3765345.00	0.11305
439874.00	3765345.00	0.11299	
	439879.00	3765345.00	0.11292
439884.00	3765345.00	0.11285	
	439674.00	3765350.00	0.11530
439679.00	3765350.00	0.11532	
	439684.00	3765350.00	0.11534
439689.00	3765350.00	0.11535	
	439694.00	3765350.00	0.11537
439699.00	3765350.00	0.11538	
	439704.00	3765350.00	0.11539
439709.00	3765350.00	0.11540	
	439714.00	3765350.00	0.11541
439719.00	3765350.00	0.11542	
	439729.00	3765350.00	0.11543
439734.00	3765350.00	0.11543	
	439739.00	3765350.00	0.11544
439744.00	3765350.00	0.11543	
	439749.00	3765350.00	0.11543
439774.00	3765350.00	0.11539	
	439779.00	3765350.00	0.11538
439784.00	3765350.00	0.11537	
	439789.00	3765350.00	0.11535
439794.00	3765350.00	0.11533	
	439839.00	3765350.00	0.11506
439844.00	3765350.00	0.11501	
	439849.00	3765350.00	0.11497
439854.00	3765350.00	0.11492	
	439859.00	3765350.00	0.11487
439864.00	3765350.00	0.11482	

	439869.00	3765350.00	0.11476
439874.00	3765350.00	0.11470	
	439879.00	3765350.00	0.11464
439884.00	3765350.00	0.11457	
	439674.00	3765355.00	0.11697
439679.00	3765355.00	0.11699	
	439684.00	3765355.00	0.11701
439689.00	3765355.00	0.11703	
	439694.00	3765355.00	0.11704
439699.00	3765355.00	0.11706	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439704.00	3765355.00	0.11707
439709.00	3765355.00	0.11709
439714.00	3765355.00	0.11710
439719.00	3765355.00	0.11711
439729.00	3765355.00	0.11712
439734.00	3765355.00	0.11713
439739.00	3765355.00	0.11713
439744.00	3765355.00	0.11713
439749.00	3765355.00	0.11713
439774.00	3765355.00	0.11711
439779.00	3765355.00	0.11710
439784.00	3765355.00	0.11708
439789.00	3765355.00	0.11707
439794.00	3765355.00	0.11705
439839.00	3765355.00	0.11680
439844.00	3765355.00	0.11676
439849.00	3765355.00	0.11672
439854.00	3765355.00	0.11667

	439859.00	3765355.00	0.11662
439864.00	3765355.00	0.11657	
	439869.00	3765355.00	0.11652
439874.00	3765355.00	0.11646	
	439879.00	3765355.00	0.11640
439884.00	3765355.00	0.11634	
	439674.00	3765360.00	0.11868
439679.00	3765360.00	0.11870	
	439684.00	3765360.00	0.11872
439689.00	3765360.00	0.11874	
	439694.00	3765360.00	0.11876
439699.00	3765360.00	0.11878	
	439704.00	3765360.00	0.11880
439709.00	3765360.00	0.11881	
	439714.00	3765360.00	0.11883
439719.00	3765360.00	0.11884	
	439729.00	3765360.00	0.11886
439734.00	3765360.00	0.11886	
	439739.00	3765360.00	0.11887
439744.00	3765360.00	0.11887	
	439749.00	3765360.00	0.11888
439774.00	3765360.00	0.11886	
	439779.00	3765360.00	0.11885
439784.00	3765360.00	0.11884	
	439789.00	3765360.00	0.11883
439794.00	3765360.00	0.11882	
	439799.00	3765360.00	0.11880
439804.00	3765360.00	0.11878	
	439809.00	3765360.00	0.11876
439814.00	3765360.00	0.11874	
	439839.00	3765360.00	0.11859
439844.00	3765360.00	0.11855	
	439849.00	3765360.00	0.11851
439854.00	3765360.00	0.11847	
	439859.00	3765360.00	0.11842
439864.00	3765360.00	0.11837	
	439869.00	3765360.00	0.11832
439874.00	3765360.00	0.11827	
	439879.00	3765360.00	0.11821
439884.00	3765360.00	0.11815	
	439674.00	3765365.00	0.12043
439679.00	3765365.00	0.12046	
	439684.00	3765365.00	0.12048
439689.00	3765365.00	0.12051	
	439694.00	3765365.00	0.12053
439699.00	3765365.00	0.12055	
	439704.00	3765365.00	0.12057
439709.00	3765365.00	0.12058	
	439714.00	3765365.00	0.12060
439719.00	3765365.00	0.12061	
	439729.00	3765365.00	0.12064
439734.00	3765365.00	0.12065	

	439739.00	3765365.00	0.12066
439744.00	3765365.00	0.12066	
	439749.00	3765365.00	0.12067
439774.00	3765365.00	0.12066	
	439779.00	3765365.00	0.12066
439784.00	3765365.00	0.12065	
	439789.00	3765365.00	0.12064
439794.00	3765365.00	0.12063	
	439799.00	3765365.00	0.12062
439804.00	3765365.00	0.12060	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439809.00	3765365.00	0.12058
439814.00	3765365.00	0.12056
439839.00	3765365.00	0.12042
439844.00	3765365.00	0.12039
439849.00	3765365.00	0.12035
439854.00	3765365.00	0.12031
439859.00	3765365.00	0.12027
439864.00	3765365.00	0.12022
439869.00	3765365.00	0.12017
439874.00	3765365.00	0.12012
439879.00	3765365.00	0.12006
439884.00	3765365.00	0.12001
439674.00	3765370.00	0.12224
439679.00	3765370.00	0.12226
439684.00	3765370.00	0.12229
439689.00	3765370.00	0.12232
439694.00	3765370.00	0.12234
439699.00	3765370.00	0.12236

	439704.00	3765370.00	0.12238
439709.00	3765370.00	0.12240	
	439714.00	3765370.00	0.12242
439719.00	3765370.00	0.12244	
	439729.00	3765370.00	0.12247
439734.00	3765370.00	0.12248	
	439739.00	3765370.00	0.12249
439744.00	3765370.00	0.12250	
	439749.00	3765370.00	0.12250
439774.00	3765370.00	0.12251	
	439779.00	3765370.00	0.12251
439784.00	3765370.00	0.12251	
	439789.00	3765370.00	0.12250
439794.00	3765370.00	0.12249	
	439799.00	3765370.00	0.12248
439804.00	3765370.00	0.12247	
	439809.00	3765370.00	0.12245
439814.00	3765370.00	0.12243	
	439839.00	3765370.00	0.12231
439844.00	3765370.00	0.12228	
	439849.00	3765370.00	0.12224
439854.00	3765370.00	0.12220	
	439859.00	3765370.00	0.12216
439864.00	3765370.00	0.12212	
	439869.00	3765370.00	0.12207
439874.00	3765370.00	0.12202	
	439879.00	3765370.00	0.12197
439884.00	3765370.00	0.12191	
	439674.00	3765375.00	0.12409
439679.00	3765375.00	0.12412	
	439684.00	3765375.00	0.12415
439689.00	3765375.00	0.12417	
	439694.00	3765375.00	0.12420
439699.00	3765375.00	0.12423	
	439704.00	3765375.00	0.12425
439709.00	3765375.00	0.12427	
	439714.00	3765375.00	0.12429
439719.00	3765375.00	0.12431	
	439729.00	3765375.00	0.12434
439734.00	3765375.00	0.12436	
	439739.00	3765375.00	0.12437
439744.00	3765375.00	0.12438	
	439749.00	3765375.00	0.12439
439754.00	3765375.00	0.12440	
	439774.00	3765375.00	0.12442
439779.00	3765375.00	0.12442	
	439784.00	3765375.00	0.12441
439789.00	3765375.00	0.12441	
	439794.00	3765375.00	0.12440
439799.00	3765375.00	0.12439	
	439804.00	3765375.00	0.12438
439809.00	3765375.00	0.12437	

	439814.00	3765375.00	0.12435
439839.00	3765375.00	0.12424	
	439844.00	3765375.00	0.12421
439849.00	3765375.00	0.12418	
	439854.00	3765375.00	0.12415
439859.00	3765375.00	0.12411	
	439864.00	3765375.00	0.12407
439869.00	3765375.00	0.12402	
	439874.00	3765375.00	0.12398
439879.00	3765375.00	0.12393	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439884.00	3765375.00	0.12388
439774.00	3765380.00	0.12637
439779.00	3765380.00	0.12637
439784.00	3765380.00	0.12637
439789.00	3765380.00	0.12637
439794.00	3765380.00	0.12637
439799.00	3765380.00	0.12636
439804.00	3765380.00	0.12635
439809.00	3765380.00	0.12634
439814.00	3765380.00	0.12633
439769.00	3765385.00	0.12837
439819.00	3765385.00	0.12835
439769.00	3765400.00	0.13474
439844.00	3765400.00	0.13476
439849.00	3765400.00	0.13475
439674.00	3765405.00	0.13636
439714.00	3765405.00	0.13668
439719.00	3765405.00	0.13672

	439734.00	3765405.00	0.13681
439749.00	3765405.00	0.13689	
	439754.00	3765405.00	0.13692
439774.00	3765405.00	0.13700	
	439779.00	3765405.00	0.13702
439784.00	3765405.00	0.13704	
	439789.00	3765405.00	0.13705
439794.00	3765405.00	0.13706	
	439799.00	3765405.00	0.13707
439804.00	3765405.00	0.13708	
	439809.00	3765405.00	0.13709
439814.00	3765405.00	0.13709	
	439819.00	3765405.00	0.13709
439824.00	3765405.00	0.13709	
	439829.00	3765405.00	0.13709
439834.00	3765405.00	0.13708	
	439839.00	3765405.00	0.13707
439844.00	3765405.00	0.13706	
	439849.00	3765405.00	0.13705
439854.00	3765405.00	0.13703	
	439859.00	3765405.00	0.13701
439674.00	3765410.00	0.13862	
	439679.00	3765410.00	0.13867
439684.00	3765410.00	0.13872	
	439689.00	3765410.00	0.13876
439694.00	3765410.00	0.13880	
	439699.00	3765410.00	0.13885
439704.00	3765410.00	0.13889	
	439709.00	3765410.00	0.13893
439714.00	3765410.00	0.13897	
	439719.00	3765410.00	0.13900
439729.00	3765410.00	0.13907	
	439734.00	3765410.00	0.13911
439739.00	3765410.00	0.13914	
	439744.00	3765410.00	0.13917
439749.00	3765410.00	0.13920	
	439774.00	3765410.00	0.13932
439779.00	3765410.00	0.13934	
	439784.00	3765410.00	0.13936
439789.00	3765410.00	0.13938	
	439794.00	3765410.00	0.13940
439799.00	3765410.00	0.13941	
	439804.00	3765410.00	0.13942
439809.00	3765410.00	0.13943	
	439814.00	3765410.00	0.13944
439819.00	3765410.00	0.13944	
	439824.00	3765410.00	0.13944
439829.00	3765410.00	0.13944	
	439834.00	3765410.00	0.13944
439839.00	3765410.00	0.13944	
	439844.00	3765410.00	0.13943
439849.00	3765410.00	0.13942	

	439854.00	3765410.00	0.13941
439859.00	3765410.00	0.13939	
	439674.00	3765415.00	0.14095
439679.00	3765415.00	0.14100	
	439684.00	3765415.00	0.14105
439689.00	3765415.00	0.14110	
	439694.00	3765415.00	0.14115
439699.00	3765415.00	0.14119	
	439704.00	3765415.00	0.14124
439709.00	3765415.00	0.14128	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439714.00	3765415.00	0.14132
439719.00	3765415.00	0.14136
439729.00	3765415.00	0.14144
439734.00	3765415.00	0.14147
439739.00	3765415.00	0.14151
439744.00	3765415.00	0.14154
439749.00	3765415.00	0.14158
439774.00	3765415.00	0.14172
439779.00	3765415.00	0.14174
439784.00	3765415.00	0.14176
439789.00	3765415.00	0.14178
439794.00	3765415.00	0.14180
439799.00	3765415.00	0.14182
439804.00	3765415.00	0.14183
439809.00	3765415.00	0.14185
439814.00	3765415.00	0.14186
439819.00	3765415.00	0.14186
439824.00	3765415.00	0.14187

	439829.00	3765415.00	0.14188
439834.00	3765415.00	0.14188	
	439839.00	3765415.00	0.14188
439844.00	3765415.00	0.14187	
	439849.00	3765415.00	0.14187
439854.00	3765415.00	0.14186	
	439859.00	3765415.00	0.14185
439674.00	3765420.00	0.14336	
	439679.00	3765420.00	0.14341
439684.00	3765420.00	0.14347	
	439689.00	3765420.00	0.14352
439694.00	3765420.00	0.14357	
	439699.00	3765420.00	0.14361
439704.00	3765420.00	0.14366	
	439709.00	3765420.00	0.14371
439714.00	3765420.00	0.14375	
	439719.00	3765420.00	0.14379
439729.00	3765420.00	0.14388	
	439734.00	3765420.00	0.14392
439739.00	3765420.00	0.14395	
	439744.00	3765420.00	0.14399
439749.00	3765420.00	0.14403	
	439774.00	3765420.00	0.14418
439779.00	3765420.00	0.14421	
	439784.00	3765420.00	0.14423
439789.00	3765420.00	0.14426	
	439794.00	3765420.00	0.14428
439799.00	3765420.00	0.14430	
	439804.00	3765420.00	0.14432
439809.00	3765420.00	0.14434	
	439814.00	3765420.00	0.14435
439819.00	3765420.00	0.14436	
	439824.00	3765420.00	0.14437
439829.00	3765420.00	0.14438	
	439834.00	3765420.00	0.14439
439839.00	3765420.00	0.14439	
	439844.00	3765420.00	0.14439
439849.00	3765420.00	0.14439	
	439854.00	3765420.00	0.14439
439859.00	3765420.00	0.14438	
	439674.00	3765425.00	0.14584
439679.00	3765425.00	0.14590	
	439684.00	3765425.00	0.14596
439689.00	3765425.00	0.14601	
	439694.00	3765425.00	0.14606
439699.00	3765425.00	0.14611	
	439704.00	3765425.00	0.14616
439709.00	3765425.00	0.14621	
	439714.00	3765425.00	0.14626
439719.00	3765425.00	0.14630	
	439729.00	3765425.00	0.14639
439734.00	3765425.00	0.14643	

	439739.00	3765425.00	0.14648
439744.00	3765425.00	0.14652	
	439749.00	3765425.00	0.14656
439774.00	3765425.00	0.14673	
	439779.00	3765425.00	0.14676
439784.00	3765425.00	0.14679	
	439789.00	3765425.00	0.14682
439794.00	3765425.00	0.14684	
	439799.00	3765425.00	0.14686
439804.00	3765425.00	0.14689	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439809.00	3765425.00	0.14691
439814.00	3765425.00	0.14693
439819.00	3765425.00	0.14694
439824.00	3765425.00	0.14696
439829.00	3765425.00	0.14697
439834.00	3765425.00	0.14698
439839.00	3765425.00	0.14699
439844.00	3765425.00	0.14699
439849.00	3765425.00	0.14699
439854.00	3765425.00	0.14699
439859.00	3765425.00	0.14699
439674.00	3765430.00	0.14841
439679.00	3765430.00	0.14847
439684.00	3765430.00	0.14853
439689.00	3765430.00	0.14858
439694.00	3765430.00	0.14864
439699.00	3765430.00	0.14869
439704.00	3765430.00	0.14874

	439709.00	3765430.00	0.14880
439714.00	3765430.00	0.14885	
	439719.00	3765430.00	0.14890
439729.00	3765430.00	0.14899	
	439734.00	3765430.00	0.14904
439739.00	3765430.00	0.14908	
	439744.00	3765430.00	0.14912
439749.00	3765430.00	0.14917	
	439774.00	3765430.00	0.14936
439779.00	3765430.00	0.14939	
	439784.00	3765430.00	0.14942
439789.00	3765430.00	0.14945	
	439794.00	3765430.00	0.14948
439799.00	3765430.00	0.14951	
	439804.00	3765430.00	0.14954
439809.00	3765430.00	0.14956	
	439814.00	3765430.00	0.14958
439819.00	3765430.00	0.14961	
	439824.00	3765430.00	0.14962
439829.00	3765430.00	0.14964	
	439834.00	3765430.00	0.14965
439839.00	3765430.00	0.14967	
	439844.00	3765430.00	0.14967
439849.00	3765430.00	0.14968	
	439854.00	3765430.00	0.14968
439859.00	3765430.00	0.14968	
	439674.00	3765435.00	0.15106
439679.00	3765435.00	0.15112	
	439684.00	3765435.00	0.15118
439689.00	3765435.00	0.15124	
	439694.00	3765435.00	0.15130
439699.00	3765435.00	0.15136	
	439704.00	3765435.00	0.15141
439709.00	3765435.00	0.15147	
	439714.00	3765435.00	0.15152
439719.00	3765435.00	0.15158	
	439729.00	3765435.00	0.15168
439734.00	3765435.00	0.15172	
	439739.00	3765435.00	0.15177
439744.00	3765435.00	0.15182	
	439749.00	3765435.00	0.15186
439774.00	3765435.00	0.15207	
	439779.00	3765435.00	0.15211
439784.00	3765435.00	0.15215	
	439789.00	3765435.00	0.15218
439794.00	3765435.00	0.15221	
	439799.00	3765435.00	0.15225
439804.00	3765435.00	0.15228	
	439809.00	3765435.00	0.15230
439814.00	3765435.00	0.15233	
	439819.00	3765435.00	0.15236
439824.00	3765435.00	0.15238	

	439829.00	3765435.00	0.15240
439834.00	3765435.00	0.15242	
	439839.00	3765435.00	0.15243
439844.00	3765435.00	0.15245	
	439849.00	3765435.00	0.15246
439854.00	3765435.00	0.15247	
	439859.00	3765435.00	0.15247
439674.00	3765440.00	0.15380	
	439679.00	3765440.00	0.15387
439684.00	3765440.00	0.15393	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439689.00	3765440.00	0.15399
439694.00	3765440.00	0.15406
439699.00	3765440.00	0.15412
439704.00	3765440.00	0.15417
439709.00	3765440.00	0.15423
439714.00	3765440.00	0.15429
439719.00	3765440.00	0.15434
439729.00	3765440.00	0.15445
439734.00	3765440.00	0.15450
439739.00	3765440.00	0.15455
439744.00	3765440.00	0.15460
439749.00	3765440.00	0.15465
439774.00	3765440.00	0.15488
439779.00	3765440.00	0.15492
439784.00	3765440.00	0.15496
439789.00	3765440.00	0.15500
439794.00	3765440.00	0.15504
439799.00	3765440.00	0.15507

	439804.00	3765440.00	0.15511
439809.00	3765440.00	0.15514	
	439814.00	3765440.00	0.15517
439819.00	3765440.00	0.15520	
	439824.00	3765440.00	0.15523
439829.00	3765440.00	0.15525	
	439834.00	3765440.00	0.15527
439839.00	3765440.00	0.15529	
	439844.00	3765440.00	0.15531
439849.00	3765440.00	0.15533	
	439854.00	3765440.00	0.15534
439859.00	3765440.00	0.15535	
	439674.00	3765445.00	0.15664
439679.00	3765445.00	0.15671	
	439684.00	3765445.00	0.15677
439689.00	3765445.00	0.15684	
	439694.00	3765445.00	0.15690
439699.00	3765445.00	0.15697	
	439704.00	3765445.00	0.15703
439709.00	3765445.00	0.15709	
	439714.00	3765445.00	0.15715
439719.00	3765445.00	0.15721	
	439729.00	3765445.00	0.15732
439734.00	3765445.00	0.15738	
	439739.00	3765445.00	0.15743
439744.00	3765445.00	0.15749	
	439749.00	3765445.00	0.15754
439774.00	3765445.00	0.15778	
	439779.00	3765445.00	0.15783
439784.00	3765445.00	0.15787	
	439789.00	3765445.00	0.15791
439794.00	3765445.00	0.15795	
	439799.00	3765445.00	0.15800
439804.00	3765445.00	0.15803	
	439809.00	3765445.00	0.15807
439814.00	3765445.00	0.15810	
	439819.00	3765445.00	0.15814
439824.00	3765445.00	0.15817	
	439829.00	3765445.00	0.15820
439834.00	3765445.00	0.15823	
	439839.00	3765445.00	0.15825
439844.00	3765445.00	0.15828	
	439849.00	3765445.00	0.15830
439854.00	3765445.00	0.15831	
	439859.00	3765445.00	0.15833
439674.00	3765450.00	0.15958	
	439679.00	3765450.00	0.15965
439684.00	3765450.00	0.15972	
	439689.00	3765450.00	0.15979
439694.00	3765450.00	0.15985	
	439699.00	3765450.00	0.15992
439704.00	3765450.00	0.15999	

	439709.00	3765450.00	0.16005
439714.00	3765450.00	0.16011	
	439719.00	3765450.00	0.16017
439729.00	3765450.00	0.16030	
	439734.00	3765450.00	0.16035
439739.00	3765450.00	0.16041	
	439744.00	3765450.00	0.16047
439749.00	3765450.00	0.16052	
	439774.00	3765450.00	0.16079
439844.00	3765450.00	0.16134	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439849.00	3765450.00	0.16137
439854.00	3765450.00	0.16139
439859.00	3765450.00	0.16141
439674.00	3765455.00	0.16262
439679.00	3765455.00	0.16269
439684.00	3765455.00	0.16277
439689.00	3765455.00	0.16284
439694.00	3765455.00	0.16291
439699.00	3765455.00	0.16298
439704.00	3765455.00	0.16305
439709.00	3765455.00	0.16311
439714.00	3765455.00	0.16318
439719.00	3765455.00	0.16325
439729.00	3765455.00	0.16337
439734.00	3765455.00	0.16344
439739.00	3765455.00	0.16350
439744.00	3765455.00	0.16356
439749.00	3765455.00	0.16362

	439844.00	3765455.00	0.16452
439849.00	3765455.00	0.16455	
	439854.00	3765455.00	0.16458
439859.00	3765455.00	0.16460	
	439674.00	3765460.00	0.16577
439679.00	3765460.00	0.16585	
	439684.00	3765460.00	0.16593
439689.00	3765460.00	0.16600	
	439694.00	3765460.00	0.16608
439699.00	3765460.00	0.16615	
	439704.00	3765460.00	0.16622
439709.00	3765460.00	0.16629	
	439714.00	3765460.00	0.16636
439719.00	3765460.00	0.16643	
	439729.00	3765460.00	0.16656
439734.00	3765460.00	0.16663	
	439739.00	3765460.00	0.16670
439744.00	3765460.00	0.16676	
	439749.00	3765460.00	0.16682
439789.00	3765460.00	0.16729	
	439794.00	3765460.00	0.16735
439799.00	3765460.00	0.16740	
	439804.00	3765460.00	0.16745
439809.00	3765460.00	0.16750	
	439814.00	3765460.00	0.16755
439819.00	3765460.00	0.16760	
	439824.00	3765460.00	0.16764
439829.00	3765460.00	0.16769	
	439844.00	3765460.00	0.16781
439849.00	3765460.00	0.16785	
	439854.00	3765460.00	0.16788
439859.00	3765460.00	0.16791	
	439674.00	3765465.00	0.16904
439679.00	3765465.00	0.16913	
	439684.00	3765465.00	0.16921
439689.00	3765465.00	0.16928	
	439694.00	3765465.00	0.16936
439699.00	3765465.00	0.16944	
	439704.00	3765465.00	0.16951
439709.00	3765465.00	0.16959	
	439714.00	3765465.00	0.16966
439719.00	3765465.00	0.16973	
	439729.00	3765465.00	0.16988
439734.00	3765465.00	0.16994	
	439739.00	3765465.00	0.17001
439744.00	3765465.00	0.17008	
	439749.00	3765465.00	0.17015
439789.00	3765465.00	0.17065	
	439794.00	3765465.00	0.17071
439799.00	3765465.00	0.17076	
	439804.00	3765465.00	0.17082
439809.00	3765465.00	0.17088	

	439814.00	3765465.00	0.17093
439819.00	3765465.00	0.17098	
	439824.00	3765465.00	0.17104
439829.00	3765465.00	0.17109	
	439844.00	3765465.00	0.17123
439849.00	3765465.00	0.17127	
	439854.00	3765465.00	0.17131
439859.00	3765465.00	0.17134	
	439674.00	3765470.00	0.17244
439679.00	3765470.00	0.17253	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439684.00	3765470.00	0.17261
439689.00	3765470.00	0.17269
439694.00	3765470.00	0.17277
439699.00	3765470.00	0.17285
439704.00	3765470.00	0.17293
439709.00	3765470.00	0.17301
439714.00	3765470.00	0.17309
439719.00	3765470.00	0.17316
439729.00	3765470.00	0.17331
439734.00	3765470.00	0.17338
439739.00	3765470.00	0.17346
439744.00	3765470.00	0.17353
439749.00	3765470.00	0.17360
439789.00	3765470.00	0.17413
439794.00	3765470.00	0.17420
439799.00	3765470.00	0.17426
439804.00	3765470.00	0.17432
439809.00	3765470.00	0.17438

	439814.00	3765470.00	0.17444
439819.00	3765470.00	0.17450	
	439824.00	3765470.00	0.17456
439829.00	3765470.00	0.17461	
	439844.00	3765470.00	0.17477
439849.00	3765470.00	0.17482	
	439854.00	3765470.00	0.17486
439859.00	3765470.00	0.17491	
	439674.00	3765475.00	0.17597
439679.00	3765475.00	0.17606	
	439684.00	3765475.00	0.17615
439689.00	3765475.00	0.17623	
	439694.00	3765475.00	0.17632
439699.00	3765475.00	0.17640	
	439704.00	3765475.00	0.17648
439709.00	3765475.00	0.17656	
	439714.00	3765475.00	0.17665
439719.00	3765475.00	0.17673	
	439729.00	3765475.00	0.17688
439734.00	3765475.00	0.17696	
	439739.00	3765475.00	0.17703
439744.00	3765475.00	0.17711	
	439749.00	3765475.00	0.17718
439754.00	3765475.00	0.17726	
	439789.00	3765475.00	0.17775
439794.00	3765475.00	0.17782	
	439799.00	3765475.00	0.17789
439804.00	3765475.00	0.17795	
	439809.00	3765475.00	0.17802
439814.00	3765475.00	0.17808	
	439819.00	3765475.00	0.17815
439824.00	3765475.00	0.17821	
	439829.00	3765475.00	0.17827
439269.00	3764900.00	0.04606	
	439369.00	3764900.00	0.04642
439469.00	3764900.00	0.04639	
	439569.00	3764900.00	0.04597
439669.00	3764900.00	0.04512	
	439769.00	3764900.00	0.04385
439869.00	3764900.00	0.04214	
	439969.00	3764900.00	0.04002
440069.00	3764900.00	0.03753	
	440169.00	3764900.00	0.03475
440269.00	3764900.00	0.03183	
	439269.00	3765000.00	0.05372
439369.00	3765000.00	0.05436	
	439469.00	3765000.00	0.05456
439569.00	3765000.00	0.05430	
	439669.00	3765000.00	0.05356
439769.00	3765000.00	0.05232	
	439869.00	3765000.00	0.05055
439969.00	3765000.00	0.04821	

	440069.00	3765000.00	0.04534
440169.00	3765000.00	0.04199	
	440269.00	3765000.00	0.03833
439269.00	3765100.00	0.06359	
	439369.00	3765100.00	0.06461
439469.00	3765100.00	0.06510	
	439569.00	3765100.00	0.06509
439669.00	3765100.00	0.06456	
	439769.00	3765100.00	0.06346
439869.00	3765100.00	0.06172	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439969.00	3765100.00	0.05926
440069.00	3765100.00	0.05603
440169.00	3765100.00	0.05206
440269.00	3765100.00	0.04746
439269.00	3765200.00	0.07686
439369.00	3765200.00	0.07837
439469.00	3765200.00	0.07926
439569.00	3765200.00	0.07961
439669.00	3765200.00	0.07941
439769.00	3765200.00	0.07861
439869.00	3765200.00	0.07708
439969.00	3765200.00	0.07466
440069.00	3765200.00	0.07121
440169.00	3765200.00	0.06661
440269.00	3765200.00	0.06089
439269.00	3765300.00	0.09575
439369.00	3765300.00	0.09797
439469.00	3765300.00	0.09947

	439569.00	3765300.00	0.10035
439669.00	3765300.00	0.10068	
	439769.00	3765300.00	0.10042
439869.00	3765300.00	0.09937	
	439969.00	3765300.00	0.09727
440069.00	3765300.00	0.09384	
	440169.00	3765300.00	0.08878
440269.00	3765300.00	0.08184	
	439269.00	3765400.00	0.12516
439369.00	3765400.00	0.12859	
	439469.00	3765400.00	0.13115
439569.00	3765400.00	0.13295	
	439669.00	3765400.00	0.13412
439769.00	3765400.00	0.13474	
	439869.00	3765400.00	0.13465
439969.00	3765400.00	0.13333	
	440069.00	3765400.00	0.13031
440169.00	3765400.00	0.12517	
	440269.00	3765400.00	0.11721
439269.00	3765500.00	0.17876	
	439369.00	3765500.00	0.18478
439469.00	3765500.00	0.18961	
	439569.00	3765500.00	0.19322
439669.00	3765500.00	0.19582	
	439769.00	3765500.00	0.19781
439869.00	3765500.00	0.19964	
	439969.00	3765500.00	0.20029
440069.00	3765500.00	0.19829	
	440169.00	3765500.00	0.19359
440269.00	3765500.00	0.18527	
	439269.00	3765600.00	0.31632
439369.00	3765600.00	0.32940	
	439469.00	3765600.00	0.34044
439569.00	3765600.00	0.34849	
	439669.00	3765600.00	0.35423
439769.00	3765600.00	0.35865	
	439869.00	3765600.00	0.36362
439969.00	3765600.00	0.37453	
	440069.00	3765600.00	0.37423
440169.00	3765600.00	0.36957	
	440269.00	3765600.00	0.36104
439269.00	3765700.00	1.67000	
	439369.00	3765700.00	1.75481
439469.00	3765700.00	1.85402	
	439569.00	3765700.00	1.93748
439669.00	3765700.00	1.99410	
	439769.00	3765700.00	2.03560
439869.00	3765700.00	2.05444	
	439969.00	3765700.00	2.07937
440069.00	3765700.00	2.11887	
	440169.00	3765700.00	2.14786
440269.00	3765700.00	2.18082	

	439269.00	3765800.00	0.55059
439369.00	3765800.00	0.58078	
	439469.00	3765800.00	0.60591
439569.00	3765800.00	0.62930	
	439669.00	3765800.00	0.64728
439769.00	3765800.00	0.66861	
	439869.00	3765800.00	0.69784
439969.00	3765800.00	0.66347	
	440069.00	3765800.00	0.65659
440169.00	3765800.00	0.65426	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
440269.00	3765800.00	0.65258
439269.00	3765900.00	0.20138
439369.00	3765900.00	0.23137
439469.00	3765900.00	0.25454
439569.00	3765900.00	0.27290
439669.00	3765900.00	0.28770
439769.00	3765900.00	0.29954
439869.00	3765900.00	0.30880
439969.00	3765900.00	0.31495
440069.00	3765900.00	0.31797
440169.00	3765900.00	0.31964
440269.00	3765900.00	0.32025
439649.00	3765310.00	0.10330
439679.00	3765310.00	0.10335
439709.00	3765310.00	0.10334
439739.00	3765310.00	0.10327
439769.00	3765310.00	0.10314
439799.00	3765310.00	0.10295

	439829.00	3765310.00	0.10267
439859.00	3765310.00	0.10231	
	439889.00	3765310.00	0.10185
439649.00	3765340.00	0.11199	
	439679.00	3765340.00	0.11211
439709.00	3765340.00	0.11217	
	439739.00	3765340.00	0.11217
439769.00	3765340.00	0.11211	
	439799.00	3765340.00	0.11199
439829.00	3765340.00	0.11179	
	439859.00	3765340.00	0.11150
439889.00	3765340.00	0.11111	
	439649.00	3765370.00	0.12208
439679.00	3765370.00	0.12226	
	439709.00	3765370.00	0.12240
439739.00	3765370.00	0.12249	
	439769.00	3765370.00	0.12252
439799.00	3765370.00	0.12248	
	439829.00	3765370.00	0.12237
439859.00	3765370.00	0.12216	
	439889.00	3765370.00	0.12186
439649.00	3765400.00	0.13393	
	439679.00	3765400.00	0.13420
439709.00	3765400.00	0.13443	
	439739.00	3765400.00	0.13461
439769.00	3765400.00	0.13474	
	439799.00	3765400.00	0.13480
439829.00	3765400.00	0.13480	
	439859.00	3765400.00	0.13471
439889.00	3765400.00	0.13450	
	439649.00	3765430.00	0.14810
439679.00	3765430.00	0.14847	
	439709.00	3765430.00	0.14880
439739.00	3765430.00	0.14908	
	439769.00	3765430.00	0.14932
439799.00	3765430.00	0.14951	
	439829.00	3765430.00	0.14964
439859.00	3765430.00	0.14968	
	439889.00	3765430.00	0.14962
439649.00	3765460.00	0.16536	
	439679.00	3765460.00	0.16585
439709.00	3765460.00	0.16629	
	439739.00	3765460.00	0.16670
439769.00	3765460.00	0.16706	
	439799.00	3765460.00	0.16740
439829.00	3765460.00	0.16769	
	439859.00	3765460.00	0.16791
439889.00	3765460.00	0.16803	
	439649.00	3765490.00	0.18692
439679.00	3765490.00	0.18754	
	439709.00	3765490.00	0.18812
439739.00	3765490.00	0.18865	

	439769.00	3765490.00	0.18917
439799.00	3765490.00	0.18967	
	439829.00	3765490.00	0.19015
439859.00	3765490.00	0.19061	
	439889.00	3765490.00	0.19098

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439674.00	3765310.00	0.10015
439679.00	3765310.00	0.10014
439684.00	3765310.00	0.10013
439689.00	3765310.00	0.10011
439694.00	3765310.00	0.10010
439699.00	3765310.00	0.10008
439704.00	3765310.00	0.10006
439709.00	3765310.00	0.10004
439714.00	3765310.00	0.10002
439719.00	3765310.00	0.09999
439729.00	3765310.00	0.09994
439734.00	3765310.00	0.09991
439739.00	3765310.00	0.09988
439744.00	3765310.00	0.09985
439749.00	3765310.00	0.09982
439764.00	3765310.00	0.09971
439769.00	3765310.00	0.09967
439774.00	3765310.00	0.09962
439779.00	3765310.00	0.09958
439784.00	3765310.00	0.09953

	439789.00	3765310.00	0.09949
439794.00	3765310.00	0.09944	
	439799.00	3765310.00	0.09939
439804.00	3765310.00	0.09933	
	439809.00	3765310.00	0.09928
439814.00	3765310.00	0.09922	
	439819.00	3765310.00	0.09916
439824.00	3765310.00	0.09910	
	439829.00	3765310.00	0.09904
439839.00	3765310.00	0.09891	
	439844.00	3765310.00	0.09884
439849.00	3765310.00	0.09877	
	439854.00	3765310.00	0.09870
439859.00	3765310.00	0.09862	
	439864.00	3765310.00	0.09854
439869.00	3765310.00	0.09847	
	439874.00	3765310.00	0.09838
439879.00	3765310.00	0.09830	
	439884.00	3765310.00	0.09821
439674.00	3765315.00	0.10149	
	439679.00	3765315.00	0.10148
439684.00	3765315.00	0.10147	
	439689.00	3765315.00	0.10145
439694.00	3765315.00	0.10144	
	439699.00	3765315.00	0.10142
439704.00	3765315.00	0.10141	
	439709.00	3765315.00	0.10139
439714.00	3765315.00	0.10137	
	439719.00	3765315.00	0.10134
439729.00	3765315.00	0.10129	
	439734.00	3765315.00	0.10127
439739.00	3765315.00	0.10124	
	439744.00	3765315.00	0.10121
439749.00	3765315.00	0.10117	
	439764.00	3765315.00	0.10107
439769.00	3765315.00	0.10103	
	439774.00	3765315.00	0.10099
439779.00	3765315.00	0.10095	
	439784.00	3765315.00	0.10090
439789.00	3765315.00	0.10085	
	439794.00	3765315.00	0.10081
439799.00	3765315.00	0.10076	
	439804.00	3765315.00	0.10070
439809.00	3765315.00	0.10065	
	439814.00	3765315.00	0.10060
439819.00	3765315.00	0.10054	
	439824.00	3765315.00	0.10048
439829.00	3765315.00	0.10042	
	439839.00	3765315.00	0.10029
439844.00	3765315.00	0.10022	
	439849.00	3765315.00	0.10015
439854.00	3765315.00	0.10008	

	439859.00	3765315.00	0.10001
439864.00	3765315.00	0.09993	
	439869.00	3765315.00	0.09985
439874.00	3765315.00	0.09977	
	439879.00	3765315.00	0.09969
439884.00	3765315.00	0.09961	
	439674.00	3765320.00	0.10286
439679.00	3765320.00	0.10285	

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 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439684.00	3765320.00	0.10284
439689.00	3765320.00	0.10283
439694.00	3765320.00	0.10281
439699.00	3765320.00	0.10280
439704.00	3765320.00	0.10278
439709.00	3765320.00	0.10276
439714.00	3765320.00	0.10275
439719.00	3765320.00	0.10272
439729.00	3765320.00	0.10268
439734.00	3765320.00	0.10265
439739.00	3765320.00	0.10262
439744.00	3765320.00	0.10260
439749.00	3765320.00	0.10256
439764.00	3765320.00	0.10246
439769.00	3765320.00	0.10242
439774.00	3765320.00	0.10238
439779.00	3765320.00	0.10234
439784.00	3765320.00	0.10230
439789.00	3765320.00	0.10225
439794.00	3765320.00	0.10221

	439799.00	3765320.00	0.10216
439804.00	3765320.00	0.10211	
	439809.00	3765320.00	0.10206
439814.00	3765320.00	0.10200	
	439819.00	3765320.00	0.10194
439824.00	3765320.00	0.10189	
	439829.00	3765320.00	0.10183
439839.00	3765320.00	0.10170	
	439844.00	3765320.00	0.10163
439849.00	3765320.00	0.10157	
	439854.00	3765320.00	0.10150
439859.00	3765320.00	0.10142	
	439864.00	3765320.00	0.10135
439869.00	3765320.00	0.10127	
	439874.00	3765320.00	0.10119
439879.00	3765320.00	0.10111	
	439884.00	3765320.00	0.10103
439674.00	3765325.00	0.10426	
	439679.00	3765325.00	0.10425
439684.00	3765325.00	0.10424	
	439689.00	3765325.00	0.10423
439694.00	3765325.00	0.10422	
	439699.00	3765325.00	0.10421
439704.00	3765325.00	0.10419	
	439709.00	3765325.00	0.10418
439714.00	3765325.00	0.10416	
	439719.00	3765325.00	0.10414
439729.00	3765325.00	0.10409	
	439734.00	3765325.00	0.10407
439739.00	3765325.00	0.10404	
	439744.00	3765325.00	0.10402
439749.00	3765325.00	0.10399	
	439754.00	3765325.00	0.10396
439769.00	3765325.00	0.10385	
	439774.00	3765325.00	0.10381
439779.00	3765325.00	0.10377	
	439784.00	3765325.00	0.10373
439789.00	3765325.00	0.10369	
	439794.00	3765325.00	0.10364
439799.00	3765325.00	0.10359	
	439804.00	3765325.00	0.10355
439809.00	3765325.00	0.10349	
	439814.00	3765325.00	0.10344
439819.00	3765325.00	0.10339	
	439824.00	3765325.00	0.10333
439829.00	3765325.00	0.10327	
	439839.00	3765325.00	0.10315
439844.00	3765325.00	0.10308	
	439849.00	3765325.00	0.10301
439854.00	3765325.00	0.10294	
	439859.00	3765325.00	0.10287
439864.00	3765325.00	0.10280	

	439869.00	3765325.00	0.10272
439874.00	3765325.00	0.10265	
	439879.00	3765325.00	0.10257
439884.00	3765325.00	0.10248	
	439674.00	3765330.00	0.10569
439679.00	3765330.00	0.10569	
	439684.00	3765330.00	0.10568
439689.00	3765330.00	0.10567	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439694.00	3765330.00	0.10566
439699.00	3765330.00	0.10565
439704.00	3765330.00	0.10564
439709.00	3765330.00	0.10562
439714.00	3765330.00	0.10560
439719.00	3765330.00	0.10559
439729.00	3765330.00	0.10555
439734.00	3765330.00	0.10552
439739.00	3765330.00	0.10550
439744.00	3765330.00	0.10547
439749.00	3765330.00	0.10544
439754.00	3765330.00	0.10541
439774.00	3765330.00	0.10528
439779.00	3765330.00	0.10524
439784.00	3765330.00	0.10520
439789.00	3765330.00	0.10516
439794.00	3765330.00	0.10511
439799.00	3765330.00	0.10506
439804.00	3765330.00	0.10502
439809.00	3765330.00	0.10497

	439814.00	3765330.00	0.10492
439819.00	3765330.00	0.10486	
	439824.00	3765330.00	0.10481
439829.00	3765330.00	0.10475	
	439839.00	3765330.00	0.10463
439844.00	3765330.00	0.10456	
	439849.00	3765330.00	0.10450
439854.00	3765330.00	0.10443	
	439859.00	3765330.00	0.10436
439864.00	3765330.00	0.10429	
	439869.00	3765330.00	0.10421
439874.00	3765330.00	0.10414	
	439879.00	3765330.00	0.10406
439884.00	3765330.00	0.10398	
	439674.00	3765335.00	0.10716
439679.00	3765335.00	0.10716	
	439684.00	3765335.00	0.10715
439689.00	3765335.00	0.10714	
	439694.00	3765335.00	0.10714
439699.00	3765335.00	0.10713	
	439704.00	3765335.00	0.10712
439709.00	3765335.00	0.10710	
	439714.00	3765335.00	0.10709
439719.00	3765335.00	0.10707	
	439729.00	3765335.00	0.10703
439734.00	3765335.00	0.10701	
	439739.00	3765335.00	0.10699
439744.00	3765335.00	0.10696	
	439749.00	3765335.00	0.10694
439774.00	3765335.00	0.10678	
	439779.00	3765335.00	0.10674
439784.00	3765335.00	0.10670	
	439789.00	3765335.00	0.10666
439794.00	3765335.00	0.10662	
	439839.00	3765335.00	0.10614
439844.00	3765335.00	0.10608	
	439849.00	3765335.00	0.10602
439854.00	3765335.00	0.10595	
	439859.00	3765335.00	0.10588
439864.00	3765335.00	0.10581	
	439869.00	3765335.00	0.10574
439874.00	3765335.00	0.10566	
	439879.00	3765335.00	0.10558
439884.00	3765335.00	0.10550	
	439674.00	3765340.00	0.10867
439679.00	3765340.00	0.10866	
	439684.00	3765340.00	0.10866
439689.00	3765340.00	0.10866	
	439694.00	3765340.00	0.10865
439699.00	3765340.00	0.10864	
	439704.00	3765340.00	0.10863
439709.00	3765340.00	0.10862	

	439714.00	3765340.00	0.10861
439719.00	3765340.00	0.10859	
	439729.00	3765340.00	0.10856
439734.00	3765340.00	0.10854	
	439739.00	3765340.00	0.10851
439744.00	3765340.00	0.10849	
	439749.00	3765340.00	0.10847
439774.00	3765340.00	0.10831	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439779.00	3765340.00	0.10828
439784.00	3765340.00	0.10824
439789.00	3765340.00	0.10820
439794.00	3765340.00	0.10816
439839.00	3765340.00	0.10770
439844.00	3765340.00	0.10764
439849.00	3765340.00	0.10757
439854.00	3765340.00	0.10751
439859.00	3765340.00	0.10744
439864.00	3765340.00	0.10737
439869.00	3765340.00	0.10730
439874.00	3765340.00	0.10723
439879.00	3765340.00	0.10715
439884.00	3765340.00	0.10707
439674.00	3765345.00	0.11021
439679.00	3765345.00	0.11021
439684.00	3765345.00	0.11021
439689.00	3765345.00	0.11021
439694.00	3765345.00	0.11020
439699.00	3765345.00	0.11019

	439704.00	3765345.00	0.11018
439709.00	3765345.00	0.11017	
	439714.00	3765345.00	0.11016
439719.00	3765345.00	0.11015	
	439729.00	3765345.00	0.11012
439734.00	3765345.00	0.11010	
	439739.00	3765345.00	0.11008
439744.00	3765345.00	0.11006	
	439749.00	3765345.00	0.11003
439774.00	3765345.00	0.10989	
	439779.00	3765345.00	0.10985
439784.00	3765345.00	0.10982	
	439789.00	3765345.00	0.10978
439794.00	3765345.00	0.10974	
	439839.00	3765345.00	0.10929
439844.00	3765345.00	0.10923	
	439849.00	3765345.00	0.10917
439854.00	3765345.00	0.10911	
	439859.00	3765345.00	0.10904
439864.00	3765345.00	0.10897	
	439869.00	3765345.00	0.10890
439874.00	3765345.00	0.10883	
	439879.00	3765345.00	0.10875
439884.00	3765345.00	0.10868	
	439674.00	3765350.00	0.11180
439679.00	3765350.00	0.11180	
	439684.00	3765350.00	0.11180
439689.00	3765350.00	0.11179	
	439694.00	3765350.00	0.11179
439699.00	3765350.00	0.11178	
	439704.00	3765350.00	0.11178
439709.00	3765350.00	0.11177	
	439714.00	3765350.00	0.11176
439719.00	3765350.00	0.11175	
	439729.00	3765350.00	0.11172
439734.00	3765350.00	0.11170	
	439739.00	3765350.00	0.11168
439744.00	3765350.00	0.11166	
	439749.00	3765350.00	0.11164
439774.00	3765350.00	0.11150	
	439779.00	3765350.00	0.11147
439784.00	3765350.00	0.11144	
	439789.00	3765350.00	0.11140
439794.00	3765350.00	0.11136	
	439839.00	3765350.00	0.11093
439844.00	3765350.00	0.11087	
	439849.00	3765350.00	0.11081
439854.00	3765350.00	0.11075	
	439859.00	3765350.00	0.11068
439864.00	3765350.00	0.11061	
	439869.00	3765350.00	0.11054
439874.00	3765350.00	0.11047	

	439879.00	3765350.00	0.11040
439884.00	3765350.00	0.11032	
	439674.00	3765355.00	0.11342
439679.00	3765355.00	0.11342	
	439684.00	3765355.00	0.11342
439689.00	3765355.00	0.11342	
	439694.00	3765355.00	0.11342
439699.00	3765355.00	0.11342	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439704.00	3765355.00	0.11341
439709.00	3765355.00	0.11341
439714.00	3765355.00	0.11340
439719.00	3765355.00	0.11339
439729.00	3765355.00	0.11336
439734.00	3765355.00	0.11335
439739.00	3765355.00	0.11333
439744.00	3765355.00	0.11331
439749.00	3765355.00	0.11329
439774.00	3765355.00	0.11316
439779.00	3765355.00	0.11313
439784.00	3765355.00	0.11310
439789.00	3765355.00	0.11306
439794.00	3765355.00	0.11303
439839.00	3765355.00	0.11260
439844.00	3765355.00	0.11255
439849.00	3765355.00	0.11249
439854.00	3765355.00	0.11243
439859.00	3765355.00	0.11236
439864.00	3765355.00	0.11230

	439869.00	3765355.00	0.11223
439874.00	3765355.00	0.11216	
	439879.00	3765355.00	0.11209
439884.00	3765355.00	0.11201	
	439674.00	3765360.00	0.11509
439679.00	3765360.00	0.11509	
	439684.00	3765360.00	0.11509
439689.00	3765360.00	0.11510	
	439694.00	3765360.00	0.11510
439699.00	3765360.00	0.11509	
	439704.00	3765360.00	0.11509
439709.00	3765360.00	0.11509	
	439714.00	3765360.00	0.11508
439719.00	3765360.00	0.11507	
	439729.00	3765360.00	0.11505
439734.00	3765360.00	0.11504	
	439739.00	3765360.00	0.11502
439744.00	3765360.00	0.11500	
	439749.00	3765360.00	0.11498
439774.00	3765360.00	0.11486	
	439779.00	3765360.00	0.11483
439784.00	3765360.00	0.11480	
	439789.00	3765360.00	0.11477
439794.00	3765360.00	0.11473	
	439799.00	3765360.00	0.11470
439804.00	3765360.00	0.11466	
	439809.00	3765360.00	0.11462
439814.00	3765360.00	0.11457	
	439839.00	3765360.00	0.11433
439844.00	3765360.00	0.11427	
	439849.00	3765360.00	0.11421
439854.00	3765360.00	0.11415	
	439859.00	3765360.00	0.11409
439864.00	3765360.00	0.11403	
	439869.00	3765360.00	0.11396
439874.00	3765360.00	0.11389	
	439879.00	3765360.00	0.11382
439884.00	3765360.00	0.11375	
	439674.00	3765365.00	0.11680
439679.00	3765365.00	0.11680	
	439684.00	3765365.00	0.11681
439689.00	3765365.00	0.11681	
	439694.00	3765365.00	0.11681
439699.00	3765365.00	0.11681	
	439704.00	3765365.00	0.11681
439709.00	3765365.00	0.11681	
	439714.00	3765365.00	0.11680
439719.00	3765365.00	0.11680	
	439729.00	3765365.00	0.11678
439734.00	3765365.00	0.11677	
	439739.00	3765365.00	0.11675
439744.00	3765365.00	0.11674	

	439749.00	3765365.00	0.11672
439774.00	3765365.00	0.11661	
	439779.00	3765365.00	0.11658
439784.00	3765365.00	0.11655	
	439789.00	3765365.00	0.11652
439794.00	3765365.00	0.11649	
	439799.00	3765365.00	0.11645
439804.00	3765365.00	0.11641	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439809.00	3765365.00	0.11637
439814.00	3765365.00	0.11633
439839.00	3765365.00	0.11609
439844.00	3765365.00	0.11604
439849.00	3765365.00	0.11598
439854.00	3765365.00	0.11592
439859.00	3765365.00	0.11586
439864.00	3765365.00	0.11580
439869.00	3765365.00	0.11574
439874.00	3765365.00	0.11567
439879.00	3765365.00	0.11560
439884.00	3765365.00	0.11553
439674.00	3765370.00	0.11856
439679.00	3765370.00	0.11856
439684.00	3765370.00	0.11857
439689.00	3765370.00	0.11858
439694.00	3765370.00	0.11858
439699.00	3765370.00	0.11858
439704.00	3765370.00	0.11858
439709.00	3765370.00	0.11858

	439714.00	3765370.00	0.11858
439719.00	3765370.00	0.11857	
	439729.00	3765370.00	0.11856
439734.00	3765370.00	0.11855	
	439739.00	3765370.00	0.11854
439744.00	3765370.00	0.11852	
	439749.00	3765370.00	0.11851
439774.00	3765370.00	0.11840	
	439779.00	3765370.00	0.11838
439784.00	3765370.00	0.11835	
	439789.00	3765370.00	0.11832
439794.00	3765370.00	0.11829	
	439799.00	3765370.00	0.11825
439804.00	3765370.00	0.11822	
	439809.00	3765370.00	0.11818
439814.00	3765370.00	0.11814	
	439839.00	3765370.00	0.11791
439844.00	3765370.00	0.11786	
	439849.00	3765370.00	0.11780
439854.00	3765370.00	0.11774	
	439859.00	3765370.00	0.11769
439864.00	3765370.00	0.11762	
	439869.00	3765370.00	0.11756
439874.00	3765370.00	0.11750	
	439879.00	3765370.00	0.11743
439884.00	3765370.00	0.11736	
	439674.00	3765375.00	0.12036
439679.00	3765375.00	0.12037	
	439684.00	3765375.00	0.12038
439689.00	3765375.00	0.12039	
	439694.00	3765375.00	0.12039
439699.00	3765375.00	0.12040	
	439704.00	3765375.00	0.12040
439709.00	3765375.00	0.12040	
	439714.00	3765375.00	0.12040
439719.00	3765375.00	0.12040	
	439729.00	3765375.00	0.12038
439734.00	3765375.00	0.12038	
	439739.00	3765375.00	0.12037
439744.00	3765375.00	0.12035	
	439749.00	3765375.00	0.12034
439754.00	3765375.00	0.12033	
	439774.00	3765375.00	0.12025
439779.00	3765375.00	0.12022	
	439784.00	3765375.00	0.12019
439789.00	3765375.00	0.12017	
	439794.00	3765375.00	0.12014
439799.00	3765375.00	0.12010	
	439804.00	3765375.00	0.12007
439809.00	3765375.00	0.12003	
	439814.00	3765375.00	0.11999
439839.00	3765375.00	0.11977	

	439844.00	3765375.00	0.11972
439849.00	3765375.00	0.11967	
	439854.00	3765375.00	0.11961
439859.00	3765375.00	0.11956	
	439864.00	3765375.00	0.11950
439869.00	3765375.00	0.11943	
	439874.00	3765375.00	0.11937
439879.00	3765375.00	0.11930	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439884.00	3765375.00	0.11924
439774.00	3765380.00	0.12214
439779.00	3765380.00	0.12212
439784.00	3765380.00	0.12209
439789.00	3765380.00	0.12207
439794.00	3765380.00	0.12204
439799.00	3765380.00	0.12201
439804.00	3765380.00	0.12197
439809.00	3765380.00	0.12194
439814.00	3765380.00	0.12190
439769.00	3765385.00	0.12411
439819.00	3765385.00	0.12383
439769.00	3765400.00	0.13029
439844.00	3765400.00	0.12988
439849.00	3765400.00	0.12984
439674.00	3765405.00	0.13234
439714.00	3765405.00	0.13247
439719.00	3765405.00	0.13248
439734.00	3765405.00	0.13250
439749.00	3765405.00	0.13250

	439754.00	3765405.00	0.13250
439774.00	3765405.00	0.13246	
	439779.00	3765405.00	0.13245
439784.00	3765405.00	0.13244	
	439789.00	3765405.00	0.13242
439794.00	3765405.00	0.13240	
	439799.00	3765405.00	0.13238
439804.00	3765405.00	0.13235	
	439809.00	3765405.00	0.13233
439814.00	3765405.00	0.13230	
	439819.00	3765405.00	0.13227
439824.00	3765405.00	0.13224	
	439829.00	3765405.00	0.13221
439834.00	3765405.00	0.13217	
	439839.00	3765405.00	0.13213
439844.00	3765405.00	0.13209	
	439849.00	3765405.00	0.13205
439854.00	3765405.00	0.13201	
	439859.00	3765405.00	0.13196
439674.00	3765410.00	0.13454	
	439679.00	3765410.00	0.13457
439684.00	3765410.00	0.13460	
	439689.00	3765410.00	0.13462
439694.00	3765410.00	0.13464	
	439699.00	3765410.00	0.13466
439704.00	3765410.00	0.13467	
	439709.00	3765410.00	0.13469
439714.00	3765410.00	0.13470	
	439719.00	3765410.00	0.13471
439729.00	3765410.00	0.13473	
	439734.00	3765410.00	0.13474
439739.00	3765410.00	0.13474	
	439744.00	3765410.00	0.13474
439749.00	3765410.00	0.13474	
	439774.00	3765410.00	0.13472
439779.00	3765410.00	0.13471	
	439784.00	3765410.00	0.13469
439789.00	3765410.00	0.13468	
	439794.00	3765410.00	0.13466
439799.00	3765410.00	0.13464	
	439804.00	3765410.00	0.13462
439809.00	3765410.00	0.13460	
	439814.00	3765410.00	0.13457
439819.00	3765410.00	0.13455	
	439824.00	3765410.00	0.13452
439829.00	3765410.00	0.13448	
	439834.00	3765410.00	0.13445
439839.00	3765410.00	0.13442	
	439844.00	3765410.00	0.13438
439849.00	3765410.00	0.13434	
	439854.00	3765410.00	0.13429
439859.00	3765410.00	0.13425	

	439674.00	3765415.00	0.13682
439679.00	3765415.00	0.13685	
	439684.00	3765415.00	0.13688
439689.00	3765415.00	0.13690	
	439694.00	3765415.00	0.13693
439699.00	3765415.00	0.13695	
	439704.00	3765415.00	0.13697
439709.00	3765415.00	0.13698	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439714.00	3765415.00	0.13700
439719.00	3765415.00	0.13701
439729.00	3765415.00	0.13704
439734.00	3765415.00	0.13704
439739.00	3765415.00	0.13705
439744.00	3765415.00	0.13705
439749.00	3765415.00	0.13706
439774.00	3765415.00	0.13704
439779.00	3765415.00	0.13703
439784.00	3765415.00	0.13702
439789.00	3765415.00	0.13701
439794.00	3765415.00	0.13700
439799.00	3765415.00	0.13698
439804.00	3765415.00	0.13696
439809.00	3765415.00	0.13694
439814.00	3765415.00	0.13691
439819.00	3765415.00	0.13689
439824.00	3765415.00	0.13686
439829.00	3765415.00	0.13683
439834.00	3765415.00	0.13680

	439839.00	3765415.00	0.13677
439844.00	3765415.00	0.13673	
	439849.00	3765415.00	0.13669
439854.00	3765415.00	0.13665	
	439859.00	3765415.00	0.13661
439674.00	3765420.00	0.13917	
	439679.00	3765420.00	0.13921
439684.00	3765420.00	0.13923	
	439689.00	3765420.00	0.13926
439694.00	3765420.00	0.13929	
	439699.00	3765420.00	0.13931
439704.00	3765420.00	0.13933	
	439709.00	3765420.00	0.13935
439714.00	3765420.00	0.13937	
	439719.00	3765420.00	0.13939
439729.00	3765420.00	0.13941	
	439734.00	3765420.00	0.13942
439739.00	3765420.00	0.13943	
	439744.00	3765420.00	0.13944
439749.00	3765420.00	0.13944	
	439774.00	3765420.00	0.13944
439779.00	3765420.00	0.13943	
	439784.00	3765420.00	0.13942
439789.00	3765420.00	0.13941	
	439794.00	3765420.00	0.13940
439799.00	3765420.00	0.13939	
	439804.00	3765420.00	0.13937
439809.00	3765420.00	0.13935	
	439814.00	3765420.00	0.13933
439819.00	3765420.00	0.13931	
	439824.00	3765420.00	0.13928
439829.00	3765420.00	0.13925	
	439834.00	3765420.00	0.13923
439839.00	3765420.00	0.13919	
	439844.00	3765420.00	0.13916
439849.00	3765420.00	0.13912	
	439854.00	3765420.00	0.13908
439859.00	3765420.00	0.13904	
	439674.00	3765425.00	0.14160
439679.00	3765425.00	0.14163	
	439684.00	3765425.00	0.14167
439689.00	3765425.00	0.14170	
	439694.00	3765425.00	0.14172
439699.00	3765425.00	0.14175	
	439704.00	3765425.00	0.14177
439709.00	3765425.00	0.14180	
	439714.00	3765425.00	0.14182
439719.00	3765425.00	0.14184	
	439729.00	3765425.00	0.14187
439734.00	3765425.00	0.14188	
	439739.00	3765425.00	0.14189
439744.00	3765425.00	0.14190	

	439749.00	3765425.00	0.14191
439774.00	3765425.00	0.14192	
	439779.00	3765425.00	0.14191
439784.00	3765425.00	0.14191	
	439789.00	3765425.00	0.14190
439794.00	3765425.00	0.14189	
	439799.00	3765425.00	0.14187
439804.00	3765425.00	0.14186	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439809.00	3765425.00	0.14184
439814.00	3765425.00	0.14182
439819.00	3765425.00	0.14180
439824.00	3765425.00	0.14178
439829.00	3765425.00	0.14175
439834.00	3765425.00	0.14173
439839.00	3765425.00	0.14170
439844.00	3765425.00	0.14167
439849.00	3765425.00	0.14163
439854.00	3765425.00	0.14159
439859.00	3765425.00	0.14156
439674.00	3765430.00	0.14411
439679.00	3765430.00	0.14414
439684.00	3765430.00	0.14418
439689.00	3765430.00	0.14421
439694.00	3765430.00	0.14424
439699.00	3765430.00	0.14427
439704.00	3765430.00	0.14430
439709.00	3765430.00	0.14432
439714.00	3765430.00	0.14434

	439719.00	3765430.00	0.14437
439729.00	3765430.00	0.14440	
	439734.00	3765430.00	0.14442
439739.00	3765430.00	0.14443	
	439744.00	3765430.00	0.14444
439749.00	3765430.00	0.14445	
	439774.00	3765430.00	0.14447
439779.00	3765430.00	0.14447	
	439784.00	3765430.00	0.14447
439789.00	3765430.00	0.14446	
	439794.00	3765430.00	0.14445
439799.00	3765430.00	0.14444	
	439804.00	3765430.00	0.14443
439809.00	3765430.00	0.14442	
	439814.00	3765430.00	0.14440
439819.00	3765430.00	0.14438	
	439824.00	3765430.00	0.14436
439829.00	3765430.00	0.14434	
	439834.00	3765430.00	0.14431
439839.00	3765430.00	0.14428	
	439844.00	3765430.00	0.14425
439849.00	3765430.00	0.14422	
	439854.00	3765430.00	0.14419
439859.00	3765430.00	0.14415	
	439674.00	3765435.00	0.14670
439679.00	3765435.00	0.14674	
	439684.00	3765435.00	0.14677
439689.00	3765435.00	0.14681	
	439694.00	3765435.00	0.14684
439699.00	3765435.00	0.14687	
	439704.00	3765435.00	0.14690
439709.00	3765435.00	0.14693	
	439714.00	3765435.00	0.14696
439719.00	3765435.00	0.14698	
	439729.00	3765435.00	0.14702
439734.00	3765435.00	0.14704	
	439739.00	3765435.00	0.14706
439744.00	3765435.00	0.14707	
	439749.00	3765435.00	0.14708
439774.00	3765435.00	0.14712	
	439779.00	3765435.00	0.14712
439784.00	3765435.00	0.14711	
	439789.00	3765435.00	0.14711
439794.00	3765435.00	0.14710	
	439799.00	3765435.00	0.14710
439804.00	3765435.00	0.14709	
	439809.00	3765435.00	0.14707
439814.00	3765435.00	0.14706	
	439819.00	3765435.00	0.14704
439824.00	3765435.00	0.14703	
	439829.00	3765435.00	0.14700
439834.00	3765435.00	0.14698	

	439839.00	3765435.00	0.14696
439844.00	3765435.00	0.14693	
	439849.00	3765435.00	0.14690
439854.00	3765435.00	0.14687	
	439859.00	3765435.00	0.14683
439674.00	3765440.00	0.14938	
	439679.00	3765440.00	0.14942
439684.00	3765440.00	0.14946	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439689.00	3765440.00	0.14950
439694.00	3765440.00	0.14953
439699.00	3765440.00	0.14957
439704.00	3765440.00	0.14960
439709.00	3765440.00	0.14963
439714.00	3765440.00	0.14966
439719.00	3765440.00	0.14968
439729.00	3765440.00	0.14973
439734.00	3765440.00	0.14975
439739.00	3765440.00	0.14977
439744.00	3765440.00	0.14979
439749.00	3765440.00	0.14980
439774.00	3765440.00	0.14985
439779.00	3765440.00	0.14985
439784.00	3765440.00	0.14985
439789.00	3765440.00	0.14985
439794.00	3765440.00	0.14985
439799.00	3765440.00	0.14984
439804.00	3765440.00	0.14983
439809.00	3765440.00	0.14982

	439814.00	3765440.00	0.14981
439819.00	3765440.00	0.14980	
	439824.00	3765440.00	0.14978
439829.00	3765440.00	0.14976	
	439834.00	3765440.00	0.14974
439839.00	3765440.00	0.14972	
	439844.00	3765440.00	0.14970
439849.00	3765440.00	0.14967	
	439854.00	3765440.00	0.14964
439859.00	3765440.00	0.14961	
	439674.00	3765445.00	0.15215
439679.00	3765445.00	0.15219	
	439684.00	3765445.00	0.15224
439689.00	3765445.00	0.15228	
	439694.00	3765445.00	0.15232
439699.00	3765445.00	0.15235	
	439704.00	3765445.00	0.15239
439709.00	3765445.00	0.15242	
	439714.00	3765445.00	0.15245
439719.00	3765445.00	0.15248	
	439729.00	3765445.00	0.15254
439734.00	3765445.00	0.15256	
	439739.00	3765445.00	0.15258
439744.00	3765445.00	0.15260	
	439749.00	3765445.00	0.15262
439774.00	3765445.00	0.15268	
	439779.00	3765445.00	0.15268
439784.00	3765445.00	0.15268	
	439789.00	3765445.00	0.15269
439794.00	3765445.00	0.15268	
	439799.00	3765445.00	0.15268
439804.00	3765445.00	0.15268	
	439809.00	3765445.00	0.15267
439814.00	3765445.00	0.15266	
	439819.00	3765445.00	0.15265
439824.00	3765445.00	0.15263	
	439829.00	3765445.00	0.15262
439834.00	3765445.00	0.15260	
	439839.00	3765445.00	0.15258
439844.00	3765445.00	0.15256	
	439849.00	3765445.00	0.15253
439854.00	3765445.00	0.15250	
	439859.00	3765445.00	0.15247
439674.00	3765450.00	0.15502	
	439679.00	3765450.00	0.15507
439684.00	3765450.00	0.15511	
	439689.00	3765450.00	0.15516
439694.00	3765450.00	0.15520	
	439699.00	3765450.00	0.15524
439704.00	3765450.00	0.15528	
	439709.00	3765450.00	0.15531
439714.00	3765450.00	0.15535	

	439719.00	3765450.00	0.15538
439729.00	3765450.00	0.15544	
	439734.00	3765450.00	0.15546
439739.00	3765450.00	0.15549	
	439744.00	3765450.00	0.15551
439749.00	3765450.00	0.15553	
	439774.00	3765450.00	0.15560
439844.00	3765450.00	0.15552	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439849.00	3765450.00	0.15550
439854.00	3765450.00	0.15547
439859.00	3765450.00	0.15544
439674.00	3765455.00	0.15799
439679.00	3765455.00	0.15805
439684.00	3765455.00	0.15809
439689.00	3765455.00	0.15814
439694.00	3765455.00	0.15819
439699.00	3765455.00	0.15823
439704.00	3765455.00	0.15827
439709.00	3765455.00	0.15831
439714.00	3765455.00	0.15835
439719.00	3765455.00	0.15838
439729.00	3765455.00	0.15845
439734.00	3765455.00	0.15847
439739.00	3765455.00	0.15850
439744.00	3765455.00	0.15853
439749.00	3765455.00	0.15855
439844.00	3765455.00	0.15859
439849.00	3765455.00	0.15857

	439854.00	3765455.00	0.15855
439859.00	3765455.00	0.15852	
	439674.00	3765460.00	0.16108
439679.00	3765460.00	0.16113	
	439684.00	3765460.00	0.16118
439689.00	3765460.00	0.16123	
	439694.00	3765460.00	0.16128
439699.00	3765460.00	0.16133	
	439704.00	3765460.00	0.16137
439709.00	3765460.00	0.16141	
	439714.00	3765460.00	0.16145
439719.00	3765460.00	0.16149	
	439729.00	3765460.00	0.16156
439734.00	3765460.00	0.16160	
	439739.00	3765460.00	0.16163
439744.00	3765460.00	0.16165	
	439749.00	3765460.00	0.16168
439789.00	3765460.00	0.16181	
	439794.00	3765460.00	0.16182
439799.00	3765460.00	0.16183	
	439804.00	3765460.00	0.16183
439809.00	3765460.00	0.16183	
	439814.00	3765460.00	0.16183
439819.00	3765460.00	0.16182	
	439824.00	3765460.00	0.16182
439829.00	3765460.00	0.16181	
	439844.00	3765460.00	0.16177
439849.00	3765460.00	0.16175	
	439854.00	3765460.00	0.16173
439859.00	3765460.00	0.16171	
	439674.00	3765465.00	0.16428
439679.00	3765465.00	0.16434	
	439684.00	3765465.00	0.16439
439689.00	3765465.00	0.16444	
	439694.00	3765465.00	0.16450
439699.00	3765465.00	0.16454	
	439704.00	3765465.00	0.16459
439709.00	3765465.00	0.16464	
	439714.00	3765465.00	0.16468
439719.00	3765465.00	0.16472	
	439729.00	3765465.00	0.16480
439734.00	3765465.00	0.16483	
	439739.00	3765465.00	0.16487
439744.00	3765465.00	0.16490	
	439749.00	3765465.00	0.16493
439789.00	3765465.00	0.16508	
	439794.00	3765465.00	0.16509
439799.00	3765465.00	0.16510	
	439804.00	3765465.00	0.16511
439809.00	3765465.00	0.16511	
	439814.00	3765465.00	0.16511
439819.00	3765465.00	0.16511	

	439824.00	3765465.00	0.16511
439829.00	3765465.00	0.16510	
	439844.00	3765465.00	0.16507
439849.00	3765465.00	0.16505	
	439854.00	3765465.00	0.16504
439859.00	3765465.00	0.16502	
	439674.00	3765470.00	0.16760
439679.00	3765470.00	0.16766	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439684.00	3765470.00	0.16772
439689.00	3765470.00	0.16778
439694.00	3765470.00	0.16783
439699.00	3765470.00	0.16788
439704.00	3765470.00	0.16793
439709.00	3765470.00	0.16798
439714.00	3765470.00	0.16803
439719.00	3765470.00	0.16808
439729.00	3765470.00	0.16816
439734.00	3765470.00	0.16820
439739.00	3765470.00	0.16823
439744.00	3765470.00	0.16827
439749.00	3765470.00	0.16830
439789.00	3765470.00	0.16848
439794.00	3765470.00	0.16849
439799.00	3765470.00	0.16850
439804.00	3765470.00	0.16851
439809.00	3765470.00	0.16852
439814.00	3765470.00	0.16852
439819.00	3765470.00	0.16852

	439824.00	3765470.00	0.16852
439829.00	3765470.00	0.16852	
	439844.00	3765470.00	0.16850
439849.00	3765470.00	0.16848	
	439854.00	3765470.00	0.16847
439859.00	3765470.00	0.16845	
	439674.00	3765475.00	0.17105
439679.00	3765475.00	0.17112	
	439684.00	3765475.00	0.17118
439689.00	3765475.00	0.17124	
	439694.00	3765475.00	0.17130
439699.00	3765475.00	0.17135	
	439704.00	3765475.00	0.17141
439709.00	3765475.00	0.17146	
	439714.00	3765475.00	0.17151
439719.00	3765475.00	0.17156	
	439729.00	3765475.00	0.17165
439734.00	3765475.00	0.17169	
	439739.00	3765475.00	0.17173
439744.00	3765475.00	0.17177	
	439749.00	3765475.00	0.17180
439754.00	3765475.00	0.17183	
	439789.00	3765475.00	0.17201
439794.00	3765475.00	0.17202	
	439799.00	3765475.00	0.17204
439804.00	3765475.00	0.17205	
	439809.00	3765475.00	0.17206
439814.00	3765475.00	0.17206	
	439819.00	3765475.00	0.17207
439824.00	3765475.00	0.17207	
	439829.00	3765475.00	0.17207
439269.00	3764900.00	0.04488	
	439369.00	3764900.00	0.04516
439469.00	3764900.00	0.04507	
	439569.00	3764900.00	0.04460
439669.00	3764900.00	0.04374	
	439769.00	3764900.00	0.04249
439869.00	3764900.00	0.04083	
	439969.00	3764900.00	0.03879
440069.00	3764900.00	0.03640	
	440169.00	3764900.00	0.03373
440269.00	3764900.00	0.03092	
	439269.00	3765000.00	0.05238
439369.00	3765000.00	0.05292	
	439469.00	3765000.00	0.05302
439569.00	3765000.00	0.05269	
	439669.00	3765000.00	0.05190
439769.00	3765000.00	0.05066	
	439869.00	3765000.00	0.04892
439969.00	3765000.00	0.04668	
	440069.00	3765000.00	0.04393
440169.00	3765000.00	0.04073	

	440269.00	3765000.00	0.03722
439269.00	3765100.00	0.06207	
	439369.00	3765100.00	0.06294
439469.00	3765100.00	0.06330	
	439569.00	3765100.00	0.06316
439669.00	3765100.00	0.06253	
	439769.00	3765100.00	0.06138
439869.00	3765100.00	0.05966	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
439969.00	3765100.00	0.05729
440069.00	3765100.00	0.05423
440169.00	3765100.00	0.05045
440269.00	3765100.00	0.04607
439269.00	3765200.00	0.07513
439369.00	3765200.00	0.07643
439469.00	3765200.00	0.07713
439569.00	3765200.00	0.07729
439669.00	3765200.00	0.07692
439769.00	3765200.00	0.07598
439869.00	3765200.00	0.07440
439969.00	3765200.00	0.07206
440069.00	3765200.00	0.06880
440169.00	3765200.00	0.06448
440269.00	3765200.00	0.05907
439269.00	3765300.00	0.09375
439369.00	3765300.00	0.09566
439469.00	3765300.00	0.09689
439569.00	3765300.00	0.09752
439669.00	3765300.00	0.09758

	439769.00	3765300.00	0.09703
439869.00	3765300.00	0.09579	
	439969.00	3765300.00	0.09367
440069.00	3765300.00	0.09044	
	440169.00	3765300.00	0.08577
440269.00	3765300.00	0.07931	
	439269.00	3765400.00	0.12284
439369.00	3765400.00	0.12577	
	439469.00	3765400.00	0.12791
439569.00	3765400.00	0.12937	
	439669.00	3765400.00	0.13017
439769.00	3765400.00	0.13029	
	439869.00	3765400.00	0.12964
439969.00	3765400.00	0.12803	
	440069.00	3765400.00	0.12517
440169.00	3765400.00	0.12053	
	440269.00	3765400.00	0.11336
439269.00	3765500.00	0.17606	
	439369.00	3765500.00	0.18117
439469.00	3765500.00	0.18521	
	439569.00	3765500.00	0.18830
439669.00	3765500.00	0.19049	
	439769.00	3765500.00	0.19179
439869.00	3765500.00	0.19217	
	439969.00	3765500.00	0.19148
440069.00	3765500.00	0.18942	
	440169.00	3765500.00	0.18542
440269.00	3765500.00	0.17836	
	439269.00	3765600.00	0.31335
439369.00	3765600.00	0.32449	
	439469.00	3765600.00	0.33334
439569.00	3765600.00	0.34028	
	439669.00	3765600.00	0.34548
439769.00	3765600.00	0.34917	
	439869.00	3765600.00	0.35147
439969.00	3765600.00	0.35246	
	440069.00	3765600.00	0.35191
440169.00	3765600.00	0.34931	
	440269.00	3765600.00	0.34361
439269.00	3765700.00	1.66725	
	439369.00	3765700.00	1.74831
439469.00	3765700.00	1.82739	
	439569.00	3765700.00	1.90454
439669.00	3765700.00	1.96641	
	439769.00	3765700.00	2.01278
439869.00	3765700.00	2.03652	
	439969.00	3765700.00	2.05764
440069.00	3765700.00	2.07627	
	440169.00	3765700.00	2.08198
440269.00	3765700.00	2.08072	
	439269.00	3765800.00	0.54859
439369.00	3765800.00	0.57719	

	439469.00	3765800.00	0.59530
439569.00	3765800.00	0.60721	
	439669.00	3765800.00	0.61549
439769.00	3765800.00	0.62173	
	439869.00	3765800.00	0.62640
439969.00	3765800.00	0.62970	
	440069.00	3765800.00	0.63144
440169.00	3765800.00	0.63147	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
440269.00	3765800.00	0.62942
439269.00	3765900.00	0.20001
439369.00	3765900.00	0.22948
439469.00	3765900.00	0.25167
439569.00	3765900.00	0.26832
439669.00	3765900.00	0.28089
439769.00	3765900.00	0.29047
439869.00	3765900.00	0.29780
439969.00	3765900.00	0.30332
440069.00	3765900.00	0.30727
440169.00	3765900.00	0.30970
440269.00	3765900.00	0.31052
439649.00	3765310.00	0.10018
439679.00	3765310.00	0.10014
439709.00	3765310.00	0.10004
439739.00	3765310.00	0.09988
439769.00	3765310.00	0.09967
439799.00	3765310.00	0.09939
439829.00	3765310.00	0.09904
439859.00	3765310.00	0.09862

	439889.00	3765310.00	0.09813
439649.00	3765340.00	0.10866	
	439679.00	3765340.00	0.10866
439709.00	3765340.00	0.10862	
	439739.00	3765340.00	0.10851
439769.00	3765340.00	0.10835	
	439799.00	3765340.00	0.10812
439829.00	3765340.00	0.10782	
	439859.00	3765340.00	0.10744
439889.00	3765340.00	0.10699	
	439649.00	3765370.00	0.11849
439679.00	3765370.00	0.11856	
	439709.00	3765370.00	0.11858
439739.00	3765370.00	0.11854	
	439769.00	3765370.00	0.11843
439799.00	3765370.00	0.11825	
	439829.00	3765370.00	0.11801
439859.00	3765370.00	0.11769	
	439889.00	3765370.00	0.11728
439649.00	3765400.00	0.13006	
	439679.00	3765400.00	0.13021
439709.00	3765400.00	0.13030	
	439739.00	3765400.00	0.13033
439769.00	3765400.00	0.13029	
	439799.00	3765400.00	0.13018
439829.00	3765400.00	0.13000	
	439859.00	3765400.00	0.12974
439889.00	3765400.00	0.12940	
	439649.00	3765430.00	0.14390
439679.00	3765430.00	0.14414	
	439709.00	3765430.00	0.14432
439739.00	3765430.00	0.14443	
	439769.00	3765430.00	0.14447
439799.00	3765430.00	0.14444	
	439829.00	3765430.00	0.14434
439859.00	3765430.00	0.14415	
	439889.00	3765430.00	0.14388
439649.00	3765460.00	0.16078	
	439679.00	3765460.00	0.16113
439709.00	3765460.00	0.16141	
	439739.00	3765460.00	0.16163
439769.00	3765460.00	0.16176	
	439799.00	3765460.00	0.16183
439829.00	3765460.00	0.16181	
	439859.00	3765460.00	0.16171
439889.00	3765460.00	0.16152	
	439649.00	3765490.00	0.18186
439679.00	3765490.00	0.18235	
	439709.00	3765490.00	0.18276
439739.00	3765490.00	0.18309	
	439769.00	3765490.00	0.18335
439799.00	3765490.00	0.18352	

	439829.00	3765490.00	0.18361
439859.00	3765490.00	0.18361	
	439889.00	3765490.00	0.18352

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439674.00	3765310.00	0.00319
439679.00	3765310.00	0.00321
439684.00	3765310.00	0.00322
439689.00	3765310.00	0.00324
439694.00	3765310.00	0.00325
439699.00	3765310.00	0.00327
439704.00	3765310.00	0.00328
439709.00	3765310.00	0.00330
439714.00	3765310.00	0.00331
439719.00	3765310.00	0.00333
439729.00	3765310.00	0.00336
439734.00	3765310.00	0.00337
439739.00	3765310.00	0.00339
439744.00	3765310.00	0.00340
439749.00	3765310.00	0.00342
439764.00	3765310.00	0.00346
439769.00	3765310.00	0.00348
439774.00	3765310.00	0.00349

	439779.00	3765310.00	0.00351
439784.00	3765310.00	0.00352	
	439789.00	3765310.00	0.00353
439794.00	3765310.00	0.00355	
	439799.00	3765310.00	0.00356
439804.00	3765310.00	0.00357	
	439809.00	3765310.00	0.00358
439814.00	3765310.00	0.00360	
	439819.00	3765310.00	0.00361
439824.00	3765310.00	0.00362	
	439829.00	3765310.00	0.00363
439839.00	3765310.00	0.00365	
	439844.00	3765310.00	0.00366
439849.00	3765310.00	0.00367	
	439854.00	3765310.00	0.00368
439859.00	3765310.00	0.00369	
	439864.00	3765310.00	0.00370
439869.00	3765310.00	0.00370	
	439874.00	3765310.00	0.00371
439879.00	3765310.00	0.00372	
	439884.00	3765310.00	0.00372
439674.00	3765315.00	0.00323	
	439679.00	3765315.00	0.00324
439684.00	3765315.00	0.00326	
	439689.00	3765315.00	0.00328
439694.00	3765315.00	0.00329	
	439699.00	3765315.00	0.00331
439704.00	3765315.00	0.00332	
	439709.00	3765315.00	0.00334
439714.00	3765315.00	0.00335	
	439719.00	3765315.00	0.00337
439729.00	3765315.00	0.00340	
	439734.00	3765315.00	0.00342
439739.00	3765315.00	0.00343	
	439744.00	3765315.00	0.00345
439749.00	3765315.00	0.00346	
	439764.00	3765315.00	0.00351
439769.00	3765315.00	0.00352	
	439774.00	3765315.00	0.00354
439779.00	3765315.00	0.00355	
	439784.00	3765315.00	0.00357
439789.00	3765315.00	0.00358	
	439794.00	3765315.00	0.00360
439799.00	3765315.00	0.00361	
	439804.00	3765315.00	0.00362
439809.00	3765315.00	0.00364	
	439814.00	3765315.00	0.00365
439819.00	3765315.00	0.00366	
	439824.00	3765315.00	0.00367
439829.00	3765315.00	0.00368	
	439839.00	3765315.00	0.00371
439844.00	3765315.00	0.00372	

	439849.00	3765315.00	0.00373
439854.00	3765315.00	0.00374	
	439859.00	3765315.00	0.00375
439864.00	3765315.00	0.00375	
	439869.00	3765315.00	0.00376
439874.00	3765315.00	0.00377	
	439879.00	3765315.00	0.00378
439884.00	3765315.00	0.00378	
	439674.00	3765320.00	0.00327
439679.00	3765320.00	0.00328	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439684.00	3765320.00	0.00330
439689.00	3765320.00	0.00331
439694.00	3765320.00	0.00333
439699.00	3765320.00	0.00335
439704.00	3765320.00	0.00336
439709.00	3765320.00	0.00338
439714.00	3765320.00	0.00339
439719.00	3765320.00	0.00341
439729.00	3765320.00	0.00344
439734.00	3765320.00	0.00346
439739.00	3765320.00	0.00348
439744.00	3765320.00	0.00349
439749.00	3765320.00	0.00351
439764.00	3765320.00	0.00355
439769.00	3765320.00	0.00357
439774.00	3765320.00	0.00359
439779.00	3765320.00	0.00360
439784.00	3765320.00	0.00362

	439789.00	3765320.00	0.00363
439794.00	3765320.00	0.00365	
	439799.00	3765320.00	0.00366
439804.00	3765320.00	0.00367	
	439809.00	3765320.00	0.00369
439814.00	3765320.00	0.00370	
	439819.00	3765320.00	0.00371
439824.00	3765320.00	0.00373	
	439829.00	3765320.00	0.00374
439839.00	3765320.00	0.00376	
	439844.00	3765320.00	0.00377
439849.00	3765320.00	0.00378	
	439854.00	3765320.00	0.00379
439859.00	3765320.00	0.00380	
	439864.00	3765320.00	0.00381
439869.00	3765320.00	0.00382	
	439874.00	3765320.00	0.00383
439879.00	3765320.00	0.00384	
	439884.00	3765320.00	0.00384
439674.00	3765325.00	0.00330	
	439679.00	3765325.00	0.00332
439684.00	3765325.00	0.00334	
	439689.00	3765325.00	0.00335
439694.00	3765325.00	0.00337	
	439699.00	3765325.00	0.00339
439704.00	3765325.00	0.00340	
	439709.00	3765325.00	0.00342
439714.00	3765325.00	0.00344	
	439719.00	3765325.00	0.00345
439729.00	3765325.00	0.00349	
	439734.00	3765325.00	0.00350
439739.00	3765325.00	0.00352	
	439744.00	3765325.00	0.00354
439749.00	3765325.00	0.00355	
	439754.00	3765325.00	0.00357
439769.00	3765325.00	0.00362	
	439774.00	3765325.00	0.00363
439779.00	3765325.00	0.00365	
	439784.00	3765325.00	0.00367
439789.00	3765325.00	0.00368	
	439794.00	3765325.00	0.00370
439799.00	3765325.00	0.00371	
	439804.00	3765325.00	0.00373
439809.00	3765325.00	0.00374	
	439814.00	3765325.00	0.00376
439819.00	3765325.00	0.00377	
	439824.00	3765325.00	0.00378
439829.00	3765325.00	0.00380	
	439839.00	3765325.00	0.00382
439844.00	3765325.00	0.00383	
	439849.00	3765325.00	0.00384
439854.00	3765325.00	0.00385	

	439859.00	3765325.00	0.00386
439864.00	3765325.00	0.00387	
	439869.00	3765325.00	0.00388
439874.00	3765325.00	0.00389	
	439879.00	3765325.00	0.00390
439884.00	3765325.00	0.00391	
	439674.00	3765330.00	0.00334
439679.00	3765330.00	0.00336	
	439684.00	3765330.00	0.00338
439689.00	3765330.00	0.00339	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439694.00	3765330.00	0.00341
439699.00	3765330.00	0.00343
439704.00	3765330.00	0.00344
439709.00	3765330.00	0.00346
439714.00	3765330.00	0.00348
439719.00	3765330.00	0.00350
439729.00	3765330.00	0.00353
439734.00	3765330.00	0.00355
439739.00	3765330.00	0.00356
439744.00	3765330.00	0.00358
439749.00	3765330.00	0.00360
439754.00	3765330.00	0.00362
439774.00	3765330.00	0.00368
439779.00	3765330.00	0.00370
439784.00	3765330.00	0.00372
439789.00	3765330.00	0.00373
439794.00	3765330.00	0.00375
439799.00	3765330.00	0.00377

	439804.00	3765330.00	0.00378
439809.00	3765330.00	0.00380	
	439814.00	3765330.00	0.00381
439819.00	3765330.00	0.00383	
	439824.00	3765330.00	0.00384
439829.00	3765330.00	0.00385	
	439839.00	3765330.00	0.00388
439844.00	3765330.00	0.00389	
	439849.00	3765330.00	0.00390
439854.00	3765330.00	0.00392	
	439859.00	3765330.00	0.00393
439864.00	3765330.00	0.00394	
	439869.00	3765330.00	0.00395
439874.00	3765330.00	0.00396	
	439879.00	3765330.00	0.00396
439884.00	3765330.00	0.00397	
	439674.00	3765335.00	0.00338
439679.00	3765335.00	0.00340	
	439684.00	3765335.00	0.00342
439689.00	3765335.00	0.00343	
	439694.00	3765335.00	0.00345
439699.00	3765335.00	0.00347	
	439704.00	3765335.00	0.00349
439709.00	3765335.00	0.00350	
	439714.00	3765335.00	0.00352
439719.00	3765335.00	0.00354	
	439729.00	3765335.00	0.00357
439734.00	3765335.00	0.00359	
	439739.00	3765335.00	0.00361
439744.00	3765335.00	0.00363	
	439749.00	3765335.00	0.00365
439774.00	3765335.00	0.00373	
	439779.00	3765335.00	0.00375
439784.00	3765335.00	0.00377	
	439789.00	3765335.00	0.00379
439794.00	3765335.00	0.00380	
	439839.00	3765335.00	0.00394
439844.00	3765335.00	0.00395	
	439849.00	3765335.00	0.00397
439854.00	3765335.00	0.00398	
	439859.00	3765335.00	0.00399
439864.00	3765335.00	0.00400	
	439869.00	3765335.00	0.00401
439874.00	3765335.00	0.00402	
	439879.00	3765335.00	0.00403
439884.00	3765335.00	0.00404	
	439674.00	3765340.00	0.00342
439679.00	3765340.00	0.00344	
	439684.00	3765340.00	0.00346
439689.00	3765340.00	0.00348	
	439694.00	3765340.00	0.00349
439699.00	3765340.00	0.00351	

	439704.00	3765340.00	0.00353
439709.00	3765340.00	0.00355	
	439714.00	3765340.00	0.00356
439719.00	3765340.00	0.00358	
	439729.00	3765340.00	0.00362
439734.00	3765340.00	0.00364	
	439739.00	3765340.00	0.00366
439744.00	3765340.00	0.00368	
	439749.00	3765340.00	0.00369
439774.00	3765340.00	0.00379	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439779.00	3765340.00	0.00380
439784.00	3765340.00	0.00382
439789.00	3765340.00	0.00384
439794.00	3765340.00	0.00386
439839.00	3765340.00	0.00400
439844.00	3765340.00	0.00402
439849.00	3765340.00	0.00403
439854.00	3765340.00	0.00404
439859.00	3765340.00	0.00405
439864.00	3765340.00	0.00407
439869.00	3765340.00	0.00408
439874.00	3765340.00	0.00409
439879.00	3765340.00	0.00410
439884.00	3765340.00	0.00411
439674.00	3765345.00	0.00346
439679.00	3765345.00	0.00348
439684.00	3765345.00	0.00350
439689.00	3765345.00	0.00352

	439694.00	3765345.00	0.00354
439699.00	3765345.00	0.00355	
	439704.00	3765345.00	0.00357
439709.00	3765345.00	0.00359	
	439714.00	3765345.00	0.00361
439719.00	3765345.00	0.00363	
	439729.00	3765345.00	0.00367
439734.00	3765345.00	0.00368	
	439739.00	3765345.00	0.00370
439744.00	3765345.00	0.00372	
	439749.00	3765345.00	0.00374
439774.00	3765345.00	0.00384	
	439779.00	3765345.00	0.00386
439784.00	3765345.00	0.00388	
	439789.00	3765345.00	0.00389
439794.00	3765345.00	0.00391	
	439839.00	3765345.00	0.00406
439844.00	3765345.00	0.00408	
	439849.00	3765345.00	0.00409
439854.00	3765345.00	0.00411	
	439859.00	3765345.00	0.00412
439864.00	3765345.00	0.00413	
	439869.00	3765345.00	0.00415
439874.00	3765345.00	0.00416	
	439879.00	3765345.00	0.00417
439884.00	3765345.00	0.00418	
	439674.00	3765350.00	0.00351
439679.00	3765350.00	0.00352	
	439684.00	3765350.00	0.00354
439689.00	3765350.00	0.00356	
	439694.00	3765350.00	0.00358
439699.00	3765350.00	0.00360	
	439704.00	3765350.00	0.00362
439709.00	3765350.00	0.00364	
	439714.00	3765350.00	0.00365
439719.00	3765350.00	0.00367	
	439729.00	3765350.00	0.00371
439734.00	3765350.00	0.00373	
	439739.00	3765350.00	0.00375
439744.00	3765350.00	0.00377	
	439749.00	3765350.00	0.00379
439774.00	3765350.00	0.00389	
	439779.00	3765350.00	0.00391
439784.00	3765350.00	0.00393	
	439789.00	3765350.00	0.00395
439794.00	3765350.00	0.00397	
	439839.00	3765350.00	0.00413
439844.00	3765350.00	0.00414	
	439849.00	3765350.00	0.00416
439854.00	3765350.00	0.00417	
	439859.00	3765350.00	0.00419
439864.00	3765350.00	0.00420	

	439869.00	3765350.00	0.00422
439874.00	3765350.00	0.00423	
	439879.00	3765350.00	0.00424
439884.00	3765350.00	0.00425	
	439674.00	3765355.00	0.00355
439679.00	3765355.00	0.00357	
	439684.00	3765355.00	0.00359
439689.00	3765355.00	0.00360	
	439694.00	3765355.00	0.00362
439699.00	3765355.00	0.00364	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439704.00	3765355.00	0.00366
439709.00	3765355.00	0.00368
439714.00	3765355.00	0.00370
439719.00	3765355.00	0.00372
439729.00	3765355.00	0.00376
439734.00	3765355.00	0.00378
439739.00	3765355.00	0.00380
439744.00	3765355.00	0.00382
439749.00	3765355.00	0.00384
439774.00	3765355.00	0.00394
439779.00	3765355.00	0.00397
439784.00	3765355.00	0.00399
439789.00	3765355.00	0.00401
439794.00	3765355.00	0.00403
439839.00	3765355.00	0.00419
439844.00	3765355.00	0.00421
439849.00	3765355.00	0.00423
439854.00	3765355.00	0.00424

	439859.00	3765355.00	0.00426
439864.00	3765355.00	0.00427	
	439869.00	3765355.00	0.00429
439874.00	3765355.00	0.00430	
	439879.00	3765355.00	0.00431
439884.00	3765355.00	0.00432	
	439674.00	3765360.00	0.00359
439679.00	3765360.00	0.00361	
	439684.00	3765360.00	0.00363
439689.00	3765360.00	0.00365	
	439694.00	3765360.00	0.00367
439699.00	3765360.00	0.00369	
	439704.00	3765360.00	0.00371
439709.00	3765360.00	0.00373	
	439714.00	3765360.00	0.00375
439719.00	3765360.00	0.00377	
	439729.00	3765360.00	0.00381
439734.00	3765360.00	0.00383	
	439739.00	3765360.00	0.00385
439744.00	3765360.00	0.00387	
	439749.00	3765360.00	0.00389
439774.00	3765360.00	0.00400	
	439779.00	3765360.00	0.00402
439784.00	3765360.00	0.00404	
	439789.00	3765360.00	0.00406
439794.00	3765360.00	0.00408	
	439799.00	3765360.00	0.00411
439804.00	3765360.00	0.00413	
	439809.00	3765360.00	0.00415
439814.00	3765360.00	0.00417	
	439839.00	3765360.00	0.00426
439844.00	3765360.00	0.00428	
	439849.00	3765360.00	0.00430
439854.00	3765360.00	0.00431	
	439859.00	3765360.00	0.00433
439864.00	3765360.00	0.00434	
	439869.00	3765360.00	0.00436
439874.00	3765360.00	0.00437	
	439879.00	3765360.00	0.00439
439884.00	3765360.00	0.00440	
	439674.00	3765365.00	0.00364
439679.00	3765365.00	0.00365	
	439684.00	3765365.00	0.00367
439689.00	3765365.00	0.00369	
	439694.00	3765365.00	0.00371
439699.00	3765365.00	0.00373	
	439704.00	3765365.00	0.00375
439709.00	3765365.00	0.00377	
	439714.00	3765365.00	0.00379
439719.00	3765365.00	0.00382	
	439729.00	3765365.00	0.00386
439734.00	3765365.00	0.00388	

	439739.00	3765365.00	0.00390
439744.00	3765365.00	0.00392	
	439749.00	3765365.00	0.00394
439774.00	3765365.00	0.00406	
	439779.00	3765365.00	0.00408
439784.00	3765365.00	0.00410	
	439789.00	3765365.00	0.00412
439794.00	3765365.00	0.00414	
	439799.00	3765365.00	0.00417
439804.00	3765365.00	0.00419	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439809.00	3765365.00	0.00421
439814.00	3765365.00	0.00423
439839.00	3765365.00	0.00433
439844.00	3765365.00	0.00435
439849.00	3765365.00	0.00437
439854.00	3765365.00	0.00439
439859.00	3765365.00	0.00440
439864.00	3765365.00	0.00442
439869.00	3765365.00	0.00443
439874.00	3765365.00	0.00445
439879.00	3765365.00	0.00446
439884.00	3765365.00	0.00448
439674.00	3765370.00	0.00368
439679.00	3765370.00	0.00370
439684.00	3765370.00	0.00372
439689.00	3765370.00	0.00374
439694.00	3765370.00	0.00376
439699.00	3765370.00	0.00378

	439704.00	3765370.00	0.00380
439709.00	3765370.00	0.00382	
	439714.00	3765370.00	0.00384
439719.00	3765370.00	0.00386	
	439729.00	3765370.00	0.00391
439734.00	3765370.00	0.00393	
	439739.00	3765370.00	0.00395
439744.00	3765370.00	0.00397	
	439749.00	3765370.00	0.00400
439774.00	3765370.00	0.00411	
	439779.00	3765370.00	0.00414
439784.00	3765370.00	0.00416	
	439789.00	3765370.00	0.00418
439794.00	3765370.00	0.00420	
	439799.00	3765370.00	0.00423
439804.00	3765370.00	0.00425	
	439809.00	3765370.00	0.00427
439814.00	3765370.00	0.00429	
	439839.00	3765370.00	0.00440
439844.00	3765370.00	0.00442	
	439849.00	3765370.00	0.00444
439854.00	3765370.00	0.00446	
	439859.00	3765370.00	0.00448
439864.00	3765370.00	0.00449	
	439869.00	3765370.00	0.00451
439874.00	3765370.00	0.00453	
	439879.00	3765370.00	0.00454
439884.00	3765370.00	0.00456	
	439674.00	3765375.00	0.00373
439679.00	3765375.00	0.00375	
	439684.00	3765375.00	0.00377
439689.00	3765375.00	0.00379	
	439694.00	3765375.00	0.00381
439699.00	3765375.00	0.00383	
	439704.00	3765375.00	0.00385
439709.00	3765375.00	0.00387	
	439714.00	3765375.00	0.00389
439719.00	3765375.00	0.00391	
	439729.00	3765375.00	0.00396
439734.00	3765375.00	0.00398	
	439739.00	3765375.00	0.00400
439744.00	3765375.00	0.00403	
	439749.00	3765375.00	0.00405
439754.00	3765375.00	0.00407	
	439774.00	3765375.00	0.00417
439779.00	3765375.00	0.00419	
	439784.00	3765375.00	0.00422
439789.00	3765375.00	0.00424	
	439794.00	3765375.00	0.00427
439799.00	3765375.00	0.00429	
	439804.00	3765375.00	0.00431
439809.00	3765375.00	0.00434	

	439814.00	3765375.00	0.00436
439839.00	3765375.00	0.00447	
	439844.00	3765375.00	0.00449
439849.00	3765375.00	0.00451	
	439854.00	3765375.00	0.00453
439859.00	3765375.00	0.00455	
	439864.00	3765375.00	0.00457
439869.00	3765375.00	0.00459	
	439874.00	3765375.00	0.00461
439879.00	3765375.00	0.00462	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439884.00	3765375.00	0.00464
439774.00	3765380.00	0.00423
439779.00	3765380.00	0.00425
439784.00	3765380.00	0.00428
439789.00	3765380.00	0.00430
439794.00	3765380.00	0.00433
439799.00	3765380.00	0.00435
439804.00	3765380.00	0.00438
439809.00	3765380.00	0.00440
439814.00	3765380.00	0.00443
439769.00	3765385.00	0.00426
439819.00	3765385.00	0.00452
439769.00	3765400.00	0.00445
439844.00	3765400.00	0.00488
439849.00	3765400.00	0.00491
439674.00	3765405.00	0.00402
439714.00	3765405.00	0.00421
439719.00	3765405.00	0.00423

	439734.00	3765405.00	0.00431
439749.00	3765405.00	0.00439	
	439754.00	3765405.00	0.00442
439774.00	3765405.00	0.00454	
	439779.00	3765405.00	0.00457
439784.00	3765405.00	0.00460	
	439789.00	3765405.00	0.00463
439794.00	3765405.00	0.00466	
	439799.00	3765405.00	0.00469
439804.00	3765405.00	0.00472	
	439809.00	3765405.00	0.00476
439814.00	3765405.00	0.00479	
	439819.00	3765405.00	0.00482
439824.00	3765405.00	0.00485	
	439829.00	3765405.00	0.00488
439834.00	3765405.00	0.00491	
	439839.00	3765405.00	0.00494
439844.00	3765405.00	0.00497	
	439849.00	3765405.00	0.00500
439854.00	3765405.00	0.00503	
	439859.00	3765405.00	0.00505
439674.00	3765410.00	0.00408	
	439679.00	3765410.00	0.00410
439684.00	3765410.00	0.00412	
	439689.00	3765410.00	0.00414
439694.00	3765410.00	0.00417	
	439699.00	3765410.00	0.00419
439704.00	3765410.00	0.00421	
	439709.00	3765410.00	0.00424
439714.00	3765410.00	0.00426	
	439719.00	3765410.00	0.00429
439729.00	3765410.00	0.00434	
	439734.00	3765410.00	0.00437
439739.00	3765410.00	0.00440	
	439744.00	3765410.00	0.00443
439749.00	3765410.00	0.00446	
	439774.00	3765410.00	0.00461
439779.00	3765410.00	0.00464	
	439784.00	3765410.00	0.00467
439789.00	3765410.00	0.00470	
	439794.00	3765410.00	0.00473
439799.00	3765410.00	0.00477	
	439804.00	3765410.00	0.00480
439809.00	3765410.00	0.00483	
	439814.00	3765410.00	0.00486
439819.00	3765410.00	0.00490	
	439824.00	3765410.00	0.00493
439829.00	3765410.00	0.00496	
	439834.00	3765410.00	0.00499
439839.00	3765410.00	0.00502	
	439844.00	3765410.00	0.00505
439849.00	3765410.00	0.00509	

	439854.00	3765410.00	0.00512
439859.00	3765410.00	0.00515	
	439674.00	3765415.00	0.00413
439679.00	3765415.00	0.00415	
	439684.00	3765415.00	0.00418
439689.00	3765415.00	0.00420	
	439694.00	3765415.00	0.00422
439699.00	3765415.00	0.00425	
	439704.00	3765415.00	0.00427
439709.00	3765415.00	0.00430	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439714.00	3765415.00	0.00432
439719.00	3765415.00	0.00435
439729.00	3765415.00	0.00440
439734.00	3765415.00	0.00443
439739.00	3765415.00	0.00446
439744.00	3765415.00	0.00449
439749.00	3765415.00	0.00452
439774.00	3765415.00	0.00467
439779.00	3765415.00	0.00471
439784.00	3765415.00	0.00474
439789.00	3765415.00	0.00477
439794.00	3765415.00	0.00481
439799.00	3765415.00	0.00484
439804.00	3765415.00	0.00487
439809.00	3765415.00	0.00491
439814.00	3765415.00	0.00494
439819.00	3765415.00	0.00498
439824.00	3765415.00	0.00501

	439829.00	3765415.00	0.00504
439834.00	3765415.00	0.00508	
	439839.00	3765415.00	0.00511
439844.00	3765415.00	0.00514	
	439849.00	3765415.00	0.00518
439854.00	3765415.00	0.00521	
	439859.00	3765415.00	0.00524
439674.00	3765420.00	0.00419	
	439679.00	3765420.00	0.00421
439684.00	3765420.00	0.00423	
	439689.00	3765420.00	0.00426
439694.00	3765420.00	0.00428	
	439699.00	3765420.00	0.00430
439704.00	3765420.00	0.00433	
	439709.00	3765420.00	0.00435
439714.00	3765420.00	0.00438	
	439719.00	3765420.00	0.00441
439729.00	3765420.00	0.00446	
	439734.00	3765420.00	0.00449
439739.00	3765420.00	0.00452	
	439744.00	3765420.00	0.00455
439749.00	3765420.00	0.00458	
	439774.00	3765420.00	0.00474
439779.00	3765420.00	0.00478	
	439784.00	3765420.00	0.00481
439789.00	3765420.00	0.00484	
	439794.00	3765420.00	0.00488
439799.00	3765420.00	0.00491	
	439804.00	3765420.00	0.00495
439809.00	3765420.00	0.00498	
	439814.00	3765420.00	0.00502
439819.00	3765420.00	0.00506	
	439824.00	3765420.00	0.00509
439829.00	3765420.00	0.00513	
	439834.00	3765420.00	0.00516
439839.00	3765420.00	0.00520	
	439844.00	3765420.00	0.00523
439849.00	3765420.00	0.00527	
	439854.00	3765420.00	0.00530
439859.00	3765420.00	0.00533	
	439674.00	3765425.00	0.00424
439679.00	3765425.00	0.00427	
	439684.00	3765425.00	0.00429
439689.00	3765425.00	0.00431	
	439694.00	3765425.00	0.00434
439699.00	3765425.00	0.00436	
	439704.00	3765425.00	0.00439
439709.00	3765425.00	0.00441	
	439714.00	3765425.00	0.00444
439719.00	3765425.00	0.00447	
	439729.00	3765425.00	0.00453
439734.00	3765425.00	0.00455	

	439739.00	3765425.00	0.00458
439744.00	3765425.00	0.00461	
	439749.00	3765425.00	0.00465
439774.00	3765425.00	0.00481	
	439779.00	3765425.00	0.00485
439784.00	3765425.00	0.00488	
	439789.00	3765425.00	0.00492
439794.00	3765425.00	0.00495	
	439799.00	3765425.00	0.00499
439804.00	3765425.00	0.00503	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439809.00	3765425.00	0.00506
439814.00	3765425.00	0.00510
439819.00	3765425.00	0.00514
439824.00	3765425.00	0.00518
439829.00	3765425.00	0.00521
439834.00	3765425.00	0.00525
439839.00	3765425.00	0.00529
439844.00	3765425.00	0.00533
439849.00	3765425.00	0.00536
439854.00	3765425.00	0.00540
439859.00	3765425.00	0.00543
439674.00	3765430.00	0.00430
439679.00	3765430.00	0.00433
439684.00	3765430.00	0.00435
439689.00	3765430.00	0.00437
439694.00	3765430.00	0.00440
439699.00	3765430.00	0.00442
439704.00	3765430.00	0.00445

	439709.00	3765430.00	0.00448
439714.00	3765430.00	0.00450	
	439719.00	3765430.00	0.00453
439729.00	3765430.00	0.00459	
	439734.00	3765430.00	0.00462
439739.00	3765430.00	0.00465	
	439744.00	3765430.00	0.00468
439749.00	3765430.00	0.00471	
	439774.00	3765430.00	0.00488
439779.00	3765430.00	0.00492	
	439784.00	3765430.00	0.00496
439789.00	3765430.00	0.00499	
	439794.00	3765430.00	0.00503
439799.00	3765430.00	0.00507	
	439804.00	3765430.00	0.00511
439809.00	3765430.00	0.00515	
	439814.00	3765430.00	0.00519
439819.00	3765430.00	0.00522	
	439824.00	3765430.00	0.00526
439829.00	3765430.00	0.00530	
	439834.00	3765430.00	0.00534
439839.00	3765430.00	0.00538	
	439844.00	3765430.00	0.00542
439849.00	3765430.00	0.00546	
	439854.00	3765430.00	0.00550
439859.00	3765430.00	0.00553	
	439674.00	3765435.00	0.00436
439679.00	3765435.00	0.00439	
	439684.00	3765435.00	0.00441
439689.00	3765435.00	0.00443	
	439694.00	3765435.00	0.00446
439699.00	3765435.00	0.00449	
	439704.00	3765435.00	0.00451
439709.00	3765435.00	0.00454	
	439714.00	3765435.00	0.00457
439719.00	3765435.00	0.00459	
	439729.00	3765435.00	0.00465
439734.00	3765435.00	0.00468	
	439739.00	3765435.00	0.00471
439744.00	3765435.00	0.00475	
	439749.00	3765435.00	0.00478
439774.00	3765435.00	0.00496	
	439779.00	3765435.00	0.00499
439784.00	3765435.00	0.00503	
	439789.00	3765435.00	0.00507
439794.00	3765435.00	0.00511	
	439799.00	3765435.00	0.00515
439804.00	3765435.00	0.00519	
	439809.00	3765435.00	0.00523
439814.00	3765435.00	0.00527	
	439819.00	3765435.00	0.00531
439824.00	3765435.00	0.00535	

	439829.00	3765435.00	0.00539
439834.00	3765435.00	0.00544	
	439839.00	3765435.00	0.00548
439844.00	3765435.00	0.00552	
	439849.00	3765435.00	0.00556
439854.00	3765435.00	0.00560	
	439859.00	3765435.00	0.00564
439674.00	3765440.00	0.00443	
	439679.00	3765440.00	0.00445
439684.00	3765440.00	0.00447	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439689.00	3765440.00	0.00450
439694.00	3765440.00	0.00452
439699.00	3765440.00	0.00455
439704.00	3765440.00	0.00458
439709.00	3765440.00	0.00460
439714.00	3765440.00	0.00463
439719.00	3765440.00	0.00466
439729.00	3765440.00	0.00472
439734.00	3765440.00	0.00475
439739.00	3765440.00	0.00478
439744.00	3765440.00	0.00482
439749.00	3765440.00	0.00485
439774.00	3765440.00	0.00503
439779.00	3765440.00	0.00507
439784.00	3765440.00	0.00511
439789.00	3765440.00	0.00515
439794.00	3765440.00	0.00519
439799.00	3765440.00	0.00523

	439804.00	3765440.00	0.00527
439809.00	3765440.00	0.00531	
	439814.00	3765440.00	0.00536
439819.00	3765440.00	0.00540	
	439824.00	3765440.00	0.00544
439829.00	3765440.00	0.00549	
	439834.00	3765440.00	0.00553
439839.00	3765440.00	0.00557	
	439844.00	3765440.00	0.00562
439849.00	3765440.00	0.00566	
	439854.00	3765440.00	0.00570
439859.00	3765440.00	0.00575	
	439674.00	3765445.00	0.00449
439679.00	3765445.00	0.00451	
	439684.00	3765445.00	0.00454
439689.00	3765445.00	0.00456	
	439694.00	3765445.00	0.00459
439699.00	3765445.00	0.00461	
	439704.00	3765445.00	0.00464
439709.00	3765445.00	0.00467	
	439714.00	3765445.00	0.00470
439719.00	3765445.00	0.00473	
	439729.00	3765445.00	0.00479
439734.00	3765445.00	0.00482	
	439739.00	3765445.00	0.00485
439744.00	3765445.00	0.00489	
	439749.00	3765445.00	0.00492
439774.00	3765445.00	0.00511	
	439779.00	3765445.00	0.00515
439784.00	3765445.00	0.00519	
	439789.00	3765445.00	0.00523
439794.00	3765445.00	0.00527	
	439799.00	3765445.00	0.00531
439804.00	3765445.00	0.00536	
	439809.00	3765445.00	0.00540
439814.00	3765445.00	0.00545	
	439819.00	3765445.00	0.00549
439824.00	3765445.00	0.00554	
	439829.00	3765445.00	0.00558
439834.00	3765445.00	0.00563	
	439839.00	3765445.00	0.00567
439844.00	3765445.00	0.00572	
	439849.00	3765445.00	0.00577
439854.00	3765445.00	0.00581	
	439859.00	3765445.00	0.00586
439674.00	3765450.00	0.00456	
	439679.00	3765450.00	0.00458
439684.00	3765450.00	0.00460	
	439689.00	3765450.00	0.00463
439694.00	3765450.00	0.00465	
	439699.00	3765450.00	0.00468
439704.00	3765450.00	0.00471	

	439709.00	3765450.00	0.00474
439714.00	3765450.00	0.00476	
	439719.00	3765450.00	0.00479
439729.00	3765450.00	0.00486	
	439734.00	3765450.00	0.00489
439739.00	3765450.00	0.00492	
	439744.00	3765450.00	0.00496
439749.00	3765450.00	0.00499	
	439774.00	3765450.00	0.00518
439844.00	3765450.00	0.00582	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439849.00	3765450.00	0.00587
439854.00	3765450.00	0.00592
439859.00	3765450.00	0.00597
439674.00	3765455.00	0.00462
439679.00	3765455.00	0.00465
439684.00	3765455.00	0.00467
439689.00	3765455.00	0.00470
439694.00	3765455.00	0.00472
439699.00	3765455.00	0.00475
439704.00	3765455.00	0.00478
439709.00	3765455.00	0.00481
439714.00	3765455.00	0.00483
439719.00	3765455.00	0.00486
439729.00	3765455.00	0.00493
439734.00	3765455.00	0.00496
439739.00	3765455.00	0.00499
439744.00	3765455.00	0.00503
439749.00	3765455.00	0.00507

	439844.00	3765455.00	0.00593
439849.00	3765455.00	0.00598	
	439854.00	3765455.00	0.00603
439859.00	3765455.00	0.00608	
	439674.00	3765460.00	0.00469
439679.00	3765460.00	0.00472	
	439684.00	3765460.00	0.00474
439689.00	3765460.00	0.00477	
	439694.00	3765460.00	0.00479
439699.00	3765460.00	0.00482	
	439704.00	3765460.00	0.00485
439709.00	3765460.00	0.00488	
	439714.00	3765460.00	0.00491
439719.00	3765460.00	0.00494	
	439729.00	3765460.00	0.00500
439734.00	3765460.00	0.00503	
	439739.00	3765460.00	0.00507
439744.00	3765460.00	0.00510	
	439749.00	3765460.00	0.00514
439789.00	3765460.00	0.00548	
	439794.00	3765460.00	0.00552
439799.00	3765460.00	0.00557	
	439804.00	3765460.00	0.00562
439809.00	3765460.00	0.00567	
	439814.00	3765460.00	0.00572
439819.00	3765460.00	0.00578	
	439824.00	3765460.00	0.00583
439829.00	3765460.00	0.00588	
	439844.00	3765460.00	0.00604
439849.00	3765460.00	0.00610	
	439854.00	3765460.00	0.00615
439859.00	3765460.00	0.00620	
	439674.00	3765465.00	0.00477
439679.00	3765465.00	0.00479	
	439684.00	3765465.00	0.00481
439689.00	3765465.00	0.00484	
	439694.00	3765465.00	0.00487
439699.00	3765465.00	0.00489	
	439704.00	3765465.00	0.00492
439709.00	3765465.00	0.00495	
	439714.00	3765465.00	0.00498
439719.00	3765465.00	0.00501	
	439729.00	3765465.00	0.00508
439734.00	3765465.00	0.00511	
	439739.00	3765465.00	0.00515
439744.00	3765465.00	0.00518	
	439749.00	3765465.00	0.00522
439789.00	3765465.00	0.00556	
	439794.00	3765465.00	0.00561
439799.00	3765465.00	0.00566	
	439804.00	3765465.00	0.00571
439809.00	3765465.00	0.00577	

	439814.00	3765465.00	0.00582
439819.00	3765465.00	0.00587	
	439824.00	3765465.00	0.00593
439829.00	3765465.00	0.00599	
	439844.00	3765465.00	0.00616
439849.00	3765465.00	0.00621	
	439854.00	3765465.00	0.00627
439859.00	3765465.00	0.00633	
	439674.00	3765470.00	0.00484
439679.00	3765470.00	0.00487	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439684.00	3765470.00	0.00489
439689.00	3765470.00	0.00492
439694.00	3765470.00	0.00494
439699.00	3765470.00	0.00497
439704.00	3765470.00	0.00500
439709.00	3765470.00	0.00503
439714.00	3765470.00	0.00506
439719.00	3765470.00	0.00509
439729.00	3765470.00	0.00515
439734.00	3765470.00	0.00519
439739.00	3765470.00	0.00522
439744.00	3765470.00	0.00526
439749.00	3765470.00	0.00530
439789.00	3765470.00	0.00565
439794.00	3765470.00	0.00570
439799.00	3765470.00	0.00576
439804.00	3765470.00	0.00581
439809.00	3765470.00	0.00586

	439814.00	3765470.00	0.00592
439819.00	3765470.00	0.00598	
	439824.00	3765470.00	0.00603
439829.00	3765470.00	0.00609	
	439844.00	3765470.00	0.00627
439849.00	3765470.00	0.00633	
	439854.00	3765470.00	0.00639
439859.00	3765470.00	0.00645	
	439674.00	3765475.00	0.00492
439679.00	3765475.00	0.00494	
	439684.00	3765475.00	0.00497
439689.00	3765475.00	0.00499	
	439694.00	3765475.00	0.00502
439699.00	3765475.00	0.00505	
	439704.00	3765475.00	0.00508
439709.00	3765475.00	0.00511	
	439714.00	3765475.00	0.00514
439719.00	3765475.00	0.00517	
	439729.00	3765475.00	0.00523
439734.00	3765475.00	0.00527	
	439739.00	3765475.00	0.00530
439744.00	3765475.00	0.00534	
	439749.00	3765475.00	0.00538
439754.00	3765475.00	0.00542	
	439789.00	3765475.00	0.00574
439794.00	3765475.00	0.00580	
	439799.00	3765475.00	0.00585
439804.00	3765475.00	0.00591	
	439809.00	3765475.00	0.00596
439814.00	3765475.00	0.00602	
	439819.00	3765475.00	0.00608
439824.00	3765475.00	0.00614	
	439829.00	3765475.00	0.00620
439269.00	3764900.00	0.00118	
	439369.00	3764900.00	0.00126
439469.00	3764900.00	0.00132	
	439569.00	3764900.00	0.00136
439669.00	3764900.00	0.00138	
	439769.00	3764900.00	0.00136
439869.00	3764900.00	0.00131	
	439969.00	3764900.00	0.00123
440069.00	3764900.00	0.00113	
	440169.00	3764900.00	0.00102
440269.00	3764900.00	0.00091	
	439269.00	3765000.00	0.00134
439369.00	3765000.00	0.00145	
	439469.00	3765000.00	0.00154
439569.00	3765000.00	0.00162	
	439669.00	3765000.00	0.00166
439769.00	3765000.00	0.00167	
	439869.00	3765000.00	0.00163
439969.00	3765000.00	0.00153	

	440069.00	3765000.00	0.00141
440169.00	3765000.00	0.00126	
	440269.00	3765000.00	0.00111
439269.00	3765100.00	0.00152	
	439369.00	3765100.00	0.00167
439469.00	3765100.00	0.00180	
	439569.00	3765100.00	0.00193
439669.00	3765100.00	0.00203	
	439769.00	3765100.00	0.00208
439869.00	3765100.00	0.00206	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439969.00	3765100.00	0.00197
440069.00	3765100.00	0.00181
440169.00	3765100.00	0.00160
440269.00	3765100.00	0.00139
439269.00	3765200.00	0.00173
439369.00	3765200.00	0.00194
439469.00	3765200.00	0.00214
439569.00	3765200.00	0.00232
439669.00	3765200.00	0.00249
439769.00	3765200.00	0.00263
439869.00	3765200.00	0.00268
439969.00	3765200.00	0.00260
440069.00	3765200.00	0.00241
440169.00	3765200.00	0.00214
440269.00	3765200.00	0.00182
439269.00	3765300.00	0.00200
439369.00	3765300.00	0.00231
439469.00	3765300.00	0.00258

	439569.00	3765300.00	0.00283
439669.00	3765300.00	0.00311	
	439769.00	3765300.00	0.00339
439869.00	3765300.00	0.00359	
	439969.00	3765300.00	0.00360
440069.00	3765300.00	0.00340	
	440169.00	3765300.00	0.00302
440269.00	3765300.00	0.00253	
	439269.00	3765400.00	0.00233
439369.00	3765400.00	0.00282	
	439469.00	3765400.00	0.00324
439569.00	3765400.00	0.00358	
	439669.00	3765400.00	0.00395
439769.00	3765400.00	0.00445	
	439869.00	3765400.00	0.00502
439969.00	3765400.00	0.00530	
	440069.00	3765400.00	0.00515
440169.00	3765400.00	0.00464	
	440269.00	3765400.00	0.00386
439269.00	3765500.00	0.00270	
	439369.00	3765500.00	0.00362
439469.00	3765500.00	0.00441	
	439569.00	3765500.00	0.00492
439669.00	3765500.00	0.00533	
	439769.00	3765500.00	0.00602
439869.00	3765500.00	0.00747	
	439969.00	3765500.00	0.00881
440069.00	3765500.00	0.00887	
	440169.00	3765500.00	0.00817
440269.00	3765500.00	0.00691	
	439269.00	3765600.00	0.00296
439369.00	3765600.00	0.00491	
	439469.00	3765600.00	0.00709
439569.00	3765600.00	0.00822	
	439669.00	3765600.00	0.00875
439769.00	3765600.00	0.00948	
	439869.00	3765600.00	0.01214
439969.00	3765600.00	0.02207	
	440069.00	3765600.00	0.02232
440169.00	3765600.00	0.02025	
	440269.00	3765600.00	0.01743
439269.00	3765700.00	0.00274	
	439369.00	3765700.00	0.00650
439469.00	3765700.00	0.02663	
	439569.00	3765700.00	0.03295
439669.00	3765700.00	0.02769	
	439769.00	3765700.00	0.02282
439869.00	3765700.00	0.01792	
	439969.00	3765700.00	0.02173
440069.00	3765700.00	0.04260	
	440169.00	3765700.00	0.06589
440269.00	3765700.00	0.10010	

	439269.00	3765800.00	0.00200
439369.00	3765800.00	0.00359	
	439469.00	3765800.00	0.01061
439569.00	3765800.00	0.02209	
	439669.00	3765800.00	0.03178
439769.00	3765800.00	0.04688	
	439869.00	3765800.00	0.07144
439969.00	3765800.00	0.03377	
	440069.00	3765800.00	0.02516
440169.00	3765800.00	0.02279	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
440269.00	3765800.00	0.02315
439269.00	3765900.00	0.00137
439369.00	3765900.00	0.00190
439469.00	3765900.00	0.00287
439569.00	3765900.00	0.00458
439669.00	3765900.00	0.00681
439769.00	3765900.00	0.00906
439869.00	3765900.00	0.01100
439969.00	3765900.00	0.01163
440069.00	3765900.00	0.01070
440169.00	3765900.00	0.00994
440269.00	3765900.00	0.00973
439649.00	3765310.00	0.00312
439679.00	3765310.00	0.00321
439709.00	3765310.00	0.00330
439739.00	3765310.00	0.00339
439769.00	3765310.00	0.00348
439799.00	3765310.00	0.00356

	439829.00	3765310.00	0.00363
439859.00	3765310.00	0.00369	
	439889.00	3765310.00	0.00373
439649.00	3765340.00	0.00334	
	439679.00	3765340.00	0.00344
439709.00	3765340.00	0.00355	
	439739.00	3765340.00	0.00366
439769.00	3765340.00	0.00377	
	439799.00	3765340.00	0.00387
439829.00	3765340.00	0.00397	
	439859.00	3765340.00	0.00405
439889.00	3765340.00	0.00412	
	439649.00	3765370.00	0.00359
439679.00	3765370.00	0.00370	
	439709.00	3765370.00	0.00382
439739.00	3765370.00	0.00395	
	439769.00	3765370.00	0.00409
439799.00	3765370.00	0.00423	
	439829.00	3765370.00	0.00436
439859.00	3765370.00	0.00448	
	439889.00	3765370.00	0.00457
439649.00	3765400.00	0.00387	
	439679.00	3765400.00	0.00399
439709.00	3765400.00	0.00413	
	439739.00	3765400.00	0.00428
439769.00	3765400.00	0.00445	
	439799.00	3765400.00	0.00462
439829.00	3765400.00	0.00480	
	439859.00	3765400.00	0.00497
439889.00	3765400.00	0.00511	
	439649.00	3765430.00	0.00419
439679.00	3765430.00	0.00433	
	439709.00	3765430.00	0.00448
439739.00	3765430.00	0.00465	
	439769.00	3765430.00	0.00485
439799.00	3765430.00	0.00507	
	439829.00	3765430.00	0.00530
439859.00	3765430.00	0.00553	
	439889.00	3765430.00	0.00574
439649.00	3765460.00	0.00458	
	439679.00	3765460.00	0.00472
439709.00	3765460.00	0.00488	
	439739.00	3765460.00	0.00507
439769.00	3765460.00	0.00530	
	439799.00	3765460.00	0.00557
439829.00	3765460.00	0.00588	
	439859.00	3765460.00	0.00620
439889.00	3765460.00	0.00651	
	439649.00	3765490.00	0.00506
439679.00	3765490.00	0.00519	
	439709.00	3765490.00	0.00536
439739.00	3765490.00	0.00556	

	439769.00	3765490.00	0.00582
439799.00	3765490.00	0.00615	
	439829.00	3765490.00	0.00655
439859.00	3765490.00	0.00700	
	439889.00	3765490.00	0.00746

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439674.00	3765310.00	0.10334
439679.00	3765310.00	0.10335
439684.00	3765310.00	0.10335
439689.00	3765310.00	0.10335
439694.00	3765310.00	0.10335
439699.00	3765310.00	0.10335
439704.00	3765310.00	0.10334
439709.00	3765310.00	0.10334
439714.00	3765310.00	0.10333
439719.00	3765310.00	0.10332
439729.00	3765310.00	0.10330
439734.00	3765310.00	0.10329
439739.00	3765310.00	0.10327
439744.00	3765310.00	0.10325
439749.00	3765310.00	0.10324
439764.00	3765310.00	0.10317
439769.00	3765310.00	0.10314
439774.00	3765310.00	0.10312

	439779.00	3765310.00	0.10309
439784.00	3765310.00	0.10305	
	439789.00	3765310.00	0.10302
439794.00	3765310.00	0.10298	
	439799.00	3765310.00	0.10295
439804.00	3765310.00	0.10291	
	439809.00	3765310.00	0.10286
439814.00	3765310.00	0.10282	
	439819.00	3765310.00	0.10277
439824.00	3765310.00	0.10272	
	439829.00	3765310.00	0.10267
439839.00	3765310.00	0.10256	
	439844.00	3765310.00	0.10250
439849.00	3765310.00	0.10244	
	439854.00	3765310.00	0.10238
439859.00	3765310.00	0.10231	
	439864.00	3765310.00	0.10224
439869.00	3765310.00	0.10217	
	439874.00	3765310.00	0.10209
439879.00	3765310.00	0.10202	
	439884.00	3765310.00	0.10194
439674.00	3765315.00	0.10472	
	439679.00	3765315.00	0.10472
439684.00	3765315.00	0.10473	
	439689.00	3765315.00	0.10473
439694.00	3765315.00	0.10473	
	439699.00	3765315.00	0.10473
439704.00	3765315.00	0.10473	
	439709.00	3765315.00	0.10472
439714.00	3765315.00	0.10472	
	439719.00	3765315.00	0.10471
439729.00	3765315.00	0.10469	
	439734.00	3765315.00	0.10468
439739.00	3765315.00	0.10467	
	439744.00	3765315.00	0.10465
439749.00	3765315.00	0.10464	
	439764.00	3765315.00	0.10458
439769.00	3765315.00	0.10455	
	439774.00	3765315.00	0.10453
439779.00	3765315.00	0.10450	
	439784.00	3765315.00	0.10447
439789.00	3765315.00	0.10444	
	439794.00	3765315.00	0.10440
439799.00	3765315.00	0.10437	
	439804.00	3765315.00	0.10433
439809.00	3765315.00	0.10429	
	439814.00	3765315.00	0.10424
439819.00	3765315.00	0.10420	
	439824.00	3765315.00	0.10415
439829.00	3765315.00	0.10410	
	439839.00	3765315.00	0.10400
439844.00	3765315.00	0.10394	

	439849.00	3765315.00	0.10388
439854.00	3765315.00	0.10382	
	439859.00	3765315.00	0.10375
439864.00	3765315.00	0.10368	
	439869.00	3765315.00	0.10361
439874.00	3765315.00	0.10354	
	439879.00	3765315.00	0.10346
439884.00	3765315.00	0.10339	
	439674.00	3765320.00	0.10612
439679.00	3765320.00	0.10613	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439684.00	3765320.00	0.10614
439689.00	3765320.00	0.10614
439694.00	3765320.00	0.10614
439699.00	3765320.00	0.10614
439704.00	3765320.00	0.10614
439709.00	3765320.00	0.10614
439714.00	3765320.00	0.10614
439719.00	3765320.00	0.10613
439729.00	3765320.00	0.10612
439734.00	3765320.00	0.10611
439739.00	3765320.00	0.10610
439744.00	3765320.00	0.10609
439749.00	3765320.00	0.10607
439764.00	3765320.00	0.10602
439769.00	3765320.00	0.10599
439774.00	3765320.00	0.10597
439779.00	3765320.00	0.10594
439784.00	3765320.00	0.10592

	439789.00	3765320.00	0.10589
439794.00	3765320.00	0.10585	
	439799.00	3765320.00	0.10582
439804.00	3765320.00	0.10578	
	439809.00	3765320.00	0.10574
439814.00	3765320.00	0.10570	
	439819.00	3765320.00	0.10566
439824.00	3765320.00	0.10561	
	439829.00	3765320.00	0.10557
439839.00	3765320.00	0.10546	
	439844.00	3765320.00	0.10541
439849.00	3765320.00	0.10535	
	439854.00	3765320.00	0.10529
439859.00	3765320.00	0.10523	
	439864.00	3765320.00	0.10516
439869.00	3765320.00	0.10509	
	439874.00	3765320.00	0.10502
439879.00	3765320.00	0.10495	
	439884.00	3765320.00	0.10487
439674.00	3765325.00	0.10756	
	439679.00	3765325.00	0.10757
439684.00	3765325.00	0.10758	
	439689.00	3765325.00	0.10758
439694.00	3765325.00	0.10759	
	439699.00	3765325.00	0.10759
439704.00	3765325.00	0.10759	
	439709.00	3765325.00	0.10760
439714.00	3765325.00	0.10759	
	439719.00	3765325.00	0.10759
439729.00	3765325.00	0.10758	
	439734.00	3765325.00	0.10757
439739.00	3765325.00	0.10756	
	439744.00	3765325.00	0.10755
439749.00	3765325.00	0.10754	
	439754.00	3765325.00	0.10752
439769.00	3765325.00	0.10747	
	439774.00	3765325.00	0.10745
439779.00	3765325.00	0.10742	
	439784.00	3765325.00	0.10740
439789.00	3765325.00	0.10737	
	439794.00	3765325.00	0.10734
439799.00	3765325.00	0.10731	
	439804.00	3765325.00	0.10727
439809.00	3765325.00	0.10724	
	439814.00	3765325.00	0.10720
439819.00	3765325.00	0.10716	
	439824.00	3765325.00	0.10711
439829.00	3765325.00	0.10707	
	439839.00	3765325.00	0.10697
439844.00	3765325.00	0.10691	
	439849.00	3765325.00	0.10686
439854.00	3765325.00	0.10680	

	439859.00	3765325.00	0.10674
439864.00	3765325.00	0.10667	
	439869.00	3765325.00	0.10661
439874.00	3765325.00	0.10654	
	439879.00	3765325.00	0.10647
439884.00	3765325.00	0.10639	
	439674.00	3765330.00	0.10903
439679.00	3765330.00	0.10905	
	439684.00	3765330.00	0.10906
439689.00	3765330.00	0.10906	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439694.00	3765330.00	0.10907
439699.00	3765330.00	0.10908
439704.00	3765330.00	0.10908
439709.00	3765330.00	0.10908
439714.00	3765330.00	0.10908
439719.00	3765330.00	0.10908
439729.00	3765330.00	0.10908
439734.00	3765330.00	0.10907
439739.00	3765330.00	0.10906
439744.00	3765330.00	0.10905
439749.00	3765330.00	0.10904
439754.00	3765330.00	0.10903
439774.00	3765330.00	0.10896
439779.00	3765330.00	0.10894
439784.00	3765330.00	0.10891
439789.00	3765330.00	0.10889
439794.00	3765330.00	0.10886
439799.00	3765330.00	0.10883

	439804.00	3765330.00	0.10880
439809.00	3765330.00	0.10876	
	439814.00	3765330.00	0.10873
439819.00	3765330.00	0.10869	
	439824.00	3765330.00	0.10865
439829.00	3765330.00	0.10860	
	439839.00	3765330.00	0.10851
439844.00	3765330.00	0.10846	
	439849.00	3765330.00	0.10840
439854.00	3765330.00	0.10835	
	439859.00	3765330.00	0.10829
439864.00	3765330.00	0.10822	
	439869.00	3765330.00	0.10816
439874.00	3765330.00	0.10809	
	439879.00	3765330.00	0.10802
439884.00	3765330.00	0.10795	
	439674.00	3765335.00	0.11054
439679.00	3765335.00	0.11056	
	439684.00	3765335.00	0.11057
439689.00	3765335.00	0.11058	
	439694.00	3765335.00	0.11059
439699.00	3765335.00	0.11060	
	439704.00	3765335.00	0.11060
439709.00	3765335.00	0.11061	
	439714.00	3765335.00	0.11061
439719.00	3765335.00	0.11061	
	439729.00	3765335.00	0.11061
439734.00	3765335.00	0.11060	
	439739.00	3765335.00	0.11060
439744.00	3765335.00	0.11059	
	439749.00	3765335.00	0.11058
439774.00	3765335.00	0.11051	
	439779.00	3765335.00	0.11049
439784.00	3765335.00	0.11047	
	439789.00	3765335.00	0.11044
439794.00	3765335.00	0.11042	
	439839.00	3765335.00	0.11008
439844.00	3765335.00	0.11003	
	439849.00	3765335.00	0.10998
439854.00	3765335.00	0.10993	
	439859.00	3765335.00	0.10987
439864.00	3765335.00	0.10981	
	439869.00	3765335.00	0.10975
439874.00	3765335.00	0.10968	
	439879.00	3765335.00	0.10961
439884.00	3765335.00	0.10954	
	439674.00	3765340.00	0.11209
439679.00	3765340.00	0.11211	
	439684.00	3765340.00	0.11212
439689.00	3765340.00	0.11213	
	439694.00	3765340.00	0.11214
439699.00	3765340.00	0.11215	

	439704.00	3765340.00	0.11216
439709.00	3765340.00	0.11217	
	439714.00	3765340.00	0.11217
439719.00	3765340.00	0.11217	
	439729.00	3765340.00	0.11218
439734.00	3765340.00	0.11217	
	439739.00	3765340.00	0.11217
439744.00	3765340.00	0.11217	
	439749.00	3765340.00	0.11216
439774.00	3765340.00	0.11210	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439779.00	3765340.00	0.11208
439784.00	3765340.00	0.11206
439789.00	3765340.00	0.11204
439794.00	3765340.00	0.11202
439839.00	3765340.00	0.11170
439844.00	3765340.00	0.11165
439849.00	3765340.00	0.11160
439854.00	3765340.00	0.11155
439859.00	3765340.00	0.11150
439864.00	3765340.00	0.11144
439869.00	3765340.00	0.11138
439874.00	3765340.00	0.11131
439879.00	3765340.00	0.11125
439884.00	3765340.00	0.11118
439674.00	3765345.00	0.11368
439679.00	3765345.00	0.11369
439684.00	3765345.00	0.11371
439689.00	3765345.00	0.11372

	439694.00	3765345.00	0.11374
439699.00	3765345.00	0.11375	
	439704.00	3765345.00	0.11376
439709.00	3765345.00	0.11377	
	439714.00	3765345.00	0.11377
439719.00	3765345.00	0.11378	
	439729.00	3765345.00	0.11378
439734.00	3765345.00	0.11378	
	439739.00	3765345.00	0.11378
439744.00	3765345.00	0.11378	
	439749.00	3765345.00	0.11378
439774.00	3765345.00	0.11373	
	439779.00	3765345.00	0.11371
439784.00	3765345.00	0.11369	
	439789.00	3765345.00	0.11367
439794.00	3765345.00	0.11365	
	439839.00	3765345.00	0.11336
439844.00	3765345.00	0.11331	
	439849.00	3765345.00	0.11327
439854.00	3765345.00	0.11322	
	439859.00	3765345.00	0.11316
439864.00	3765345.00	0.11311	
	439869.00	3765345.00	0.11305
439874.00	3765345.00	0.11299	
	439879.00	3765345.00	0.11292
439884.00	3765345.00	0.11285	
	439674.00	3765350.00	0.11530
439679.00	3765350.00	0.11532	
	439684.00	3765350.00	0.11534
439689.00	3765350.00	0.11535	
	439694.00	3765350.00	0.11537
439699.00	3765350.00	0.11538	
	439704.00	3765350.00	0.11539
439709.00	3765350.00	0.11540	
	439714.00	3765350.00	0.11541
439719.00	3765350.00	0.11542	
	439729.00	3765350.00	0.11543
439734.00	3765350.00	0.11543	
	439739.00	3765350.00	0.11544
439744.00	3765350.00	0.11543	
	439749.00	3765350.00	0.11543
439774.00	3765350.00	0.11539	
	439779.00	3765350.00	0.11538
439784.00	3765350.00	0.11537	
	439789.00	3765350.00	0.11535
439794.00	3765350.00	0.11533	
	439839.00	3765350.00	0.11506
439844.00	3765350.00	0.11501	
	439849.00	3765350.00	0.11497
439854.00	3765350.00	0.11492	
	439859.00	3765350.00	0.11487
439864.00	3765350.00	0.11482	

	439869.00	3765350.00	0.11476
439874.00	3765350.00	0.11470	
	439879.00	3765350.00	0.11464
439884.00	3765350.00	0.11457	
	439674.00	3765355.00	0.11697
439679.00	3765355.00	0.11699	
	439684.00	3765355.00	0.11701
439689.00	3765355.00	0.11703	
	439694.00	3765355.00	0.11704
439699.00	3765355.00	0.11706	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439704.00	3765355.00	0.11707
439709.00	3765355.00	0.11709
439714.00	3765355.00	0.11710
439719.00	3765355.00	0.11711
439729.00	3765355.00	0.11712
439734.00	3765355.00	0.11713
439739.00	3765355.00	0.11713
439744.00	3765355.00	0.11713
439749.00	3765355.00	0.11713
439774.00	3765355.00	0.11711
439779.00	3765355.00	0.11710
439784.00	3765355.00	0.11708
439789.00	3765355.00	0.11707
439794.00	3765355.00	0.11705
439839.00	3765355.00	0.11680
439844.00	3765355.00	0.11676
439849.00	3765355.00	0.11672
439854.00	3765355.00	0.11667

	439859.00	3765355.00	0.11662
439864.00	3765355.00	0.11657	
	439869.00	3765355.00	0.11652
439874.00	3765355.00	0.11646	
	439879.00	3765355.00	0.11640
439884.00	3765355.00	0.11634	
	439674.00	3765360.00	0.11868
439679.00	3765360.00	0.11870	
	439684.00	3765360.00	0.11872
439689.00	3765360.00	0.11874	
	439694.00	3765360.00	0.11876
439699.00	3765360.00	0.11878	
	439704.00	3765360.00	0.11880
439709.00	3765360.00	0.11881	
	439714.00	3765360.00	0.11883
439719.00	3765360.00	0.11884	
	439729.00	3765360.00	0.11886
439734.00	3765360.00	0.11886	
	439739.00	3765360.00	0.11887
439744.00	3765360.00	0.11887	
	439749.00	3765360.00	0.11888
439774.00	3765360.00	0.11886	
	439779.00	3765360.00	0.11885
439784.00	3765360.00	0.11884	
	439789.00	3765360.00	0.11883
439794.00	3765360.00	0.11882	
	439799.00	3765360.00	0.11880
439804.00	3765360.00	0.11878	
	439809.00	3765360.00	0.11876
439814.00	3765360.00	0.11874	
	439839.00	3765360.00	0.11859
439844.00	3765360.00	0.11855	
	439849.00	3765360.00	0.11851
439854.00	3765360.00	0.11847	
	439859.00	3765360.00	0.11842
439864.00	3765360.00	0.11837	
	439869.00	3765360.00	0.11832
439874.00	3765360.00	0.11827	
	439879.00	3765360.00	0.11821
439884.00	3765360.00	0.11815	
	439674.00	3765365.00	0.12043
439679.00	3765365.00	0.12046	
	439684.00	3765365.00	0.12048
439689.00	3765365.00	0.12051	
	439694.00	3765365.00	0.12053
439699.00	3765365.00	0.12055	
	439704.00	3765365.00	0.12057
439709.00	3765365.00	0.12058	
	439714.00	3765365.00	0.12060
439719.00	3765365.00	0.12061	
	439729.00	3765365.00	0.12064
439734.00	3765365.00	0.12065	

	439739.00	3765365.00	0.12066
439744.00	3765365.00	0.12066	
	439749.00	3765365.00	0.12067
439774.00	3765365.00	0.12066	
	439779.00	3765365.00	0.12066
439784.00	3765365.00	0.12065	
	439789.00	3765365.00	0.12064
439794.00	3765365.00	0.12063	
	439799.00	3765365.00	0.12062
439804.00	3765365.00	0.12060	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439809.00	3765365.00	0.12058
439814.00	3765365.00	0.12056
439839.00	3765365.00	0.12042
439844.00	3765365.00	0.12039
439849.00	3765365.00	0.12035
439854.00	3765365.00	0.12031
439859.00	3765365.00	0.12027
439864.00	3765365.00	0.12022
439869.00	3765365.00	0.12017
439874.00	3765365.00	0.12012
439879.00	3765365.00	0.12006
439884.00	3765365.00	0.12001
439674.00	3765370.00	0.12224
439679.00	3765370.00	0.12226
439684.00	3765370.00	0.12229
439689.00	3765370.00	0.12232
439694.00	3765370.00	0.12234
439699.00	3765370.00	0.12236

	439704.00	3765370.00	0.12238
439709.00	3765370.00	0.12240	
	439714.00	3765370.00	0.12242
439719.00	3765370.00	0.12244	
	439729.00	3765370.00	0.12247
439734.00	3765370.00	0.12248	
	439739.00	3765370.00	0.12249
439744.00	3765370.00	0.12250	
	439749.00	3765370.00	0.12250
439774.00	3765370.00	0.12251	
	439779.00	3765370.00	0.12251
439784.00	3765370.00	0.12251	
	439789.00	3765370.00	0.12250
439794.00	3765370.00	0.12249	
	439799.00	3765370.00	0.12248
439804.00	3765370.00	0.12247	
	439809.00	3765370.00	0.12245
439814.00	3765370.00	0.12243	
	439839.00	3765370.00	0.12231
439844.00	3765370.00	0.12228	
	439849.00	3765370.00	0.12224
439854.00	3765370.00	0.12220	
	439859.00	3765370.00	0.12216
439864.00	3765370.00	0.12212	
	439869.00	3765370.00	0.12207
439874.00	3765370.00	0.12202	
	439879.00	3765370.00	0.12197
439884.00	3765370.00	0.12191	
	439674.00	3765375.00	0.12409
439679.00	3765375.00	0.12412	
	439684.00	3765375.00	0.12415
439689.00	3765375.00	0.12417	
	439694.00	3765375.00	0.12420
439699.00	3765375.00	0.12423	
	439704.00	3765375.00	0.12425
439709.00	3765375.00	0.12427	
	439714.00	3765375.00	0.12429
439719.00	3765375.00	0.12431	
	439729.00	3765375.00	0.12434
439734.00	3765375.00	0.12436	
	439739.00	3765375.00	0.12437
439744.00	3765375.00	0.12438	
	439749.00	3765375.00	0.12439
439754.00	3765375.00	0.12440	
	439774.00	3765375.00	0.12442
439779.00	3765375.00	0.12442	
	439784.00	3765375.00	0.12441
439789.00	3765375.00	0.12441	
	439794.00	3765375.00	0.12440
439799.00	3765375.00	0.12439	
	439804.00	3765375.00	0.12438
439809.00	3765375.00	0.12437	

	439814.00	3765375.00	0.12435
439839.00	3765375.00	0.12424	
	439844.00	3765375.00	0.12421
439849.00	3765375.00	0.12418	
	439854.00	3765375.00	0.12415
439859.00	3765375.00	0.12411	
	439864.00	3765375.00	0.12407
439869.00	3765375.00	0.12402	
	439874.00	3765375.00	0.12398
439879.00	3765375.00	0.12393	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439884.00	3765375.00	0.12388
439774.00	3765380.00	0.12637
439779.00	3765380.00	0.12637
439784.00	3765380.00	0.12637
439789.00	3765380.00	0.12637
439794.00	3765380.00	0.12637
439799.00	3765380.00	0.12636
439804.00	3765380.00	0.12635
439809.00	3765380.00	0.12634
439814.00	3765380.00	0.12633
439769.00	3765385.00	0.12837
439819.00	3765385.00	0.12835
439769.00	3765400.00	0.13474
439844.00	3765400.00	0.13476
439849.00	3765400.00	0.13475
439674.00	3765405.00	0.13636
439714.00	3765405.00	0.13668
439719.00	3765405.00	0.13672

	439734.00	3765405.00	0.13681
439749.00	3765405.00	0.13689	
	439754.00	3765405.00	0.13692
439774.00	3765405.00	0.13700	
	439779.00	3765405.00	0.13702
439784.00	3765405.00	0.13704	
	439789.00	3765405.00	0.13705
439794.00	3765405.00	0.13706	
	439799.00	3765405.00	0.13707
439804.00	3765405.00	0.13708	
	439809.00	3765405.00	0.13709
439814.00	3765405.00	0.13709	
	439819.00	3765405.00	0.13709
439824.00	3765405.00	0.13709	
	439829.00	3765405.00	0.13709
439834.00	3765405.00	0.13708	
	439839.00	3765405.00	0.13707
439844.00	3765405.00	0.13706	
	439849.00	3765405.00	0.13705
439854.00	3765405.00	0.13703	
	439859.00	3765405.00	0.13701
439674.00	3765410.00	0.13862	
	439679.00	3765410.00	0.13867
439684.00	3765410.00	0.13872	
	439689.00	3765410.00	0.13876
439694.00	3765410.00	0.13880	
	439699.00	3765410.00	0.13885
439704.00	3765410.00	0.13889	
	439709.00	3765410.00	0.13893
439714.00	3765410.00	0.13897	
	439719.00	3765410.00	0.13900
439729.00	3765410.00	0.13907	
	439734.00	3765410.00	0.13911
439739.00	3765410.00	0.13914	
	439744.00	3765410.00	0.13917
439749.00	3765410.00	0.13920	
	439774.00	3765410.00	0.13932
439779.00	3765410.00	0.13934	
	439784.00	3765410.00	0.13936
439789.00	3765410.00	0.13938	
	439794.00	3765410.00	0.13940
439799.00	3765410.00	0.13941	
	439804.00	3765410.00	0.13942
439809.00	3765410.00	0.13943	
	439814.00	3765410.00	0.13944
439819.00	3765410.00	0.13944	
	439824.00	3765410.00	0.13944
439829.00	3765410.00	0.13944	
	439834.00	3765410.00	0.13944
439839.00	3765410.00	0.13944	
	439844.00	3765410.00	0.13943
439849.00	3765410.00	0.13942	

	439854.00	3765410.00	0.13941
439859.00	3765410.00	0.13939	
	439674.00	3765415.00	0.14095
439679.00	3765415.00	0.14100	
	439684.00	3765415.00	0.14105
439689.00	3765415.00	0.14110	
	439694.00	3765415.00	0.14115
439699.00	3765415.00	0.14119	
	439704.00	3765415.00	0.14124
439709.00	3765415.00	0.14128	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439714.00	3765415.00	0.14132
439719.00	3765415.00	0.14136
439729.00	3765415.00	0.14144
439734.00	3765415.00	0.14147
439739.00	3765415.00	0.14151
439744.00	3765415.00	0.14154
439749.00	3765415.00	0.14158
439774.00	3765415.00	0.14172
439779.00	3765415.00	0.14174
439784.00	3765415.00	0.14176
439789.00	3765415.00	0.14178
439794.00	3765415.00	0.14180
439799.00	3765415.00	0.14182
439804.00	3765415.00	0.14183
439809.00	3765415.00	0.14185
439814.00	3765415.00	0.14186
439819.00	3765415.00	0.14186
439824.00	3765415.00	0.14187

	439829.00	3765415.00	0.14188
439834.00	3765415.00	0.14188	
	439839.00	3765415.00	0.14188
439844.00	3765415.00	0.14187	
	439849.00	3765415.00	0.14187
439854.00	3765415.00	0.14186	
	439859.00	3765415.00	0.14185
439674.00	3765420.00	0.14336	
	439679.00	3765420.00	0.14341
439684.00	3765420.00	0.14347	
	439689.00	3765420.00	0.14352
439694.00	3765420.00	0.14357	
	439699.00	3765420.00	0.14361
439704.00	3765420.00	0.14366	
	439709.00	3765420.00	0.14371
439714.00	3765420.00	0.14375	
	439719.00	3765420.00	0.14379
439729.00	3765420.00	0.14388	
	439734.00	3765420.00	0.14392
439739.00	3765420.00	0.14395	
	439744.00	3765420.00	0.14399
439749.00	3765420.00	0.14403	
	439774.00	3765420.00	0.14418
439779.00	3765420.00	0.14421	
	439784.00	3765420.00	0.14423
439789.00	3765420.00	0.14426	
	439794.00	3765420.00	0.14428
439799.00	3765420.00	0.14430	
	439804.00	3765420.00	0.14432
439809.00	3765420.00	0.14434	
	439814.00	3765420.00	0.14435
439819.00	3765420.00	0.14436	
	439824.00	3765420.00	0.14437
439829.00	3765420.00	0.14438	
	439834.00	3765420.00	0.14439
439839.00	3765420.00	0.14439	
	439844.00	3765420.00	0.14439
439849.00	3765420.00	0.14439	
	439854.00	3765420.00	0.14439
439859.00	3765420.00	0.14438	
	439674.00	3765425.00	0.14584
439679.00	3765425.00	0.14590	
	439684.00	3765425.00	0.14596
439689.00	3765425.00	0.14601	
	439694.00	3765425.00	0.14606
439699.00	3765425.00	0.14611	
	439704.00	3765425.00	0.14616
439709.00	3765425.00	0.14621	
	439714.00	3765425.00	0.14626
439719.00	3765425.00	0.14630	
	439729.00	3765425.00	0.14639
439734.00	3765425.00	0.14643	

	439739.00	3765425.00	0.14648
439744.00	3765425.00	0.14652	
	439749.00	3765425.00	0.14656
439774.00	3765425.00	0.14673	
	439779.00	3765425.00	0.14676
439784.00	3765425.00	0.14679	
	439789.00	3765425.00	0.14682
439794.00	3765425.00	0.14684	
	439799.00	3765425.00	0.14686
439804.00	3765425.00	0.14689	

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439809.00	3765425.00	0.14691
439814.00	3765425.00	0.14693
439819.00	3765425.00	0.14694
439824.00	3765425.00	0.14696
439829.00	3765425.00	0.14697
439834.00	3765425.00	0.14698
439839.00	3765425.00	0.14699
439844.00	3765425.00	0.14699
439849.00	3765425.00	0.14699
439854.00	3765425.00	0.14699
439859.00	3765425.00	0.14699
439674.00	3765430.00	0.14841
439679.00	3765430.00	0.14847
439684.00	3765430.00	0.14853
439689.00	3765430.00	0.14858
439694.00	3765430.00	0.14864
439699.00	3765430.00	0.14869
439704.00	3765430.00	0.14874

	439709.00	3765430.00	0.14880
439714.00	3765430.00	0.14885	
	439719.00	3765430.00	0.14890
439729.00	3765430.00	0.14899	
	439734.00	3765430.00	0.14904
439739.00	3765430.00	0.14908	
	439744.00	3765430.00	0.14912
439749.00	3765430.00	0.14917	
	439774.00	3765430.00	0.14936
439779.00	3765430.00	0.14939	
	439784.00	3765430.00	0.14942
439789.00	3765430.00	0.14945	
	439794.00	3765430.00	0.14948
439799.00	3765430.00	0.14951	
	439804.00	3765430.00	0.14954
439809.00	3765430.00	0.14956	
	439814.00	3765430.00	0.14958
439819.00	3765430.00	0.14961	
	439824.00	3765430.00	0.14962
439829.00	3765430.00	0.14964	
	439834.00	3765430.00	0.14965
439839.00	3765430.00	0.14967	
	439844.00	3765430.00	0.14967
439849.00	3765430.00	0.14968	
	439854.00	3765430.00	0.14968
439859.00	3765430.00	0.14968	
	439674.00	3765435.00	0.15106
439679.00	3765435.00	0.15112	
	439684.00	3765435.00	0.15118
439689.00	3765435.00	0.15124	
	439694.00	3765435.00	0.15130
439699.00	3765435.00	0.15136	
	439704.00	3765435.00	0.15141
439709.00	3765435.00	0.15147	
	439714.00	3765435.00	0.15152
439719.00	3765435.00	0.15158	
	439729.00	3765435.00	0.15168
439734.00	3765435.00	0.15172	
	439739.00	3765435.00	0.15177
439744.00	3765435.00	0.15182	
	439749.00	3765435.00	0.15186
439774.00	3765435.00	0.15207	
	439779.00	3765435.00	0.15211
439784.00	3765435.00	0.15215	
	439789.00	3765435.00	0.15218
439794.00	3765435.00	0.15221	
	439799.00	3765435.00	0.15225
439804.00	3765435.00	0.15228	
	439809.00	3765435.00	0.15230
439814.00	3765435.00	0.15233	
	439819.00	3765435.00	0.15236
439824.00	3765435.00	0.15238	

	439829.00	3765435.00	0.15240
439834.00	3765435.00	0.15242	
	439839.00	3765435.00	0.15243
439844.00	3765435.00	0.15245	
	439849.00	3765435.00	0.15246
439854.00	3765435.00	0.15247	
	439859.00	3765435.00	0.15247
439674.00	3765440.00	0.15380	
	439679.00	3765440.00	0.15387
439684.00	3765440.00	0.15393	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439689.00	3765440.00	0.15399
439694.00	3765440.00	0.15406
439699.00	3765440.00	0.15412
439704.00	3765440.00	0.15417
439709.00	3765440.00	0.15423
439714.00	3765440.00	0.15429
439719.00	3765440.00	0.15434
439729.00	3765440.00	0.15445
439734.00	3765440.00	0.15450
439739.00	3765440.00	0.15455
439744.00	3765440.00	0.15460
439749.00	3765440.00	0.15465
439774.00	3765440.00	0.15488
439779.00	3765440.00	0.15492
439784.00	3765440.00	0.15496
439789.00	3765440.00	0.15500
439794.00	3765440.00	0.15504
439799.00	3765440.00	0.15507

	439804.00	3765440.00	0.15511
439809.00	3765440.00	0.15514	
	439814.00	3765440.00	0.15517
439819.00	3765440.00	0.15520	
	439824.00	3765440.00	0.15523
439829.00	3765440.00	0.15525	
	439834.00	3765440.00	0.15527
439839.00	3765440.00	0.15529	
	439844.00	3765440.00	0.15531
439849.00	3765440.00	0.15533	
	439854.00	3765440.00	0.15534
439859.00	3765440.00	0.15535	
	439674.00	3765445.00	0.15664
439679.00	3765445.00	0.15671	
	439684.00	3765445.00	0.15677
439689.00	3765445.00	0.15684	
	439694.00	3765445.00	0.15690
439699.00	3765445.00	0.15697	
	439704.00	3765445.00	0.15703
439709.00	3765445.00	0.15709	
	439714.00	3765445.00	0.15715
439719.00	3765445.00	0.15721	
	439729.00	3765445.00	0.15732
439734.00	3765445.00	0.15738	
	439739.00	3765445.00	0.15743
439744.00	3765445.00	0.15749	
	439749.00	3765445.00	0.15754
439774.00	3765445.00	0.15778	
	439779.00	3765445.00	0.15783
439784.00	3765445.00	0.15787	
	439789.00	3765445.00	0.15791
439794.00	3765445.00	0.15795	
	439799.00	3765445.00	0.15800
439804.00	3765445.00	0.15803	
	439809.00	3765445.00	0.15807
439814.00	3765445.00	0.15810	
	439819.00	3765445.00	0.15814
439824.00	3765445.00	0.15817	
	439829.00	3765445.00	0.15820
439834.00	3765445.00	0.15823	
	439839.00	3765445.00	0.15825
439844.00	3765445.00	0.15828	
	439849.00	3765445.00	0.15830
439854.00	3765445.00	0.15831	
	439859.00	3765445.00	0.15833
439674.00	3765450.00	0.15958	
	439679.00	3765450.00	0.15965
439684.00	3765450.00	0.15972	
	439689.00	3765450.00	0.15979
439694.00	3765450.00	0.15985	
	439699.00	3765450.00	0.15992
439704.00	3765450.00	0.15999	

	439709.00	3765450.00	0.16005
439714.00	3765450.00	0.16011	
	439719.00	3765450.00	0.16017
439729.00	3765450.00	0.16030	
	439734.00	3765450.00	0.16035
439739.00	3765450.00	0.16041	
	439744.00	3765450.00	0.16047
439749.00	3765450.00	0.16052	
	439774.00	3765450.00	0.16079
439844.00	3765450.00	0.16134	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439849.00	3765450.00	0.16137
439854.00	3765450.00	0.16139
439859.00	3765450.00	0.16141
439674.00	3765455.00	0.16262
439679.00	3765455.00	0.16269
439684.00	3765455.00	0.16277
439689.00	3765455.00	0.16284
439694.00	3765455.00	0.16291
439699.00	3765455.00	0.16298
439704.00	3765455.00	0.16305
439709.00	3765455.00	0.16311
439714.00	3765455.00	0.16318
439719.00	3765455.00	0.16325
439729.00	3765455.00	0.16337
439734.00	3765455.00	0.16344
439739.00	3765455.00	0.16350
439744.00	3765455.00	0.16356
439749.00	3765455.00	0.16362

	439844.00	3765455.00	0.16452
439849.00	3765455.00	0.16455	
	439854.00	3765455.00	0.16458
439859.00	3765455.00	0.16460	
	439674.00	3765460.00	0.16577
439679.00	3765460.00	0.16585	
	439684.00	3765460.00	0.16593
439689.00	3765460.00	0.16600	
	439694.00	3765460.00	0.16608
439699.00	3765460.00	0.16615	
	439704.00	3765460.00	0.16622
439709.00	3765460.00	0.16629	
	439714.00	3765460.00	0.16636
439719.00	3765460.00	0.16643	
	439729.00	3765460.00	0.16656
439734.00	3765460.00	0.16663	
	439739.00	3765460.00	0.16670
439744.00	3765460.00	0.16676	
	439749.00	3765460.00	0.16682
439789.00	3765460.00	0.16729	
	439794.00	3765460.00	0.16735
439799.00	3765460.00	0.16740	
	439804.00	3765460.00	0.16745
439809.00	3765460.00	0.16750	
	439814.00	3765460.00	0.16755
439819.00	3765460.00	0.16760	
	439824.00	3765460.00	0.16764
439829.00	3765460.00	0.16769	
	439844.00	3765460.00	0.16781
439849.00	3765460.00	0.16785	
	439854.00	3765460.00	0.16788
439859.00	3765460.00	0.16791	
	439674.00	3765465.00	0.16904
439679.00	3765465.00	0.16913	
	439684.00	3765465.00	0.16921
439689.00	3765465.00	0.16928	
	439694.00	3765465.00	0.16936
439699.00	3765465.00	0.16944	
	439704.00	3765465.00	0.16951
439709.00	3765465.00	0.16959	
	439714.00	3765465.00	0.16966
439719.00	3765465.00	0.16973	
	439729.00	3765465.00	0.16988
439734.00	3765465.00	0.16994	
	439739.00	3765465.00	0.17001
439744.00	3765465.00	0.17008	
	439749.00	3765465.00	0.17015
439789.00	3765465.00	0.17065	
	439794.00	3765465.00	0.17071
439799.00	3765465.00	0.17076	
	439804.00	3765465.00	0.17082
439809.00	3765465.00	0.17088	

	439814.00	3765465.00	0.17093
439819.00	3765465.00	0.17098	
	439824.00	3765465.00	0.17104
439829.00	3765465.00	0.17109	
	439844.00	3765465.00	0.17123
439849.00	3765465.00	0.17127	
	439854.00	3765465.00	0.17131
439859.00	3765465.00	0.17134	
	439674.00	3765470.00	0.17244
439679.00	3765470.00	0.17253	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439684.00	3765470.00	0.17261
439689.00	3765470.00	0.17269
439694.00	3765470.00	0.17277
439699.00	3765470.00	0.17285
439704.00	3765470.00	0.17293
439709.00	3765470.00	0.17301
439714.00	3765470.00	0.17309
439719.00	3765470.00	0.17316
439729.00	3765470.00	0.17331
439734.00	3765470.00	0.17338
439739.00	3765470.00	0.17346
439744.00	3765470.00	0.17353
439749.00	3765470.00	0.17360
439789.00	3765470.00	0.17413
439794.00	3765470.00	0.17420
439799.00	3765470.00	0.17426
439804.00	3765470.00	0.17432
439809.00	3765470.00	0.17438

	439814.00	3765470.00	0.17444
439819.00	3765470.00	0.17450	
	439824.00	3765470.00	0.17456
439829.00	3765470.00	0.17461	
	439844.00	3765470.00	0.17477
439849.00	3765470.00	0.17482	
	439854.00	3765470.00	0.17486
439859.00	3765470.00	0.17491	
	439674.00	3765475.00	0.17597
439679.00	3765475.00	0.17606	
	439684.00	3765475.00	0.17615
439689.00	3765475.00	0.17623	
	439694.00	3765475.00	0.17632
439699.00	3765475.00	0.17640	
	439704.00	3765475.00	0.17648
439709.00	3765475.00	0.17656	
	439714.00	3765475.00	0.17665
439719.00	3765475.00	0.17673	
	439729.00	3765475.00	0.17688
439734.00	3765475.00	0.17696	
	439739.00	3765475.00	0.17703
439744.00	3765475.00	0.17711	
	439749.00	3765475.00	0.17718
439754.00	3765475.00	0.17726	
	439789.00	3765475.00	0.17775
439794.00	3765475.00	0.17782	
	439799.00	3765475.00	0.17789
439804.00	3765475.00	0.17795	
	439809.00	3765475.00	0.17802
439814.00	3765475.00	0.17808	
	439819.00	3765475.00	0.17815
439824.00	3765475.00	0.17821	
	439829.00	3765475.00	0.17827
439269.00	3764900.00	0.04606	
	439369.00	3764900.00	0.04642
439469.00	3764900.00	0.04639	
	439569.00	3764900.00	0.04597
439669.00	3764900.00	0.04512	
	439769.00	3764900.00	0.04385
439869.00	3764900.00	0.04214	
	439969.00	3764900.00	0.04002
440069.00	3764900.00	0.03753	
	440169.00	3764900.00	0.03475
440269.00	3764900.00	0.03183	
	439269.00	3765000.00	0.05372
439369.00	3765000.00	0.05436	
	439469.00	3765000.00	0.05456
439569.00	3765000.00	0.05430	
	439669.00	3765000.00	0.05356
439769.00	3765000.00	0.05232	
	439869.00	3765000.00	0.05055
439969.00	3765000.00	0.04821	

	440069.00	3765000.00	0.04534
440169.00	3765000.00	0.04199	
	440269.00	3765000.00	0.03833
439269.00	3765100.00	0.06359	
	439369.00	3765100.00	0.06461
439469.00	3765100.00	0.06510	
	439569.00	3765100.00	0.06509
439669.00	3765100.00	0.06456	
	439769.00	3765100.00	0.06346
439869.00	3765100.00	0.06172	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
439969.00	3765100.00	0.05926
440069.00	3765100.00	0.05603
440169.00	3765100.00	0.05206
440269.00	3765100.00	0.04746
439269.00	3765200.00	0.07686
439369.00	3765200.00	0.07837
439469.00	3765200.00	0.07926
439569.00	3765200.00	0.07961
439669.00	3765200.00	0.07941
439769.00	3765200.00	0.07861
439869.00	3765200.00	0.07708
439969.00	3765200.00	0.07466
440069.00	3765200.00	0.07121
440169.00	3765200.00	0.06661
440269.00	3765200.00	0.06089
439269.00	3765300.00	0.09575
439369.00	3765300.00	0.09797
439469.00	3765300.00	0.09947

	439569.00	3765300.00	0.10035
439669.00	3765300.00	0.10068	
	439769.00	3765300.00	0.10042
439869.00	3765300.00	0.09937	
	439969.00	3765300.00	0.09727
440069.00	3765300.00	0.09384	
	440169.00	3765300.00	0.08878
440269.00	3765300.00	0.08184	
	439269.00	3765400.00	0.12516
439369.00	3765400.00	0.12859	
	439469.00	3765400.00	0.13115
439569.00	3765400.00	0.13295	
	439669.00	3765400.00	0.13412
439769.00	3765400.00	0.13474	
	439869.00	3765400.00	0.13465
439969.00	3765400.00	0.13333	
	440069.00	3765400.00	0.13031
440169.00	3765400.00	0.12517	
	440269.00	3765400.00	0.11721
439269.00	3765500.00	0.17876	
	439369.00	3765500.00	0.18478
439469.00	3765500.00	0.18961	
	439569.00	3765500.00	0.19322
439669.00	3765500.00	0.19582	
	439769.00	3765500.00	0.19781
439869.00	3765500.00	0.19964	
	439969.00	3765500.00	0.20029
440069.00	3765500.00	0.19829	
	440169.00	3765500.00	0.19359
440269.00	3765500.00	0.18527	
	439269.00	3765600.00	0.31632
439369.00	3765600.00	0.32940	
	439469.00	3765600.00	0.34044
439569.00	3765600.00	0.34849	
	439669.00	3765600.00	0.35423
439769.00	3765600.00	0.35865	
	439869.00	3765600.00	0.36362
439969.00	3765600.00	0.37453	
	440069.00	3765600.00	0.37423
440169.00	3765600.00	0.36957	
	440269.00	3765600.00	0.36104
439269.00	3765700.00	1.67000	
	439369.00	3765700.00	1.75481
439469.00	3765700.00	1.85402	
	439569.00	3765700.00	1.93748
439669.00	3765700.00	1.99410	
	439769.00	3765700.00	2.03560
439869.00	3765700.00	2.05444	
	439969.00	3765700.00	2.07937
440069.00	3765700.00	2.11887	
	440169.00	3765700.00	2.14786
440269.00	3765700.00	2.18082	

	439269.00	3765800.00	0.55059
439369.00	3765800.00	0.58078	
	439469.00	3765800.00	0.60591
439569.00	3765800.00	0.62930	
	439669.00	3765800.00	0.64728
439769.00	3765800.00	0.66861	
	439869.00	3765800.00	0.69784
439969.00	3765800.00	0.66347	
	440069.00	3765800.00	0.65659
440169.00	3765800.00	0.65426	

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE PERIOD ( 43848 HRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
440269.00	3765800.00	0.65258
439269.00	3765900.00	0.20138
439369.00	3765900.00	0.23137
439469.00	3765900.00	0.25454
439569.00	3765900.00	0.27290
439669.00	3765900.00	0.28770
439769.00	3765900.00	0.29954
439869.00	3765900.00	0.30880
439969.00	3765900.00	0.31495
440069.00	3765900.00	0.31797
440169.00	3765900.00	0.31964
440269.00	3765900.00	0.32025
439649.00	3765310.00	0.10330
439679.00	3765310.00	0.10335
439709.00	3765310.00	0.10334
439739.00	3765310.00	0.10327
439769.00	3765310.00	0.10314
439799.00	3765310.00	0.10295

	439829.00	3765310.00	0.10267
439859.00	3765310.00	0.10231	
	439889.00	3765310.00	0.10185
439649.00	3765340.00	0.11199	
	439679.00	3765340.00	0.11211
439709.00	3765340.00	0.11217	
	439739.00	3765340.00	0.11217
439769.00	3765340.00	0.11211	
	439799.00	3765340.00	0.11199
439829.00	3765340.00	0.11179	
	439859.00	3765340.00	0.11150
439889.00	3765340.00	0.11111	
	439649.00	3765370.00	0.12208
439679.00	3765370.00	0.12226	
	439709.00	3765370.00	0.12240
439739.00	3765370.00	0.12249	
	439769.00	3765370.00	0.12252
439799.00	3765370.00	0.12248	
	439829.00	3765370.00	0.12237
439859.00	3765370.00	0.12216	
	439889.00	3765370.00	0.12186
439649.00	3765400.00	0.13393	
	439679.00	3765400.00	0.13420
439709.00	3765400.00	0.13443	
	439739.00	3765400.00	0.13461
439769.00	3765400.00	0.13474	
	439799.00	3765400.00	0.13480
439829.00	3765400.00	0.13480	
	439859.00	3765400.00	0.13471
439889.00	3765400.00	0.13450	
	439649.00	3765430.00	0.14810
439679.00	3765430.00	0.14847	
	439709.00	3765430.00	0.14880
439739.00	3765430.00	0.14908	
	439769.00	3765430.00	0.14932
439799.00	3765430.00	0.14951	
	439829.00	3765430.00	0.14964
439859.00	3765430.00	0.14968	
	439889.00	3765430.00	0.14962
439649.00	3765460.00	0.16536	
	439679.00	3765460.00	0.16585
439709.00	3765460.00	0.16629	
	439739.00	3765460.00	0.16670
439769.00	3765460.00	0.16706	
	439799.00	3765460.00	0.16740
439829.00	3765460.00	0.16769	
	439859.00	3765460.00	0.16791
439889.00	3765460.00	0.16803	
	439649.00	3765490.00	0.18692
439679.00	3765490.00	0.18754	
	439709.00	3765490.00	0.18812
439739.00	3765490.00	0.18865	

	439769.00	3765490.00	0.18917
439799.00	3765490.00	0.18967	
	439829.00	3765490.00	0.19015
439859.00	3765490.00	0.19061	
	439889.00	3765490.00	0.19098

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439674.00	3765310.00	1.31612	(13120808)
439679.00	3765310.00	1.31670	(13120808)
439684.00	3765310.00	1.31705	(13120808)
439689.00	3765310.00	1.31782	(13120808)
439694.00	3765310.00	1.31803	(13120808)
439699.00	3765310.00	1.31894	(13120808)
439704.00	3765310.00	1.31920	(13120808)
439709.00	3765310.00	1.32027	(13120808)
439714.00	3765310.00	1.32024	(13120808)
439719.00	3765310.00	1.32148	(13120808)
439729.00	3765310.00	1.32258	(13120808)
439734.00	3765310.00	1.32296	(13120808)
439739.00	3765310.00	1.32370	(13120808)
439744.00	3765310.00	1.32434	(13120808)
439749.00	3765310.00	1.32490	(13120808)
439764.00	3765310.00	1.32726	(13120808)
439769.00	3765310.00	1.32752	(13120808)

439774.00	3765310.00	1.32859	(13120808)
	439779.00	3765310.00	1.32889 (13120808)
439784.00	3765310.00	1.32992	(13120808)
	439789.00	3765310.00	1.33004 (13120808)
439794.00	3765310.00	1.33092	(13120808)
	439799.00	3765310.00	1.33138 (13120808)
439804.00	3765310.00	1.33171	(13120808)
	439809.00	3765310.00	1.33224 (13120808)
439814.00	3765310.00	1.33253	(13120808)
	439819.00	3765310.00	1.33326 (13120808)
439824.00	3765310.00	1.33321	(13120808)
	439829.00	3765310.00	1.33388 (13120808)
439839.00	3765310.00	1.33458	(13120808)
	439844.00	3765310.00	1.33421 (13120808)
439849.00	3765310.00	1.33489	(13120808)
	439854.00	3765310.00	1.33438 (13120808)
439859.00	3765310.00	1.33500	(13120808)
	439864.00	3765310.00	1.33445 (13120808)
439869.00	3765310.00	1.33451	(13120808)
	439874.00	3765310.00	1.33440 (13120808)
439879.00	3765310.00	1.33413	(13120808)
	439884.00	3765310.00	1.33419 (13120808)
439674.00	3765315.00	1.32690	(13120808)
	439679.00	3765315.00	1.32790 (13120808)
439684.00	3765315.00	1.32777	(13120808)
	439689.00	3765315.00	1.32893 (13120808)
439694.00	3765315.00	1.32893	(13120808)
	439699.00	3765315.00	1.32961 (13120808)
439704.00	3765315.00	1.33012	(13120808)
	439709.00	3765315.00	1.33071 (13120808)
439714.00	3765315.00	1.33148	(13120808)
	439719.00	3765315.00	1.33173 (13120808)
439729.00	3765315.00	1.33318	(13120808)
	439734.00	3765315.00	1.33411 (13120808)
439739.00	3765315.00	1.33443	(13120808)
	439744.00	3765315.00	1.33565 (13120808)
439749.00	3765315.00	1.33592	(13120808)
	439764.00	3765315.00	1.33823 (13120808)
439769.00	3765315.00	1.33881	(13120808)
	439774.00	3765315.00	1.33935 (13120808)
439779.00	3765315.00	1.34020	(13120808)
	439784.00	3765315.00	1.34061 (13120808)
439789.00	3765315.00	1.34153	(13120808)
	439794.00	3765315.00	1.34174 (13120808)
439799.00	3765315.00	1.34274	(13120808)
	439804.00	3765315.00	1.34295 (13120808)
439809.00	3765315.00	1.34398	(13120808)
	439814.00	3765315.00	1.34391 (13120808)
439819.00	3765315.00	1.34486	(13120808)
	439824.00	3765315.00	1.34489 (13120808)
439829.00	3765315.00	1.34540	(13120808)
	439839.00	3765315.00	1.34572 (13120808)

439844.00	3765315.00	1.34618	(13120808)
	439849.00	3765315.00	1.34603 (13120808)
439854.00	3765315.00	1.34633	(13120808)
	439859.00	3765315.00	1.34623 (13120808)
439864.00	3765315.00	1.34661	(13120808)
	439869.00	3765315.00	1.34627 (13120808)
439874.00	3765315.00	1.34651	(13120808)
	439879.00	3765315.00	1.34605 (13120808)
439884.00	3765315.00	1.34646	(13120808)
	439674.00	3765320.00	1.33823 (13120808)
439679.00	3765320.00	1.33856	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439684.00	3765320.00	1.33904	(13120808)
439689.00	3765320.00	1.33944	(13120808)
439694.00	3765320.00	1.34029	(13120808)
439699.00	3765320.00	1.34055	(13120808)
439704.00	3765320.00	1.34142	(13120808)
439709.00	3765320.00	1.34158	(13120808)
439714.00	3765320.00	1.34294	(13120808)
439719.00	3765320.00	1.34292	(13120808)
439729.00	3765320.00	1.34427	(13120808)
439734.00	3765320.00	1.34523	(13120808)
439739.00	3765320.00	1.34572	(13120808)
439744.00	3765320.00	1.34643	(13120808)
439749.00	3765320.00	1.34715	(13120808)
439764.00	3765320.00	1.34917	(13120808)
439769.00	3765320.00	1.35023	(13120808)
439774.00	3765320.00	1.35066	(13120808)
439779.00	3765320.00	1.35174	(13120808)

439784.00	3765320.00	1.35197	(13120808)
	439789.00	3765320.00	1.35316 (13120808)
439794.00	3765320.00	1.35331	(13120808)
	439799.00	3765320.00	1.35415 (13120808)
439804.00	3765320.00	1.35449	(13120808)
	439809.00	3765320.00	1.35519 (13120808)
439814.00	3765320.00	1.35568	(13120808)
	439819.00	3765320.00	1.35610 (13120808)
439824.00	3765320.00	1.35667	(13120808)
	439829.00	3765320.00	1.35692 (13120808)
439839.00	3765320.00	1.35748	(13120808)
	439844.00	3765320.00	1.35817 (13120808)
439849.00	3765320.00	1.35800	(13120808)
	439854.00	3765320.00	1.35861 (13120808)
439859.00	3765320.00	1.35823	(13120808)
	439864.00	3765320.00	1.35853 (13120808)
439869.00	3765320.00	1.35847	(13120808)
	439874.00	3765320.00	1.35833 (13120808)
439879.00	3765320.00	1.35833	(13120808)
	439884.00	3765320.00	1.35809 (13120808)
439674.00	3765325.00	1.34958	(13120808)
	439679.00	3765325.00	1.34997 (13120808)
439684.00	3765325.00	1.35058	(13120808)
	439689.00	3765325.00	1.35082 (13120808)
439694.00	3765325.00	1.35145	(13120808)
	439699.00	3765325.00	1.35212 (13120808)
439704.00	3765325.00	1.35248	(13120808)
	439709.00	3765325.00	1.35321 (13120808)
439714.00	3765325.00	1.35367	(13120808)
	439719.00	3765325.00	1.35448 (13120808)
439729.00	3765325.00	1.35586	(13120808)
	439734.00	3765325.00	1.35627 (13120808)
439739.00	3765325.00	1.35747	(13120808)
	439744.00	3765325.00	1.35785 (13120808)
439749.00	3765325.00	1.35883	(13120808)
	439754.00	3765325.00	1.35925 (13120808)
439769.00	3765325.00	1.36165	(13120808)
	439774.00	3765325.00	1.36226 (13120808)
439779.00	3765325.00	1.36296	(13120808)
	439784.00	3765325.00	1.36375 (13120808)
439789.00	3765325.00	1.36430	(13120808)
	439794.00	3765325.00	1.36514 (13120808)
439799.00	3765325.00	1.36562	(13120808)
	439804.00	3765325.00	1.36653 (13120808)
439809.00	3765325.00	1.36680	(13120808)
	439814.00	3765325.00	1.36769 (13120808)
439819.00	3765325.00	1.36800	(13120808)
	439824.00	3765325.00	1.36876 (13120808)
439829.00	3765325.00	1.36889	(13120808)
	439839.00	3765325.00	1.36970 (13120808)
439844.00	3765325.00	1.36997	(13120808)
	439849.00	3765325.00	1.37023 (13120808)

439854.00	3765325.00	1.37042	(13120808)
	439859.00	3765325.00	1.37062 (13120808)
439864.00	3765325.00	1.37059	(13120808)
	439869.00	3765325.00	1.37086 (13120808)
439874.00	3765325.00	1.37063	(13120808)
	439879.00	3765325.00	1.37093 (13120808)
439884.00	3765325.00	1.37041	(13120808)
	439674.00	3765330.00	1.36097 (13120808)
439679.00	3765330.00	1.36130	(13120808)
	439684.00	3765330.00	1.36198 (13120808)
439689.00	3765330.00	1.36246	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439694.00	3765330.00	1.36278	(13120808)
439699.00	3765330.00	1.36353	(13120808)
439704.00	3765330.00	1.36396	(13120808)
439709.00	3765330.00	1.36499	(13120808)
439714.00	3765330.00	1.36520	(13120808)
439719.00	3765330.00	1.36616	(13120808)
439729.00	3765330.00	1.36754	(13120808)
439734.00	3765330.00	1.36805	(13120808)
439739.00	3765330.00	1.36870	(13120808)
439744.00	3765330.00	1.36958	(13120808)
439749.00	3765330.00	1.37026	(13120808)
439754.00	3765330.00	1.37112	(13120808)
439774.00	3765330.00	1.37429	(13120808)
439779.00	3765330.00	1.37461	(13120808)
439784.00	3765330.00	1.37595	(13120808)
439789.00	3765330.00	1.37618	(13120808)
439794.00	3765330.00	1.37722	(13120808)

439799.00	3765330.00	1.37753	(13120808)
	439804.00	3765330.00	1.37849 (13120808)
439809.00	3765330.00	1.37888	(13120808)
	439814.00	3765330.00	1.37957 (13120808)
439819.00	3765330.00	1.38010	(13120808)
	439824.00	3765330.00	1.38069 (13120808)
439829.00	3765330.00	1.38122	(13120808)
	439839.00	3765330.00	1.38211 (13120808)
439844.00	3765330.00	1.38229	(13120808)
	439849.00	3765330.00	1.38288 (13120808)
439854.00	3765330.00	1.38277	(13120808)
	439859.00	3765330.00	1.38323 (13120808)
439864.00	3765330.00	1.38324	(13120808)
	439869.00	3765330.00	1.38323 (13120808)
439874.00	3765330.00	1.38337	(13120808)
	439879.00	3765330.00	1.38333 (13120808)
439884.00	3765330.00	1.38324	(13120808)
	439674.00	3765335.00	1.37292 (13120808)
439679.00	3765335.00	1.37324	(13120808)
	439684.00	3765335.00	1.37362 (13120808)
439689.00	3765335.00	1.37434	(13120808)
	439694.00	3765335.00	1.37473 (13120808)
439699.00	3765335.00	1.37529	(13120808)
	439704.00	3765335.00	1.37567 (13120808)
439709.00	3765335.00	1.37655	(13120808)
	439714.00	3765335.00	1.37711 (13120808)
439719.00	3765335.00	1.37777	(13120808)
	439729.00	3765335.00	1.37918 (13120808)
439734.00	3765335.00	1.38007	(13120808)
	439739.00	3765335.00	1.38058 (13120808)
439744.00	3765335.00	1.38132	(13120808)
	439749.00	3765335.00	1.38213 (13120808)
439774.00	3765335.00	1.38613	(13120808)
	439779.00	3765335.00	1.38685 (13120808)
439784.00	3765335.00	1.38754	(13120808)
	439789.00	3765335.00	1.38848 (13120808)
439794.00	3765335.00	1.38916	(13120808)
	439839.00	3765335.00	1.39456 (13120808)
439844.00	3765335.00	1.39484	(13120808)
	439849.00	3765335.00	1.39534 (13120808)
439854.00	3765335.00	1.39555	(13120808)
	439859.00	3765335.00	1.39570 (13120808)
439864.00	3765335.00	1.39607	(13120808)
	439869.00	3765335.00	1.39591 (13120808)
439874.00	3765335.00	1.39628	(13120808)
	439879.00	3765335.00	1.39603 (13120808)
439884.00	3765335.00	1.39648	(13120808)
	439674.00	3765340.00	1.38492 (13120808)
439679.00	3765340.00	1.38545	(13120808)
	439684.00	3765340.00	1.38575 (13120808)
439689.00	3765340.00	1.38612	(13120808)
	439694.00	3765340.00	1.38688 (13120808)

439699.00	3765340.00	1.38718	(13120808)
	439704.00	3765340.00	1.38802 (13120808)
439709.00	3765340.00	1.38828	(13120808)
	439714.00	3765340.00	1.38932 (13120808)
439719.00	3765340.00	1.38983	(13120808)
	439729.00	3765340.00	1.39116 (13120808)
439734.00	3765340.00	1.39211	(13120808)
	439739.00	3765340.00	1.39287 (13120808)
439744.00	3765340.00	1.39346	(13120808)
	439749.00	3765340.00	1.39425 (13120808)
439774.00	3765340.00	1.39816	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439779.00	3765340.00	1.39948	(13120808)
439784.00	3765340.00	1.39982	(13120808)
439789.00	3765340.00	1.40080	(13120808)
439794.00	3765340.00	1.40141	(13120808)
439839.00	3765340.00	1.40723	(13120808)
439844.00	3765340.00	1.40792	(13120808)
439849.00	3765340.00	1.40814	(13120808)
439854.00	3765340.00	1.40867	(13120808)
439859.00	3765340.00	1.40874	(13120808)
439864.00	3765340.00	1.40913	(13120808)
439869.00	3765340.00	1.40916	(13120808)
439874.00	3765340.00	1.40939	(13120808)
439879.00	3765340.00	1.40915	(13120808)
439884.00	3765340.00	1.40940	(13120808)
439674.00	3765345.00	1.39736	(13120808)
439679.00	3765345.00	1.39767	(13120808)
439684.00	3765345.00	1.39832	(13120808)

439689.00	3765345.00	1.39860	(13120808)
	439694.00	3765345.00	1.39929 (13120808)
439699.00	3765345.00	1.39942	(13120808)
	439704.00	3765345.00	1.40043 (13120808)
439709.00	3765345.00	1.40056	(13120808)
	439714.00	3765345.00	1.40155 (13120808)
439719.00	3765345.00	1.40214	(13120808)
	439729.00	3765345.00	1.40350 (13120808)
439734.00	3765345.00	1.40432	(13120808)
	439739.00	3765345.00	1.40501 (13120808)
439744.00	3765345.00	1.40599	(13120808)
	439749.00	3765345.00	1.40677 (13120808)
439774.00	3765345.00	1.41072	(13120808)
	439779.00	3765345.00	1.41175 (13120808)
439784.00	3765345.00	1.41273	(13120808)
	439789.00	3765345.00	1.41332 (13120808)
439794.00	3765345.00	1.41414	(13120808)
	439839.00	3765345.00	1.42026 (13120808)
439844.00	3765345.00	1.42095	(13120808)
	439849.00	3765345.00	1.42138 (13120808)
439854.00	3765345.00	1.42167	(13120808)
	439859.00	3765345.00	1.42214 (13120808)
439864.00	3765345.00	1.42217	(13120808)
	439869.00	3765345.00	1.42267 (13120808)
439874.00	3765345.00	1.42256	(13120808)
	439879.00	3765345.00	1.42302 (13120808)
439884.00	3765345.00	1.42277	(13120808)
	439674.00	3765350.00	1.41020 (13120808)
439679.00	3765350.00	1.41050	(13120808)
	439684.00	3765350.00	1.41061 (13120808)
439689.00	3765350.00	1.41121	(13120808)
	439694.00	3765350.00	1.41175 (13120808)
439699.00	3765350.00	1.41237	(13120808)
	439704.00	3765350.00	1.41270 (13120808)
439709.00	3765350.00	1.41346	(13120808)
	439714.00	3765350.00	1.41403 (13120808)
439719.00	3765350.00	1.41480	(13120808)
	439729.00	3765350.00	1.41626 (13120808)
439734.00	3765350.00	1.41695	(13120808)
	439739.00	3765350.00	1.41777 (13120808)
439744.00	3765350.00	1.41853	(13120808)
	439749.00	3765350.00	1.41937 (13120808)
439774.00	3765350.00	1.42368	(13120808)
	439779.00	3765350.00	1.42449 (13120808)
439784.00	3765350.00	1.42546	(13120808)
	439789.00	3765350.00	1.42636 (13120808)
439794.00	3765350.00	1.42723	(13120808)
	439839.00	3765350.00	1.43369 (13120808)
439844.00	3765350.00	1.43417	(13120808)
	439849.00	3765350.00	1.43492 (13120808)
439854.00	3765350.00	1.43518	(13120808)
	439859.00	3765350.00	1.43562 (13120808)

439864.00	3765350.00	1.43586	(13120808)
	439869.00	3765350.00	1.43637 (13120808)
439874.00	3765350.00	1.43611	(13120808)
	439879.00	3765350.00	1.43654 (13120808)
439884.00	3765350.00	1.43653	(13120808)
	439674.00	3765355.00	1.42294 (13120808)
439679.00	3765355.00	1.42365	(13120808)
	439684.00	3765355.00	1.42382 (13120808)
439689.00	3765355.00	1.42425	(13120808)
	439694.00	3765355.00	1.42441 (13120808)
439699.00	3765355.00	1.42554	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439704.00	3765355.00	1.42553	(13120808)
439709.00	3765355.00	1.42624	(13120808)
439714.00	3765355.00	1.42691	(13120808)
439719.00	3765355.00	1.42775	(13120808)
439729.00	3765355.00	1.42894	(13120808)
439734.00	3765355.00	1.42972	(13120808)
439739.00	3765355.00	1.43066	(13120808)
439744.00	3765355.00	1.43159	(13120808)
439749.00	3765355.00	1.43222	(13120808)
439774.00	3765355.00	1.43686	(13120808)
439779.00	3765355.00	1.43768	(13120808)
439784.00	3765355.00	1.43864	(13120808)
439789.00	3765355.00	1.43951	(13120808)
439794.00	3765355.00	1.44054	(13120808)
439839.00	3765355.00	1.44730	(13120808)
439844.00	3765355.00	1.44779	(13120808)
439849.00	3765355.00	1.44849	(13120808)

439854.00	3765355.00	1.44913	(13120808)
	439859.00	3765355.00	1.44922 (13120808)
439864.00	3765355.00	1.44963	(13120808)
	439869.00	3765355.00	1.45009 (13120808)
439874.00	3765355.00	1.45044	(13120808)
	439879.00	3765355.00	1.45049 (13120808)
439884.00	3765355.00	1.45048	(13120808)
	439674.00	3765360.00	1.43629 (13120808)
439679.00	3765360.00	1.43659	(13120808)
	439684.00	3765360.00	1.43719 (13120808)
439689.00	3765360.00	1.43748	(13120808)
	439694.00	3765360.00	1.43779 (13120808)
439699.00	3765360.00	1.43844	(13120808)
	439704.00	3765360.00	1.43912 (13120808)
439709.00	3765360.00	1.43957	(13120808)
	439714.00	3765360.00	1.43996 (13120808)
439719.00	3765360.00	1.44072	(13120808)
	439729.00	3765360.00	1.44219 (13120808)
439734.00	3765360.00	1.44296	(13120808)
	439739.00	3765360.00	1.44379 (13120808)
439744.00	3765360.00	1.44483	(13120808)
	439749.00	3765360.00	1.44544 (13120808)
439774.00	3765360.00	1.45009	(13120808)
	439779.00	3765360.00	1.45097 (13120808)
439784.00	3765360.00	1.45205	(13120808)
	439789.00	3765360.00	1.45317 (13120808)
439794.00	3765360.00	1.45390	(13120808)
	439799.00	3765360.00	1.45480 (13120808)
439804.00	3765360.00	1.45575	(13120808)
	439809.00	3765360.00	1.45668 (13120808)
439814.00	3765360.00	1.45742	(13120808)
	439839.00	3765360.00	1.46128 (13120808)
439844.00	3765360.00	1.46175	(13120808)
	439849.00	3765360.00	1.46239 (13120808)
439854.00	3765360.00	1.46320	(13120808)
	439859.00	3765360.00	1.46353 (13120808)
439864.00	3765360.00	1.46392	(13120808)
	439869.00	3765360.00	1.46395 (13120808)
439874.00	3765360.00	1.46469	(13120808)
	439879.00	3765360.00	1.46480 (13120808)
439884.00	3765360.00	1.46482	(13120808)
	439674.00	3765365.00	1.44994 (13120808)
439679.00	3765365.00	1.45032	(13120808)
	439684.00	3765365.00	1.45087 (13120808)
439689.00	3765365.00	1.45105	(13120808)
	439694.00	3765365.00	1.45165 (13120808)
439699.00	3765365.00	1.45173	(13120808)
	439704.00	3765365.00	1.45252 (13120808)
439709.00	3765365.00	1.45331	(13120808)
	439714.00	3765365.00	1.45373 (13120808)
439719.00	3765365.00	1.45425	(13120808)
	439729.00	3765365.00	1.45586 (13120808)

439734.00	3765365.00	1.45648	(13120808)
	439739.00	3765365.00	1.45730 (13120808)
439744.00	3765365.00	1.45806	(13120808)
	439749.00	3765365.00	1.45950 (14100607)
439774.00	3765365.00	1.46384	(13120808)
	439779.00	3765365.00	1.46480 (13120808)
439784.00	3765365.00	1.46567	(13120808)
	439789.00	3765365.00	1.46701 (13120808)
439794.00	3765365.00	1.46761	(13120808)
	439799.00	3765365.00	1.46870 (13120808)
439804.00	3765365.00	1.46959	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439809.00	3765365.00	1.47059	(13120808)
439814.00	3765365.00	1.47152	(13120808)
439839.00	3765365.00	1.47547	(13120808)
439844.00	3765365.00	1.47616	(13120808)
439849.00	3765365.00	1.47669	(13120808)
439854.00	3765365.00	1.47734	(13120808)
439859.00	3765365.00	1.47785	(13120808)
439864.00	3765365.00	1.47843	(13120808)
439869.00	3765365.00	1.47859	(13120808)
439874.00	3765365.00	1.47913	(13120808)
439879.00	3765365.00	1.47931	(13120808)
439884.00	3765365.00	1.47971	(13120808)
439674.00	3765370.00	1.46394	(13120808)
439679.00	3765370.00	1.46419	(13120808)
439684.00	3765370.00	1.46471	(13120808)
439689.00	3765370.00	1.46498	(13120808)
439694.00	3765370.00	1.46552	(13120808)

439699.00	3765370.00	1.46579	(13120808)
	439704.00	3765370.00	1.46644 (13120808)
439709.00	3765370.00	1.46693	(13120808)
	439714.00	3765370.00	1.46749 (13120808)
439719.00	3765370.00	1.46841	(13120808)
	439729.00	3765370.00	1.46972 (13120808)
439734.00	3765370.00	1.47055	(13120808)
	439739.00	3765370.00	1.47127 (13120808)
439744.00	3765370.00	1.47183	(13120808)
	439749.00	3765370.00	1.47302 (13120808)
439774.00	3765370.00	1.47807	(14100607)
	439779.00	3765370.00	1.47872 (13120808)
439784.00	3765370.00	1.47989	(13120808)
	439789.00	3765370.00	1.48072 (13120808)
439794.00	3765370.00	1.48210	(13120808)
	439799.00	3765370.00	1.48285 (13120808)
439804.00	3765370.00	1.48390	(13120808)
	439809.00	3765370.00	1.48460 (13120808)
439814.00	3765370.00	1.48595	(13120808)
	439839.00	3765370.00	1.49008 (13120808)
439844.00	3765370.00	1.49062	(13120808)
	439849.00	3765370.00	1.49141 (13120808)
439854.00	3765370.00	1.49209	(13120808)
	439859.00	3765370.00	1.49280 (13120808)
439864.00	3765370.00	1.49295	(13120808)
	439869.00	3765370.00	1.49362 (13120808)
439874.00	3765370.00	1.49386	(13120808)
	439879.00	3765370.00	1.49421 (13120808)
439884.00	3765370.00	1.49459	(13120808)
	439674.00	3765375.00	1.47842 (13120808)
439679.00	3765375.00	1.47866	(13120808)
	439684.00	3765375.00	1.47895 (13120808)
439689.00	3765375.00	1.47955	(13120808)
	439694.00	3765375.00	1.47958 (13120808)
439699.00	3765375.00	1.48000	(13120808)
	439704.00	3765375.00	1.48073 (13120808)
439709.00	3765375.00	1.48131	(13120808)
	439714.00	3765375.00	1.48172 (13120808)
439719.00	3765375.00	1.48244	(13120808)
	439729.00	3765375.00	1.48378 (13120808)
439734.00	3765375.00	1.48461	(13120808)
	439739.00	3765375.00	1.48540 (13120808)
439744.00	3765375.00	1.48668	(14100607)
	439749.00	3765375.00	1.48719 (13120808)
439754.00	3765375.00	1.48820	(14100607)
	439774.00	3765375.00	1.49224 (13120808)
439779.00	3765375.00	1.49312	(13120808)
	439784.00	3765375.00	1.49436 (13120808)
439789.00	3765375.00	1.49494	(13120808)
	439794.00	3765375.00	1.49633 (13120808)
439799.00	3765375.00	1.49742	(13120808)
	439804.00	3765375.00	1.49839 (13120808)

439809.00	3765375.00	1.49940	(13120808)
	439814.00	3765375.00	1.50043 (13120808)
439839.00	3765375.00	1.50515	(13120808)
	439844.00	3765375.00	1.50566 (13120808)
439849.00	3765375.00	1.50627	(13120808)
	439854.00	3765375.00	1.50687 (13120808)
439859.00	3765375.00	1.50789	(13120808)
	439864.00	3765375.00	1.50824 (13120808)
439869.00	3765375.00	1.50871	(13120808)
	439874.00	3765375.00	1.50905 (13120808)
439879.00	3765375.00	1.50969	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439884.00	3765375.00	1.50995	(13120808)
439774.00	3765380.00	1.50673	(14100607)
439779.00	3765380.00	1.50818	(14100607)
439784.00	3765380.00	1.50884	(13120808)
439789.00	3765380.00	1.51031	(14100607)
439794.00	3765380.00	1.51106	(13120808)
439799.00	3765380.00	1.51214	(13120808)
439804.00	3765380.00	1.51314	(13120808)
439809.00	3765380.00	1.51442	(13120808)
439814.00	3765380.00	1.51528	(13120808)
439769.00	3765385.00	1.52073	(14100607)
439819.00	3765385.00	1.53170	(13120808)
439769.00	3765400.00	1.56826	(14100607)
439844.00	3765400.00	1.58582	(13120808)
439849.00	3765400.00	1.58694	(13120808)
439674.00	3765405.00	1.58403	(12011417)
439714.00	3765405.00	1.57955	(12011808)

439719.00	3765405.00	1.57922	(12011808)
	439734.00	3765405.00	1.57966 (12011808)
439749.00	3765405.00	1.58035	(13120808)
	439754.00	3765405.00	1.58132 (13120808)
439774.00	3765405.00	1.58630	(14100607)
	439779.00	3765405.00	1.58746 (14100607)
439784.00	3765405.00	1.58901	(14100607)
	439789.00	3765405.00	1.59057 (14100607)
439794.00	3765405.00	1.59135	(14100607)
	439799.00	3765405.00	1.59277 (14100607)
439804.00	3765405.00	1.59390	(14100607)
	439809.00	3765405.00	1.59508 (14100607)
439814.00	3765405.00	1.59574	(13120808)
	439819.00	3765405.00	1.59706 (13120808)
439824.00	3765405.00	1.59833	(13120808)
	439829.00	3765405.00	1.59969 (13120808)
439834.00	3765405.00	1.60082	(13120808)
	439839.00	3765405.00	1.60212 (13120808)
439844.00	3765405.00	1.60308	(13120808)
	439849.00	3765405.00	1.60417 (13120808)
439854.00	3765405.00	1.60529	(13120808)
	439859.00	3765405.00	1.60631 (13120808)
439674.00	3765410.00	1.60830	(12011417)
	439679.00	3765410.00	1.60634 (12011417)
439684.00	3765410.00	1.60303	(12011417)
	439689.00	3765410.00	1.60160 (12011417)
439694.00	3765410.00	1.59839	(12011417)
	439699.00	3765410.00	1.59717 (12011808)
439704.00	3765410.00	1.59773	(12011808)
	439709.00	3765410.00	1.59782 (12011808)
439714.00	3765410.00	1.59797	(12011808)
	439719.00	3765410.00	1.59819 (12011808)
439729.00	3765410.00	1.59861	(12011808)
	439734.00	3765410.00	1.59804 (12011808)
439739.00	3765410.00	1.59867	(12011808)
	439744.00	3765410.00	1.59809 (12011808)
439749.00	3765410.00	1.59895	(12011808)
	439774.00	3765410.00	1.60330 (14100607)
439779.00	3765410.00	1.60494	(14100607)
	439784.00	3765410.00	1.60562 (14100607)
439789.00	3765410.00	1.60774	(14100607)
	439794.00	3765410.00	1.60905 (14100607)
439799.00	3765410.00	1.61003	(14100607)
	439804.00	3765410.00	1.61119 (14100607)
439809.00	3765410.00	1.61246	(14100607)
	439814.00	3765410.00	1.61416 (14100607)
439819.00	3765410.00	1.61457	(14100607)
	439824.00	3765410.00	1.61585 (14100607)
439829.00	3765410.00	1.61712	(13120808)
	439834.00	3765410.00	1.61843 (13120808)
439839.00	3765410.00	1.61975	(13120808)
	439844.00	3765410.00	1.62087 (13120808)

439849.00	3765410.00	1.62206	(13120808)
	439854.00	3765410.00	1.62304 (13120808)
439859.00	3765410.00	1.62411	(13120808)
	439674.00	3765415.00	1.63418 (12011417)
439679.00	3765415.00	1.63095	(12011417)
	439684.00	3765415.00	1.62937 (12011417)
439689.00	3765415.00	1.62579	(12011417)
	439694.00	3765415.00	1.62443 (12011417)
439699.00	3765415.00	1.62118	(12011417)
	439704.00	3765415.00	1.61906 (12011417)
439709.00	3765415.00	1.61685	(12011808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439714.00	3765415.00	1.61659	(12011808)
439719.00	3765415.00	1.61727	(12011808)
439729.00	3765415.00	1.61737	(12011808)
439734.00	3765415.00	1.61765	(12011808)
439739.00	3765415.00	1.61771	(12011808)
439744.00	3765415.00	1.61800	(12011808)
439749.00	3765415.00	1.61777	(12011808)
439774.00	3765415.00	1.62103	(14100607)
439779.00	3765415.00	1.62219	(14100607)
439784.00	3765415.00	1.62400	(14100607)
439789.00	3765415.00	1.62461	(14100607)
439794.00	3765415.00	1.62651	(14100607)
439799.00	3765415.00	1.62796	(14100607)
439804.00	3765415.00	1.62938	(14100607)
439809.00	3765415.00	1.63035	(14100607)
439814.00	3765415.00	1.63155	(14100607)
439819.00	3765415.00	1.63324	(14100607)

439824.00	3765415.00	1.63388	(14100607)
	439829.00	3765415.00	1.63514 (13120808)
439834.00	3765415.00	1.63636	(13120808)
	439839.00	3765415.00	1.63781 (13120808)
439844.00	3765415.00	1.63896	(13120808)
	439849.00	3765415.00	1.64032 (13120808)
439854.00	3765415.00	1.64159	(13120808)
	439859.00	3765415.00	1.64252 (13120808)
439674.00	3765420.00	1.65883	(12011417)
	439679.00	3765420.00	1.65702 (12011417)
439684.00	3765420.00	1.65416	(12011417)
	439689.00	3765420.00	1.65278 (12011417)
439694.00	3765420.00	1.64933	(12011417)
	439699.00	3765420.00	1.64783 (12011417)
439704.00	3765420.00	1.64468	(12011417)
	439709.00	3765420.00	1.64294 (12011417)
439714.00	3765420.00	1.63928	(12011417)
	439719.00	3765420.00	1.63693 (12011417)
439729.00	3765420.00	1.63639	(12011808)
	439734.00	3765420.00	1.63717 (12011808)
439739.00	3765420.00	1.63701	(12011808)
	439744.00	3765420.00	1.63785 (12011808)
439749.00	3765420.00	1.63734	(12011808)
	439774.00	3765420.00	1.63858 (14100607)
439779.00	3765420.00	1.64015	(14100607)
	439784.00	3765420.00	1.64166 (14100607)
439789.00	3765420.00	1.64347	(14100607)
	439794.00	3765420.00	1.64448 (14100607)
439799.00	3765420.00	1.64619	(14100607)
	439804.00	3765420.00	1.64749 (14100607)
439809.00	3765420.00	1.64892	(14100607)
	439814.00	3765420.00	1.64992 (14100607)
439819.00	3765420.00	1.65139	(14100607)
	439824.00	3765420.00	1.65274 (14100607)
439829.00	3765420.00	1.65404	(14100607)
	439834.00	3765420.00	1.65497 (14100607)
439839.00	3765420.00	1.65621	(13120808)
	439844.00	3765420.00	1.65778 (13120808)
439849.00	3765420.00	1.65890	(13120808)
	439854.00	3765420.00	1.66025 (13120808)
439859.00	3765420.00	1.66150	(13120808)
	439674.00	3765425.00	1.68504 (12011417)
439679.00	3765425.00	1.68286	(12011417)
	439684.00	3765425.00	1.68072 (12011417)
439689.00	3765425.00	1.67819	(12011417)
	439694.00	3765425.00	1.67681 (12011417)
439699.00	3765425.00	1.67365	(12011417)
	439704.00	3765425.00	1.67212 (12011417)
439709.00	3765425.00	1.66861	(12011417)
	439714.00	3765425.00	1.66724 (12011417)
439719.00	3765425.00	1.66366	(12011417)
	439729.00	3765425.00	1.65837 (12011417)

439734.00	3765425.00	1.65690	(12011808)
	439739.00	3765425.00	1.65766 (12011808)
439744.00	3765425.00	1.65728	(12011808)
	439749.00	3765425.00	1.65863 (12011808)
439774.00	3765425.00	1.65841	(12011808)
	439779.00	3765425.00	1.65888 (12011808)
439784.00	3765425.00	1.66011	(14100607)
	439789.00	3765425.00	1.66180 (14100607)
439794.00	3765425.00	1.66359	(14100607)
	439799.00	3765425.00	1.66482 (14100607)
439804.00	3765425.00	1.66634	(14100607)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439809.00	3765425.00	1.66760	(14100607)
439814.00	3765425.00	1.66956	(14100607)
439819.00	3765425.00	1.67041	(14100607)
439824.00	3765425.00	1.67198	(14100607)
439829.00	3765425.00	1.67291	(14100607)
439834.00	3765425.00	1.67452	(14100607)
439839.00	3765425.00	1.67540	(13120808)
439844.00	3765425.00	1.67694	(13120808)
439849.00	3765425.00	1.67820	(13120808)
439854.00	3765425.00	1.67962	(13120808)
439859.00	3765425.00	1.68086	(13120808)
439674.00	3765430.00	1.71166	(12011417)
439679.00	3765430.00	1.70940	(12011417)
439684.00	3765430.00	1.70752	(12011417)
439689.00	3765430.00	1.70522	(12011417)
439694.00	3765430.00	1.70285	(12011417)
439699.00	3765430.00	1.70128	(12011417)

439704.00	3765430.00	1.69835	(12011417)
	439709.00	3765430.00	1.69707 (12011417)
439714.00	3765430.00	1.69314	(12011417)
	439719.00	3765430.00	1.69204 (12011417)
439729.00	3765430.00	1.68659	(12011417)
	439734.00	3765430.00	1.68308 (12011417)
439739.00	3765430.00	1.68119	(12011417)
	439744.00	3765430.00	1.67867 (12011808)
439749.00	3765430.00	1.67841	(12011808)
	439774.00	3765430.00	1.68072 (12011808)
439779.00	3765430.00	1.67941	(12011808)
	439784.00	3765430.00	1.68045 (12011808)
439789.00	3765430.00	1.68068	(14100607)
	439794.00	3765430.00	1.68227 (14100607)
439799.00	3765430.00	1.68418	(14100607)
	439804.00	3765430.00	1.68582 (14100607)
439809.00	3765430.00	1.68731	(14100607)
	439814.00	3765430.00	1.68842 (14100607)
439819.00	3765430.00	1.69041	(14100607)
	439824.00	3765430.00	1.69156 (14100607)
439829.00	3765430.00	1.69291	(14100607)
	439834.00	3765430.00	1.69385 (14100607)
439839.00	3765430.00	1.69572	(14100607)
	439844.00	3765430.00	1.69653 (13120808)
439849.00	3765430.00	1.69819	(13120808)
	439854.00	3765430.00	1.69944 (13120808)
439859.00	3765430.00	1.70109	(13120808)
	439674.00	3765435.00	1.73801 (12011417)
439679.00	3765435.00	1.73663	(12011417)
	439684.00	3765435.00	1.73442 (12011417)
439689.00	3765435.00	1.73262	(12011417)
	439694.00	3765435.00	1.73051 (12011417)
439699.00	3765435.00	1.72792	(12011417)
	439704.00	3765435.00	1.72647 (12011417)
439709.00	3765435.00	1.72347	(12011417)
	439714.00	3765435.00	1.72262 (12011417)
439719.00	3765435.00	1.71852	(12011417)
	439729.00	3765435.00	1.71390 (12011417)
439734.00	3765435.00	1.71260	(12011417)
	439739.00	3765435.00	1.70873 (12011417)
439744.00	3765435.00	1.70712	(12011417)
	439749.00	3765435.00	1.70350 (12011417)
439774.00	3765435.00	1.70117	(12011808)
	439779.00	3765435.00	1.70258 (12011808)
439784.00	3765435.00	1.70167	(12011808)
	439789.00	3765435.00	1.70253 (12011808)
439794.00	3765435.00	1.70215	(14100607)
	439799.00	3765435.00	1.70377 (14100607)
439804.00	3765435.00	1.70563	(14100607)
	439809.00	3765435.00	1.70727 (14100607)
439814.00	3765435.00	1.70878	(14100607)
	439819.00	3765435.00	1.71017 (14100607)

439824.00	3765435.00	1.71181	(14100607)
	439829.00	3765435.00	1.71352 (14100607)
439834.00	3765435.00	1.71479	(14100607)
	439839.00	3765435.00	1.71559 (14100607)
439844.00	3765435.00	1.71745	(14100607)
	439849.00	3765435.00	1.71842 (13120808)
439854.00	3765435.00	1.72000	(13120808)
	439859.00	3765435.00	1.72117 (13120808)
439674.00	3765440.00	1.76621	(12011417)
	439679.00	3765440.00	1.76348 (12011417)
439684.00	3765440.00	1.76245	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439689.00	3765440.00	1.75977	(12011417)
439694.00	3765440.00	1.75838	(12011417)
439699.00	3765440.00	1.75638	(12011417)
439704.00	3765440.00	1.75389	(12011417)
439709.00	3765440.00	1.75229	(12011417)
439714.00	3765440.00	1.74953	(12011417)
439719.00	3765440.00	1.74876	(12011417)
439729.00	3765440.00	1.74398	(12011417)
439734.00	3765440.00	1.74010	(12011417)
439739.00	3765440.00	1.73916	(12011417)
439744.00	3765440.00	1.73489	(12011417)
439749.00	3765440.00	1.73362	(12011417)
439774.00	3765440.00	1.72363	(12011808)
439779.00	3765440.00	1.72400	(12011808)
439784.00	3765440.00	1.72475	(12011808)
439789.00	3765440.00	1.72472	(12011808)
439794.00	3765440.00	1.72524	(12011808)

439799.00	3765440.00	1.72453	(12011808)
	439804.00	3765440.00	1.72587 (12011808)
439809.00	3765440.00	1.72756	(14100607)
	439814.00	3765440.00	1.72946 (14100607)
439819.00	3765440.00	1.73106	(14100607)
	439824.00	3765440.00	1.73269 (14100607)
439829.00	3765440.00	1.73402	(14100607)
	439834.00	3765440.00	1.73569 (14100607)
439839.00	3765440.00	1.73716	(14100607)
	439844.00	3765440.00	1.73833 (14100607)
439849.00	3765440.00	1.73947	(14100607)
	439854.00	3765440.00	1.74096 (13120808)
439859.00	3765440.00	1.74266	(13120808)
	439674.00	3765445.00	1.79292 (12011417)
439679.00	3765445.00	1.79243	(12011417)
	439684.00	3765445.00	1.78980 (12011417)
439689.00	3765445.00	1.78880	(12011417)
	439694.00	3765445.00	1.78626 (12011417)
439699.00	3765445.00	1.78496	(12011417)
	439704.00	3765445.00	1.78286 (12011417)
439709.00	3765445.00	1.78076	(12011417)
	439714.00	3765445.00	1.77915 (12011417)
439719.00	3765445.00	1.77608	(12011417)
	439729.00	3765445.00	1.77187 (12011417)
439734.00	3765445.00	1.77081	(12011417)
	439739.00	3765445.00	1.76687 (12011417)
439744.00	3765445.00	1.76632	(12011417)
	439749.00	3765445.00	1.76206 (12011417)
439774.00	3765445.00	1.74872	(12011417)
	439779.00	3765445.00	1.74647 (12011808)
439784.00	3765445.00	1.74756	(12011808)
	439789.00	3765445.00	1.74740 (12011808)
439794.00	3765445.00	1.74847	(12011808)
	439799.00	3765445.00	1.74854 (12011808)
439804.00	3765445.00	1.74830	(12011808)
	439809.00	3765445.00	1.74919 (12011808)
439814.00	3765445.00	1.75040	(14100607)
	439819.00	3765445.00	1.75224 (14100607)
439824.00	3765445.00	1.75402	(14100607)
	439829.00	3765445.00	1.75563 (14100607)
439834.00	3765445.00	1.75700	(14100607)
	439839.00	3765445.00	1.75874 (14100607)
439844.00	3765445.00	1.76005	(14100607)
	439849.00	3765445.00	1.76184 (14100607)
439854.00	3765445.00	1.76265	(13120808)
	439859.00	3765445.00	1.76445 (13120808)
439674.00	3765450.00	1.82235	(12011417)
	439679.00	3765450.00	1.81987 (12011417)
439684.00	3765450.00	1.81950	(12011417)
	439689.00	3765450.00	1.81686 (12011417)
439694.00	3765450.00	1.81579	(12011417)
	439699.00	3765450.00	1.81346 (12011417)

439704.00	3765450.00	1.81242	(12011417)
	439709.00	3765450.00	1.81005 (12011417)
439714.00	3765450.00	1.80806	(12011417)
	439719.00	3765450.00	1.80653 (12011417)
439729.00	3765450.00	1.80285	(12011417)
	439734.00	3765450.00	1.79944 (12011417)
439739.00	3765450.00	1.79865	(12011417)
	439744.00	3765450.00	1.79459 (12011417)
439749.00	3765450.00	1.79413	(12011417)
	439774.00	3765450.00	1.78012 (12011417)
439844.00	3765450.00	1.78274	(14100607)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439849.00	3765450.00	1.78406	(14100607)
439854.00	3765450.00	1.78545	(14100607)
439859.00	3765450.00	1.78648	(14100607)
439674.00	3765455.00	1.85042	(12011417)
439679.00	3765455.00	1.85012	(12011417)
439684.00	3765455.00	1.84763	(12011417)
439689.00	3765455.00	1.84713	(12011417)
439694.00	3765455.00	1.84468	(12011417)
439699.00	3765455.00	1.84366	(12011417)
439704.00	3765455.00	1.84145	(12011417)
439709.00	3765455.00	1.84017	(12011417)
439714.00	3765455.00	1.83815	(12011417)
439719.00	3765455.00	1.83610	(12011417)
439729.00	3765455.00	1.83192	(12011417)
439734.00	3765455.00	1.83127	(12011417)
439739.00	3765455.00	1.82790	(12011417)
439744.00	3765455.00	1.82713	(12011417)

439749.00	3765455.00	1.82347	(12011417)
	439844.00	3765455.00	1.80561 (14100607)
439849.00	3765455.00	1.80707	(14100607)
	439854.00	3765455.00	1.80889 (14100607)
439859.00	3765455.00	1.81036	(14100607)
	439674.00	3765460.00	1.88097 (12011417)
439679.00	3765460.00	1.87852	(12011417)
	439684.00	3765460.00	1.87840 (12011417)
439689.00	3765460.00	1.87621	(12011417)
	439694.00	3765460.00	1.87561 (12011417)
439699.00	3765460.00	1.87294	(12011417)
	439704.00	3765460.00	1.87271 (12011417)
439709.00	3765460.00	1.87026	(12011417)
	439714.00	3765460.00	1.86903 (12011417)
439719.00	3765460.00	1.86716	(12011417)
	439729.00	3765460.00	1.86390 (12011417)
439734.00	3765460.00	1.86129	(12011417)
	439739.00	3765460.00	1.86032 (12011417)
439744.00	3765460.00	1.85725	(12011417)
	439749.00	3765460.00	1.85651 (12011417)
439789.00	3765460.00	1.83622	(12011417)
	439794.00	3765460.00	1.83344 (12011417)
439799.00	3765460.00	1.82996	(12011417)
	439804.00	3765460.00	1.82763 (12011417)
439809.00	3765460.00	1.82364	(12011417)
	439814.00	3765460.00	1.82310 (12011808)
439819.00	3765460.00	1.82443	(12011808)
	439824.00	3765460.00	1.82320 (12011808)
439829.00	3765460.00	1.82431	(12011808)
	439844.00	3765460.00	1.82912 (14100607)
439849.00	3765460.00	1.83164	(14100607)
	439854.00	3765460.00	1.83310 (14100607)
439859.00	3765460.00	1.83409	(14100607)
	439674.00	3765465.00	1.91085 (12011417)
439679.00	3765465.00	1.91008	(12011417)
	439684.00	3765465.00	1.90774 (12011417)
439689.00	3765465.00	1.90774	(12011417)
	439694.00	3765465.00	1.90564 (12011417)
439699.00	3765465.00	1.90508	(12011417)
	439704.00	3765465.00	1.90272 (12011417)
439709.00	3765465.00	1.90226	(12011417)
	439714.00	3765465.00	1.89991 (12011417)
439719.00	3765465.00	1.89894	(12011417)
	439729.00	3765465.00	1.89471 (12011417)
439734.00	3765465.00	1.89387	(12011417)
	439739.00	3765465.00	1.89152 (12011417)
439744.00	3765465.00	1.89037	(12011417)
	439749.00	3765465.00	1.88750 (12011417)
439789.00	3765465.00	1.86972	(12011417)
	439794.00	3765465.00	1.86698 (12011417)
439799.00	3765465.00	1.86449	(12011417)
	439804.00	3765465.00	1.86110 (12011417)

439809.00	3765465.00	1.85871	(12011417)
	439814.00	3765465.00	1.85455 (12011417)
439819.00	3765465.00	1.85252	(12011417)
	439824.00	3765465.00	1.85125 (12011808)
439829.00	3765465.00	1.85036	(12011808)
	439844.00	3765465.00	1.85435 (14100607)
439849.00	3765465.00	1.85569	(14100607)
	439854.00	3765465.00	1.85761 (14100607)
439859.00	3765465.00	1.85972	(14100607)
	439674.00	3765470.00	1.94250 (12011417)
439679.00	3765470.00	1.94058	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439684.00	3765470.00	1.93994	(12011417)
439689.00	3765470.00	1.93815	(12011417)
439694.00	3765470.00	1.93787	(12011417)
439699.00	3765470.00	1.93591	(12011417)
439704.00	3765470.00	1.93538	(12011417)
439709.00	3765470.00	1.93304	(12011417)
439714.00	3765470.00	1.93276	(12011417)
439719.00	3765470.00	1.93045	(12011417)
439729.00	3765470.00	1.92778	(12011417)
439734.00	3765470.00	1.92561	(12011417)
439739.00	3765470.00	1.92467	(12011417)
439744.00	3765470.00	1.92253	(12011417)
439749.00	3765470.00	1.92150	(12011417)
439789.00	3765470.00	1.90425	(12011417)
439794.00	3765470.00	1.90157	(12011417)
439799.00	3765470.00	1.89872	(12011417)
439804.00	3765470.00	1.89660	(12011417)

439809.00	3765470.00	1.89286	(12011417)
	439814.00	3765470.00	1.89066 (12011417)
439819.00	3765470.00	1.88695	(12011417)
	439824.00	3765470.00	1.88465 (12011417)
439829.00	3765470.00	1.88045	(12011417)
	439844.00	3765470.00	1.87916 (14100607)
439849.00	3765470.00	1.88121	(14100607)
	439854.00	3765470.00	1.88322 (14100607)
439859.00	3765470.00	1.88545	(14100607)
	439674.00	3765475.00	1.97380 (12011417)
439679.00	3765475.00	1.97335	(12011417)
	439684.00	3765475.00	1.97137 (12011417)
439689.00	3765475.00	1.97123	(12011417)
	439694.00	3765475.00	1.96926 (12011417)
439699.00	3765475.00	1.96920	(12011417)
	439704.00	3765475.00	1.96705 (12011417)
439709.00	3765475.00	1.96659	(12011417)
	439714.00	3765475.00	1.96460 (12011417)
439719.00	3765475.00	1.96409	(12011417)
	439729.00	3765475.00	1.96099 (12011417)
439734.00	3765475.00	1.95936	(12011417)
	439739.00	3765475.00	1.95751 (12011417)
439744.00	3765475.00	1.95664	(12011417)
	439749.00	3765475.00	1.95449 (12011417)
439754.00	3765475.00	1.95348	(12011417)
	439789.00	3765475.00	1.93922 (12011417)
439794.00	3765475.00	1.93712	(12011417)
	439799.00	3765475.00	1.93433 (12011417)
439804.00	3765475.00	1.93159	(12011417)
	439809.00	3765475.00	1.92962 (12011417)
439814.00	3765475.00	1.92596	(12011417)
	439819.00	3765475.00	1.92369 (12011417)
439824.00	3765475.00	1.92022	(12011417)
	439829.00	3765475.00	1.91807 (12011417)
439269.00	3764900.00	0.81860	(13120808)
	439369.00	3764900.00	0.81738 (13120808)
439469.00	3764900.00	0.81421	(13120808)
	439569.00	3764900.00	0.80580 (13120808)
439669.00	3764900.00	0.78696	(12010217)
	439769.00	3764900.00	0.78488 (12010217)
439869.00	3764900.00	0.77825	(12010217)
	439969.00	3764900.00	0.75971 (12010217)
440069.00	3764900.00	0.76638	(15010717)
	440169.00	3764900.00	0.77186 (15010717)
440269.00	3764900.00	0.77514	(15010717)
	439269.00	3765000.00	0.89521 (13120808)
439369.00	3765000.00	0.89461	(13120808)
	439469.00	3765000.00	0.89407 (13120808)
439569.00	3765000.00	0.89240	(13120808)
	439669.00	3765000.00	0.88376 (13120808)
439769.00	3765000.00	0.85967	(12010217)
	439869.00	3765000.00	0.85734 (12010217)

439969.00	3765000.00	0.84706	(12010217)
440069.00	3765000.00	0.84339	(15010717)
440169.00	3765000.00	0.84664	(15010717)
440269.00	3765000.00	0.84848	(15010717)
439269.00	3765100.00	0.99136	(13120808)
439369.00	3765100.00	0.99107	(13120808)
439469.00	3765100.00	0.99051	(13120808)
439569.00	3765100.00	0.99203	(13120808)
439669.00	3765100.00	0.99228	(13120808)
439769.00	3765100.00	0.98315	(13120808)
439869.00	3765100.00	0.95380	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439969.00	3765100.00	0.94992	(12010217)
440069.00	3765100.00	0.93766	(15010717)
440169.00	3765100.00	0.93990	(15010717)
440269.00	3765100.00	0.94031	(15010717)
439269.00	3765200.00	1.11783	(13120808)
439369.00	3765200.00	1.11904	(13120808)
439469.00	3765200.00	1.11696	(13120808)
439569.00	3765200.00	1.11716	(13120808)
439669.00	3765200.00	1.12179	(13120808)
439769.00	3765200.00	1.12546	(13120808)
439869.00	3765200.00	1.11526	(13120808)
439969.00	3765200.00	1.07910	(13120808)
440069.00	3765200.00	1.07036	(12010217)
440169.00	3765200.00	1.06123	(15010717)
440269.00	3765200.00	1.06152	(15010717)
439269.00	3765300.00	1.33818	(12011417)
439369.00	3765300.00	1.30845	(12011417)

439469.00	3765300.00	1.29458	(13120808)
	439569.00	3765300.00	1.29112 (13120808)
439669.00	3765300.00	1.29474	(13120808)
	439769.00	3765300.00	1.30661 (13120808)
439869.00	3765300.00	1.31146	(13120808)
	439969.00	3765300.00	1.29756 (13120808)
440069.00	3765300.00	1.25571	(13120808)
	440169.00	3765300.00	1.23672 (12010217)
440269.00	3765300.00	1.23086	(15010717)
	439269.00	3765400.00	1.67154 (12011417)
439369.00	3765400.00	1.65476	(12011417)
	439469.00	3765400.00	1.63212 (12011417)
439569.00	3765400.00	1.60324	(12011417)
	439669.00	3765400.00	1.56211 (12011417)
439769.00	3765400.00	1.56826	(14100607)
	439869.00	3765400.00	1.59038 (13120808)
439969.00	3765400.00	1.59150	(13120808)
	440069.00	3765400.00	1.57499 (13120808)
440169.00	3765400.00	1.52549	(13120808)
	440269.00	3765400.00	1.52387 (12011608)
439269.00	3765500.00	2.19780	(12011417)
	439369.00	3765500.00	2.19361 (12011417)
439469.00	3765500.00	2.18060	(12011417)
	439569.00	3765500.00	2.16371 (12011417)
439669.00	3765500.00	2.14880	(12011417)
	439769.00	3765500.00	2.13312 (12011417)
439869.00	3765500.00	2.09228	(12011417)
	439969.00	3765500.00	2.08853 (13120808)
440069.00	3765500.00	2.08038	(13120808)
	440169.00	3765500.00	2.06199 (13120808)
440269.00	3765500.00	2.06692	(12011608)
	439269.00	3765600.00	3.48269 (12101307)
439369.00	3765600.00	3.46847	(12101307)
	439469.00	3765600.00	3.43151 (12101307)
439569.00	3765600.00	3.38714	(12011417)
	439669.00	3765600.00	3.37011 (12011417)
439769.00	3765600.00	3.36283	(12011417)
	439869.00	3765600.00	3.39883 (12011417)
439969.00	3765600.00	3.42312	(12011417)
	440069.00	3765600.00	3.53049 (14101107)
440169.00	3765600.00	3.61368	(14101107)
	440269.00	3765600.00	3.66595 (14101107)
439269.00	3765700.00	14.56472	(12101307)
	439369.00	3765700.00	15.07590 (12101307)
439469.00	3765700.00	15.66274	(12101307)
	439569.00	3765700.00	16.04418 (14101107)
439669.00	3765700.00	16.42742	(14101107)
	439769.00	3765700.00	16.65484 (14101107)
439869.00	3765700.00	16.87478	(14101107)
	439969.00	3765700.00	16.90265 (14101107)
440069.00	3765700.00	17.19848	(12101207)
	440169.00	3765700.00	17.28501 (12101207)

440269.00	3765700.00	17.52593	(12101207)
	439269.00	3765800.00	4.32810 (12100707)
439369.00	3765800.00	4.36921	(12100707)
	439469.00	3765800.00	4.34561 (12100707)
439569.00	3765800.00	4.31596	(12100707)
	439669.00	3765800.00	4.30851 (12100707)
439769.00	3765800.00	4.31304	(12100707)
	439869.00	3765800.00	4.38199 (13111217)
439969.00	3765800.00	4.12393	(12011717)
	440069.00	3765800.00	4.06776 (12011717)
440169.00	3765800.00	4.06044	(12011717)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: EXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
440269.00	3765800.00	4.07663	(12011717)
439269.00	3765900.00	2.49048	(12100707)
439369.00	3765900.00	2.44857	(12100707)
439469.00	3765900.00	2.39490	(12100707)
439569.00	3765900.00	2.32766	(12100707)
439669.00	3765900.00	2.34570	(13111217)
439769.00	3765900.00	2.39147	(13111217)
439869.00	3765900.00	2.42311	(13111217)
439969.00	3765900.00	2.42579	(13111217)
440069.00	3765900.00	2.39105	(13111217)
440169.00	3765900.00	2.38063	(13111217)
440269.00	3765900.00	2.39922	(12011717)
439649.00	3765310.00	1.31420	(13120808)
439679.00	3765310.00	1.31670	(13120808)
439709.00	3765310.00	1.32027	(13120808)
439739.00	3765310.00	1.32370	(13120808)
439769.00	3765310.00	1.32752	(13120808)

439799.00	3765310.00	1.33138	(13120808)
	439829.00	3765310.00	1.33388 (13120808)
439859.00	3765310.00	1.33500	(13120808)
	439889.00	3765310.00	1.33348 (13120808)
439649.00	3765340.00	1.38371	(13120808)
	439679.00	3765340.00	1.38545 (13120808)
439709.00	3765340.00	1.38828	(13120808)
	439739.00	3765340.00	1.39287 (13120808)
439769.00	3765340.00	1.39757	(13120808)
	439799.00	3765340.00	1.40256 (13120808)
439829.00	3765340.00	1.40612	(13120808)
	439859.00	3765340.00	1.40874 (13120808)
439889.00	3765340.00	1.40931	(13120808)
	439649.00	3765370.00	1.46317 (13120808)
439679.00	3765370.00	1.46419	(13120808)
	439709.00	3765370.00	1.46693 (13120808)
439739.00	3765370.00	1.47127	(13120808)
	439769.00	3765370.00	1.47678 (13120808)
439799.00	3765370.00	1.48285	(13120808)
	439829.00	3765370.00	1.48834 (13120808)
439859.00	3765370.00	1.49280	(13120808)
	439889.00	3765370.00	1.49469 (13120808)
439649.00	3765400.00	1.57213	(12011417)
	439679.00	3765400.00	1.56119 (12011808)
439709.00	3765400.00	1.56142	(12011808)
	439739.00	3765400.00	1.56204 (13120808)
439769.00	3765400.00	1.56826	(14100607)
	439799.00	3765400.00	1.57546 (14100607)
439829.00	3765400.00	1.58255	(13120808)
	439859.00	3765400.00	1.58877 (13120808)
439889.00	3765400.00	1.59279	(13120808)
	439649.00	3765430.00	1.71989 (12011417)
439679.00	3765430.00	1.70940	(12011417)
	439709.00	3765430.00	1.69707 (12011417)
439739.00	3765430.00	1.68119	(12011417)
	439769.00	3765430.00	1.67905 (12011808)
439799.00	3765430.00	1.68418	(14100607)
	439829.00	3765430.00	1.69291 (14100607)
439859.00	3765430.00	1.70109	(13120808)
	439889.00	3765430.00	1.70744 (13120808)
439649.00	3765460.00	1.88705	(12011417)
	439679.00	3765460.00	1.87852 (12011417)
439709.00	3765460.00	1.87026	(12011417)
	439739.00	3765460.00	1.86032 (12011417)
439769.00	3765460.00	1.84734	(12011417)
	439799.00	3765460.00	1.82996 (12011417)
439829.00	3765460.00	1.82431	(12011808)
	439859.00	3765460.00	1.83409 (14100607)
439889.00	3765460.00	1.84365	(13120808)
	439649.00	3765490.00	2.08024 (12011417)
439679.00	3765490.00	2.07413	(12011417)
	439709.00	3765490.00	2.06936 (12011417)

439739.00	3765490.00	2.06333	(12011417)
439769.00	3765490.00	2.05619	(12011417)
439799.00	3765490.00	2.04596	(12011417)
439829.00	3765490.00	2.03231	(12011417)
439859.00	3765490.00	2.01424	(12011417)
439889.00	3765490.00	2.01037	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439674.00	3765310.00	1.27030	(13120808)
439679.00	3765310.00	1.27044	(13120808)
439684.00	3765310.00	1.27032	(13120808)
439689.00	3765310.00	1.27059	(13120808)
439694.00	3765310.00	1.27028	(13120808)
439699.00	3765310.00	1.27063	(13120808)
439704.00	3765310.00	1.27034	(13120808)
439709.00	3765310.00	1.27081	(13120808)
439714.00	3765310.00	1.27017	(13120808)
439719.00	3765310.00	1.27079	(13120808)
439729.00	3765310.00	1.27058	(13120808)
439734.00	3765310.00	1.27029	(13120808)
439739.00	3765310.00	1.27035	(13120808)
439744.00	3765310.00	1.27030	(13120808)
439749.00	3765310.00	1.27016	(13120808)
439764.00	3765310.00	1.27046	(13120808)
439769.00	3765310.00	1.27002	(13120808)
439774.00	3765310.00	1.27043	(13120808)
439779.00	3765310.00	1.27006	(13120808)

439784.00	3765310.00	1.27045	(13120808)
	439789.00	3765310.00	1.26993 (13120808)
439794.00	3765310.00	1.27020	(13120808)
	439799.00	3765310.00	1.27007 (13120808)
439804.00	3765310.00	1.26984	(13120808)
	439809.00	3765310.00	1.26982 (13120808)
439814.00	3765310.00	1.26960	(13120808)
	439819.00	3765310.00	1.26985 (13120808)
439824.00	3765310.00	1.26937	(13120808)
	439829.00	3765310.00	1.26960 (13120808)
439839.00	3765310.00	1.26959	(13120808)
	439844.00	3765310.00	1.26891 (13120808)
439849.00	3765310.00	1.26933	(13120808)
	439854.00	3765310.00	1.26858 (13120808)
439859.00	3765310.00	1.26901	(13120808)
	439864.00	3765310.00	1.26831 (13120808)
439869.00	3765310.00	1.26826	(13120808)
	439874.00	3765310.00	1.26806 (13120808)
439879.00	3765310.00	1.26775	(13120808)
	439884.00	3765310.00	1.26781 (13120808)
439674.00	3765315.00	1.28111	(13120808)
	439679.00	3765315.00	1.28166 (13120808)
439684.00	3765315.00	1.28109	(13120808)
	439689.00	3765315.00	1.28173 (13120808)
439694.00	3765315.00	1.28122	(13120808)
	439699.00	3765315.00	1.28136 (13120808)
439704.00	3765315.00	1.28128	(13120808)
	439709.00	3765315.00	1.28129 (13120808)
439714.00	3765315.00	1.28144	(13120808)
	439719.00	3765315.00	1.28106 (13120808)
439729.00	3765315.00	1.28119	(13120808)
	439734.00	3765315.00	1.28142 (13120808)
439739.00	3765315.00	1.28105	(13120808)
	439744.00	3765315.00	1.28157 (13120808)
439749.00	3765315.00	1.28112	(13120808)
	439764.00	3765315.00	1.28129 (13120808)
439769.00	3765315.00	1.28116	(13120808)
	439774.00	3765315.00	1.28100 (13120808)
439779.00	3765315.00	1.28117	(13120808)
	439784.00	3765315.00	1.28090 (13120808)
439789.00	3765315.00	1.28117	(13120808)
	439794.00	3765315.00	1.28072 (13120808)
439799.00	3765315.00	1.28111	(13120808)
	439804.00	3765315.00	1.28071 (13120808)
439809.00	3765315.00	1.28118	(13120808)
	439814.00	3765315.00	1.28057 (13120808)
439819.00	3765315.00	1.28101	(13120808)
	439824.00	3765315.00	1.28057 (13120808)
439829.00	3765315.00	1.28062	(13120808)
	439839.00	3765315.00	1.28015 (13120808)
439844.00	3765315.00	1.28030	(13120808)
	439849.00	3765315.00	1.27984 (13120808)

439854.00	3765315.00	1.27989	(13120808)
	439859.00	3765315.00	1.27957 (13120808)
439864.00	3765315.00	1.27976	(13120808)
	439869.00	3765315.00	1.27930 (13120808)
439874.00	3765315.00	1.27943	(13120808)
	439879.00	3765315.00	1.27890 (13120808)
439884.00	3765315.00	1.27929	(13120808)
	439674.00	3765320.00	1.29245 (13120808)
439679.00	3765320.00	1.29235	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439684.00	3765320.00	1.29237	(13120808)
439689.00	3765320.00	1.29228	(13120808)
439694.00	3765320.00	1.29262	(13120808)
439699.00	3765320.00	1.29234	(13120808)
439704.00	3765320.00	1.29263	(13120808)
439709.00	3765320.00	1.29220	(13120808)
439714.00	3765320.00	1.29293	(13120808)
439719.00	3765320.00	1.29227	(13120808)
439729.00	3765320.00	1.29228	(13120808)
439734.00	3765320.00	1.29254	(13120808)
439739.00	3765320.00	1.29232	(13120808)
439744.00	3765320.00	1.29232	(13120808)
439749.00	3765320.00	1.29232	(13120808)
439764.00	3765320.00	1.29212	(13120808)
439769.00	3765320.00	1.29244	(13120808)
439774.00	3765320.00	1.29215	(13120808)
439779.00	3765320.00	1.29251	(13120808)
439784.00	3765320.00	1.29204	(13120808)
439789.00	3765320.00	1.29254	(13120808)

439794.00	3765320.00	1.29202	(13120808)
	439799.00	3765320.00	1.29220 (13120808)
439804.00	3765320.00	1.29191	(13120808)
	439809.00	3765320.00	1.29201 (13120808)
439814.00	3765320.00	1.29192	(13120808)
	439819.00	3765320.00	1.29181 (13120808)
439824.00	3765320.00	1.29185	(13120808)
	439829.00	3765320.00	1.29165 (13120808)
439839.00	3765320.00	1.29136	(13120808)
	439844.00	3765320.00	1.29169 (13120808)
439849.00	3765320.00	1.29119	(13120808)
	439854.00	3765320.00	1.29151 (13120808)
439859.00	3765320.00	1.29088	(13120808)
	439864.00	3765320.00	1.29098 (13120808)
439869.00	3765320.00	1.29076	(13120808)
	439874.00	3765320.00	1.29049 (13120808)
439879.00	3765320.00	1.29041	(13120808)
	439884.00	3765320.00	1.29013 (13120808)
439674.00	3765325.00	1.30382	(13120808)
	439679.00	3765325.00	1.30377 (13120808)
439684.00	3765325.00	1.30394	(13120808)
	439689.00	3765325.00	1.30371 (13120808)
439694.00	3765325.00	1.30382	(13120808)
	439699.00	3765325.00	1.30395 (13120808)
439704.00	3765325.00	1.30374	(13120808)
	439709.00	3765325.00	1.30387 (13120808)
439714.00	3765325.00	1.30371	(13120808)
	439719.00	3765325.00	1.30388 (13120808)
439729.00	3765325.00	1.30390	(13120808)
	439734.00	3765325.00	1.30360 (13120808)
439739.00	3765325.00	1.30406	(13120808)
	439744.00	3765325.00	1.30372 (13120808)
439749.00	3765325.00	1.30394	(13120808)
	439754.00	3765325.00	1.30362 (13120808)
439769.00	3765325.00	1.30374	(13120808)
	439774.00	3765325.00	1.30360 (13120808)
439779.00	3765325.00	1.30355	(13120808)
	439784.00	3765325.00	1.30361 (13120808)
439789.00	3765325.00	1.30344	(13120808)
	439794.00	3765325.00	1.30358 (13120808)
439799.00	3765325.00	1.30338	(13120808)
	439804.00	3765325.00	1.30363 (13120808)
439809.00	3765325.00	1.30325	(13120808)
	439814.00	3765325.00	1.30355 (13120808)
439819.00	3765325.00	1.30328	(13120808)
	439824.00	3765325.00	1.30349 (13120808)
439829.00	3765325.00	1.30312	(13120808)
	439839.00	3765325.00	1.30302 (13120808)
439844.00	3765325.00	1.30289	(13120808)
	439849.00	3765325.00	1.30280 (13120808)
439854.00	3765325.00	1.30267	(13120808)
	439859.00	3765325.00	1.30259 (13120808)

439864.00	3765325.00	1.30234	(13120808)
	439869.00	3765325.00	1.30241 (13120808)
439874.00	3765325.00	1.30204	(13120808)
	439879.00	3765325.00	1.30223 (13120808)
439884.00	3765325.00	1.30165	(13120808)
	439674.00	3765330.00	1.31522 (13120808)
439679.00	3765330.00	1.31515	(13120808)
	439684.00	3765330.00	1.31537 (13120808)
439689.00	3765330.00	1.31538	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439694.00	3765330.00	1.31519	(13120808)
439699.00	3765330.00	1.31541	(13120808)
439704.00	3765330.00	1.31527	(13120808)
439709.00	3765330.00	1.31569	(13120808)
439714.00	3765330.00	1.31530	(13120808)
439719.00	3765330.00	1.31559	(13120808)
439729.00	3765330.00	1.31562	(13120808)
439734.00	3765330.00	1.31540	(13120808)
439739.00	3765330.00	1.31532	(13120808)
439744.00	3765330.00	1.31544	(13120808)
439749.00	3765330.00	1.31537	(13120808)
439754.00	3765330.00	1.31544	(13120808)
439774.00	3765330.00	1.31549	(13120808)
439779.00	3765330.00	1.31504	(13120808)
439784.00	3765330.00	1.31561	(13120808)
439789.00	3765330.00	1.31511	(13120808)
439794.00	3765330.00	1.31540	(13120808)
439799.00	3765330.00	1.31501	(13120808)
439804.00	3765330.00	1.31527	(13120808)

439809.00	3765330.00	1.31499	(13120808)
	439814.00	3765330.00	1.31503 (13120808)
439819.00	3765330.00	1.31494	(13120808)
	439824.00	3765330.00	1.31497 (13120808)
439829.00	3765330.00	1.31494	(13120808)
	439839.00	3765330.00	1.31487 (13120808)
439844.00	3765330.00	1.31461	(13120808)
	439849.00	3765330.00	1.31483 (13120808)
439854.00	3765330.00	1.31437	(13120808)
	439859.00	3765330.00	1.31452 (13120808)
439864.00	3765330.00	1.31429	(13120808)
	439869.00	3765330.00	1.31404 (13120808)
439874.00	3765330.00	1.31402	(13120808)
	439879.00	3765330.00	1.31384 (13120808)
439884.00	3765330.00	1.31365	(13120808)
	439674.00	3765335.00	1.32717 (13120808)
439679.00	3765335.00	1.32710	(13120808)
	439684.00	3765335.00	1.32705 (13120808)
439689.00	3765335.00	1.32731	(13120808)
	439694.00	3765335.00	1.32720 (13120808)
439699.00	3765335.00	1.32722	(13120808)
	439704.00	3765335.00	1.32705 (13120808)
439709.00	3765335.00	1.32731	(13120808)
	439714.00	3765335.00	1.32725 (13120808)
439719.00	3765335.00	1.32727	(13120808)
	439729.00	3765335.00	1.32730 (13120808)
439734.00	3765335.00	1.32745	(13120808)
	439739.00	3765335.00	1.32722 (13120808)
439744.00	3765335.00	1.32720	(13120808)
	439749.00	3765335.00	1.32724 (13120808)
439774.00	3765335.00	1.32721	(13120808)
	439779.00	3765335.00	1.32713 (13120808)
439784.00	3765335.00	1.32703	(13120808)
	439789.00	3765335.00	1.32719 (13120808)
439794.00	3765335.00	1.32710	(13120808)
	439839.00	3765335.00	1.32675 (13120808)
439844.00	3765335.00	1.32658	(13120808)
	439849.00	3765335.00	1.32666 (13120808)
439854.00	3765335.00	1.32649	(13120808)
	439859.00	3765335.00	1.32632 (13120808)
439864.00	3765335.00	1.32638	(13120808)
	439869.00	3765335.00	1.32599 (13120808)
439874.00	3765335.00	1.32617	(13120808)
	439879.00	3765335.00	1.32575 (13120808)
439884.00	3765335.00	1.32608	(13120808)
	439674.00	3765340.00	1.33918 (13120808)
439679.00	3765340.00	1.33932	(13120808)
	439684.00	3765340.00	1.33922 (13120808)
439689.00	3765340.00	1.33911	(13120808)
	439694.00	3765340.00	1.33940 (13120808)
439699.00	3765340.00	1.33917	(13120808)
	439704.00	3765340.00	1.33945 (13120808)

439709.00	3765340.00	1.33913	(13120808)
	439714.00	3765340.00	1.33952 (13120808)
439719.00	3765340.00	1.33939	(13120808)
	439729.00	3765340.00	1.33932 (13120808)
439734.00	3765340.00	1.33954	(13120808)
	439739.00	3765340.00	1.33954 (13120808)
439744.00	3765340.00	1.33936	(13120808)
	439749.00	3765340.00	1.33934 (13120808)
439774.00	3765340.00	1.33915	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439779.00	3765340.00	1.33963	(13120808)
439784.00	3765340.00	1.33916	(13120808)
439789.00	3765340.00	1.33930	(13120808)
439794.00	3765340.00	1.33914	(13120808)
439839.00	3765340.00	1.33889	(13120808)
439844.00	3765340.00	1.33907	(13120808)
439849.00	3765340.00	1.33883	(13120808)
439854.00	3765340.00	1.33896	(13120808)
439859.00	3765340.00	1.33866	(13120808)
439864.00	3765340.00	1.33873	(13120808)
439869.00	3765340.00	1.33851	(13120808)
439874.00	3765340.00	1.33849	(13120808)
439879.00	3765340.00	1.33808	(13120808)
439884.00	3765340.00	1.33819	(13120808)
439674.00	3765345.00	1.35163	(13120808)
439679.00	3765345.00	1.35156	(13120808)
439684.00	3765345.00	1.35180	(13120808)
439689.00	3765345.00	1.35164	(13120808)
439694.00	3765345.00	1.35184	(13120808)

439699.00	3765345.00	1.35147	(13120808)
	439704.00	3765345.00	1.35191 (13120808)
439709.00	3765345.00	1.35147	(13120808)
	439714.00	3765345.00	1.35183 (13120808)
439719.00	3765345.00	1.35177	(13120808)
	439729.00	3765345.00	1.35172 (13120808)
439734.00	3765345.00	1.35182	(13120808)
	439739.00	3765345.00	1.35173 (13120808)
439744.00	3765345.00	1.35193	(13120808)
	439749.00	3765345.00	1.35189 (13120808)
439774.00	3765345.00	1.35162	(13120808)
	439779.00	3765345.00	1.35179 (13120808)
439784.00	3765345.00	1.35192	(13120808)
	439789.00	3765345.00	1.35166 (13120808)
439794.00	3765345.00	1.35164	(13120808)
	439839.00	3765345.00	1.35137 (13120808)
439844.00	3765345.00	1.35151	(13120808)
	439849.00	3765345.00	1.35147 (13120808)
439854.00	3765345.00	1.35131	(13120808)
	439859.00	3765345.00	1.35137 (13120808)
439864.00	3765345.00	1.35106	(13120808)
	439869.00	3765345.00	1.35125 (13120808)
439874.00	3765345.00	1.35089	(13120808)
	439879.00	3765345.00	1.35113 (13120808)
439884.00	3765345.00	1.35073	(13120808)
	439674.00	3765350.00	1.36445 (13120808)
439679.00	3765350.00	1.36440	(13120808)
	439684.00	3765350.00	1.36411 (13120808)
439689.00	3765350.00	1.36431	(13120808)
	439694.00	3765350.00	1.36435 (13120808)
439699.00	3765350.00	1.36447	(13120808)
	439704.00	3765350.00	1.36426 (13120808)
439709.00	3765350.00	1.36442	(13120808)
	439714.00	3765350.00	1.36439 (13120808)
439719.00	3765350.00	1.36450	(13120808)
	439729.00	3765350.00	1.36456 (13120808)
439734.00	3765350.00	1.36451	(13120808)
	439739.00	3765350.00	1.36455 (13120808)
439744.00	3765350.00	1.36452	(13120808)
	439749.00	3765350.00	1.36453 (13120808)
439774.00	3765350.00	1.36450	(13120808)
	439779.00	3765350.00	1.36444 (13120808)
439784.00	3765350.00	1.36451	(13120808)
	439789.00	3765350.00	1.36455 (13120808)
439794.00	3765350.00	1.36453	(13120808)
	439839.00	3765350.00	1.36424 (13120808)
439844.00	3765350.00	1.36416	(13120808)
	439849.00	3765350.00	1.36439 (13120808)
439854.00	3765350.00	1.36415	(13120808)
	439859.00	3765350.00	1.36416 (13120808)
439864.00	3765350.00	1.36402	(13120808)
	439869.00	3765350.00	1.36419 (13120808)

439874.00	3765350.00	1.36366	(13120808)
	439879.00	3765350.00	1.36384 (13120808)
439884.00	3765350.00	1.36364	(13120808)
	439674.00	3765355.00	1.37717 (13120808)
439679.00	3765355.00	1.37754	(13120808)
	439684.00	3765355.00	1.37735 (13120808)
439689.00	3765355.00	1.37735	(13120808)
	439694.00	3765355.00	1.37707 (13120808)
439699.00	3765355.00	1.37769	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439704.00	3765355.00	1.37716	(13120808)
439709.00	3765355.00	1.37728	(13120808)
439714.00	3765355.00	1.37736	(13120808)
439719.00	3765355.00	1.37753	(13120808)
439729.00	3765355.00	1.37732	(13120808)
439734.00	3765355.00	1.37734	(13120808)
439739.00	3765355.00	1.37751	(13120808)
439744.00	3765355.00	1.37763	(13120808)
439749.00	3765355.00	1.37744	(13120808)
439774.00	3765355.00	1.37763	(13120808)
439779.00	3765355.00	1.37754	(13120808)
439784.00	3765355.00	1.37759	(13120808)
439789.00	3765355.00	1.37755	(13120808)
439794.00	3765355.00	1.37768	(13120808)
439839.00	3765355.00	1.37731	(13120808)
439844.00	3765355.00	1.37721	(13120808)
439849.00	3765355.00	1.37733	(13120808)
439854.00	3765355.00	1.37745	(13120808)
439859.00	3765355.00	1.37708	(13120808)

439864.00	3765355.00	1.37707	(13120808)
	439869.00	3765355.00	1.37715 (13120808)
439874.00	3765355.00	1.37718	(13120808)
	439879.00	3765355.00	1.37697 (13120808)
439884.00	3765355.00	1.37674	(13120808)
	439674.00	3765360.00	1.39051 (13120808)
439679.00	3765360.00	1.39049	(13120808)
	439684.00	3765360.00	1.39073 (13120808)
439689.00	3765360.00	1.39061	(13120808)
	439694.00	3765360.00	1.39049 (13120808)
439699.00	3765360.00	1.39064	(13120808)
	439704.00	3765360.00	1.39080 (13120808)
439709.00	3765360.00	1.39069	(13120808)
	439714.00	3765360.00	1.39047 (13120808)
439719.00	3765360.00	1.39060	(13120808)
	439729.00	3765360.00	1.39067 (13120808)
439734.00	3765360.00	1.39068	(13120808)
	439739.00	3765360.00	1.39073 (13120808)
439744.00	3765360.00	1.39094	(13120808)
	439749.00	3765360.00	1.39071 (13120808)
439774.00	3765360.00	1.39083	(13120808)
	439779.00	3765360.00	1.39077 (13120808)
439784.00	3765360.00	1.39090	(13120808)
	439789.00	3765360.00	1.39108 (13120808)
439794.00	3765360.00	1.39087	(13120808)
	439799.00	3765360.00	1.39084 (13120808)
439804.00	3765360.00	1.39089	(13120808)
	439809.00	3765360.00	1.39092 (13120808)
439814.00	3765360.00	1.39080	(13120808)
	439839.00	3765360.00	1.39078 (13120808)
439844.00	3765360.00	1.39060	(13120808)
	439849.00	3765360.00	1.39062 (13120808)
439854.00	3765360.00	1.39088	(13120808)
	439859.00	3765360.00	1.39069 (13120808)
439864.00	3765360.00	1.39062	(13120808)
	439869.00	3765360.00	1.39026 (13120808)
439874.00	3765360.00	1.39064	(13120808)
	439879.00	3765360.00	1.39044 (13120808)
439884.00	3765360.00	1.39022	(13120808)
	439674.00	3765365.00	1.40410 (13120808)
439679.00	3765365.00	1.40419	(13120808)
	439684.00	3765365.00	1.40441 (13120808)
439689.00	3765365.00	1.40421	(13120808)
	439694.00	3765365.00	1.40438 (13120808)
439699.00	3765365.00	1.40400	(13120808)
	439704.00	3765365.00	1.40427 (13120808)
439709.00	3765365.00	1.40450	(13120808)
	439714.00	3765365.00	1.40433 (13120808)
439719.00	3765365.00	1.40421	(13120808)
	439729.00	3765365.00	1.40443 (13120808)
439734.00	3765365.00	1.40430	(13120808)
	439739.00	3765365.00	1.40433 (13120808)

439744.00	3765365.00	1.40427	(13120808)
	439749.00	3765365.00	1.40471 (13120808)
439774.00	3765365.00	1.40457	(13120808)
	439779.00	3765365.00	1.40455 (13120808)
439784.00	3765365.00	1.40445	(13120808)
	439789.00	3765365.00	1.40481 (13120808)
439794.00	3765365.00	1.40445	(13120808)
	439799.00	3765365.00	1.40457 (13120808)
439804.00	3765365.00	1.40451	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439809.00	3765365.00	1.40457	(13120808)
439814.00	3765365.00	1.40461	(13120808)
439839.00	3765365.00	1.40446	(13120808)
439844.00	3765365.00	1.40443	(13120808)
439849.00	3765365.00	1.40433	(13120808)
439854.00	3765365.00	1.40436	(13120808)
439859.00	3765365.00	1.40433	(13120808)
439864.00	3765365.00	1.40441	(13120808)
439869.00	3765365.00	1.40413	(13120808)
439874.00	3765365.00	1.40427	(13120808)
439879.00	3765365.00	1.40413	(13120808)
439884.00	3765365.00	1.40423	(13120808)
439674.00	3765370.00	1.41804	(13120808)
439679.00	3765370.00	1.41803	(13120808)
439684.00	3765370.00	1.41824	(13120808)
439689.00	3765370.00	1.41815	(13120808)
439694.00	3765370.00	1.41828	(13120808)
439699.00	3765370.00	1.41812	(13120808)
439704.00	3765370.00	1.41827	(13120808)

439709.00	3765370.00	1.41822	(13120808)
	439714.00	3765370.00	1.41819 (13120808)
439719.00	3765370.00	1.41846	(13120808)
	439729.00	3765370.00	1.41839 (13120808)
439734.00	3765370.00	1.41848	(13120808)
	439739.00	3765370.00	1.41839 (13120808)
439744.00	3765370.00	1.41813	(13120808)
	439749.00	3765370.00	1.41845 (13120808)
439774.00	3765370.00	1.41862	(13120808)
	439779.00	3765370.00	1.41844 (13120808)
439784.00	3765370.00	1.41862	(13120808)
	439789.00	3765370.00	1.41843 (13120808)
439794.00	3765370.00	1.41881	(13120808)
	439799.00	3765370.00	1.41856 (13120808)
439804.00	3765370.00	1.41862	(13120808)
	439809.00	3765370.00	1.41835 (13120808)
439814.00	3765370.00	1.41874	(13120808)
	439839.00	3765370.00	1.41855 (13120808)
439844.00	3765370.00	1.41835	(13120808)
	439849.00	3765370.00	1.41845 (13120808)
439854.00	3765370.00	1.41846	(13120808)
	439859.00	3765370.00	1.41858 (13120808)
439864.00	3765370.00	1.41820	(13120808)
	439869.00	3765370.00	1.41838 (13120808)
439874.00	3765370.00	1.41819	(13120808)
	439879.00	3765370.00	1.41817 (13120808)
439884.00	3765370.00	1.41825	(13120808)
	439674.00	3765375.00	1.43247 (13120808)
439679.00	3765375.00	1.43247	(13120808)
	439684.00	3765375.00	1.43246 (13120808)
439689.00	3765375.00	1.43273	(13120808)
	439694.00	3765375.00	1.43236 (13120808)
439699.00	3765375.00	1.43236	(13120808)
	439704.00	3765375.00	1.43261 (13120808)
439709.00	3765375.00	1.43267	(13120808)
	439714.00	3765375.00	1.43250 (13120808)
439719.00	3765375.00	1.43261	(13120808)
	439729.00	3765375.00	1.43257 (13120808)
439734.00	3765375.00	1.43265	(13120808)
	439739.00	3765375.00	1.43264 (13120808)
439744.00	3765375.00	1.43282	(13120808)
	439749.00	3765375.00	1.43272 (13120808)
439754.00	3765375.00	1.43276	(13120808)
	439774.00	3765375.00	1.43299 (13120808)
439779.00	3765375.00	1.43285	(13120808)
	439784.00	3765375.00	1.43305 (13120808)
439789.00	3765375.00	1.43260	(13120808)
	439794.00	3765375.00	1.43294 (13120808)
439799.00	3765375.00	1.43298	(13120808)
	439804.00	3765375.00	1.43293 (13120808)
439809.00	3765375.00	1.43292	(13120808)
	439814.00	3765375.00	1.43297 (13120808)

439839.00	3765375.00	1.43311	(13120808)
	439844.00	3765375.00	1.43284 (13120808)
439849.00	3765375.00	1.43269	(13120808)
	439854.00	3765375.00	1.43261 (13120808)
439859.00	3765375.00	1.43299	(13120808)
	439864.00	3765375.00	1.43275 (13120808)
439869.00	3765375.00	1.43270	(13120808)
	439874.00	3765375.00	1.43258 (13120808)
439879.00	3765375.00	1.43280	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439884.00	3765375.00	1.43271	(13120808)
439774.00	3765380.00	1.44738	(13120808)
439779.00	3765380.00	1.44767	(13120808)
439784.00	3765380.00	1.44752	(13120808)
439789.00	3765380.00	1.44772	(13120808)
439794.00	3765380.00	1.44758	(13120808)
439799.00	3765380.00	1.44761	(13120808)
439804.00	3765380.00	1.44752	(13120808)
439809.00	3765380.00	1.44774	(13120808)
439814.00	3765380.00	1.44756	(13120808)
439769.00	3765385.00	1.46255	(13120808)
439819.00	3765385.00	1.46269	(13120808)
439769.00	3765400.00	1.51022	(13120808)
439844.00	3765400.00	1.51040	(13120808)
439849.00	3765400.00	1.51051	(13120808)
439674.00	3765405.00	1.53776	(12011417)
439714.00	3765405.00	1.52661	(13120808)
439719.00	3765405.00	1.52665	(13120808)
439734.00	3765405.00	1.52664	(13120808)

439749.00	3765405.00	1.52678	(13120808)
	439754.00	3765405.00	1.52681 (13120808)
439774.00	3765405.00	1.52702	(13120808)
	439779.00	3765405.00	1.52698 (13120808)
439784.00	3765405.00	1.52692	(13120808)
	439789.00	3765405.00	1.52695 (13120808)
439794.00	3765405.00	1.52709	(13120808)
	439799.00	3765405.00	1.52699 (13120808)
439804.00	3765405.00	1.52704	(13120808)
	439809.00	3765405.00	1.52717 (13120808)
439814.00	3765405.00	1.52712	(13120808)
	439819.00	3765405.00	1.52717 (13120808)
439824.00	3765405.00	1.52718	(13120808)
	439829.00	3765405.00	1.52731 (13120808)
439834.00	3765405.00	1.52723	(13120808)
	439839.00	3765405.00	1.52734 (13120808)
439844.00	3765405.00	1.52719	(13120808)
	439849.00	3765405.00	1.52721 (13120808)
439854.00	3765405.00	1.52728	(13120808)
	439859.00	3765405.00	1.52735 (13120808)
439674.00	3765410.00	1.56145	(12011417)
	439679.00	3765410.00	1.55928 (12011417)
439684.00	3765410.00	1.55579	(12011417)
	439689.00	3765410.00	1.55419 (12011417)
439694.00	3765410.00	1.55079	(12011417)
	439699.00	3765410.00	1.54803 (12011417)
439704.00	3765410.00	1.54483	(12011417)
	439709.00	3765410.00	1.54384 (13120808)
439714.00	3765410.00	1.54397	(13120808)
	439719.00	3765410.00	1.54380 (13120808)
439729.00	3765410.00	1.54405	(13120808)
	439734.00	3765410.00	1.54398 (13120808)
439739.00	3765410.00	1.54390	(13120808)
	439744.00	3765410.00	1.54415 (13120808)
439749.00	3765410.00	1.54403	(13120808)
	439774.00	3765410.00	1.54423 (13120808)
439779.00	3765410.00	1.54422	(13120808)
	439784.00	3765410.00	1.54401 (13120808)
439789.00	3765410.00	1.54430	(13120808)
	439794.00	3765410.00	1.54426 (13120808)
439799.00	3765410.00	1.54429	(13120808)
	439804.00	3765410.00	1.54416 (13120808)
439809.00	3765410.00	1.54449	(13120808)
	439814.00	3765410.00	1.54432 (13120808)
439819.00	3765410.00	1.54437	(13120808)
	439824.00	3765410.00	1.54429 (13120808)
439829.00	3765410.00	1.54447	(13120808)
	439834.00	3765410.00	1.54450 (13120808)
439839.00	3765410.00	1.54460	(13120808)
	439844.00	3765410.00	1.54451 (13120808)
439849.00	3765410.00	1.54457	(13120808)
	439854.00	3765410.00	1.54445 (13120808)

439859.00	3765410.00	1.54450	(13120808)
	439674.00	3765415.00	1.58675 (12011417)
439679.00	3765415.00	1.58330	(12011417)
	439684.00	3765415.00	1.58151 (12011417)
439689.00	3765415.00	1.57771	(12011417)
	439694.00	3765415.00	1.57617 (12011417)
439699.00	3765415.00	1.57272	(12011417)
	439704.00	3765415.00	1.57043 (12011417)
439709.00	3765415.00	1.56685	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439714.00	3765415.00	1.56426	(12011417)
439719.00	3765415.00	1.56176	(13120808)
439729.00	3765415.00	1.56172	(13120808)
439734.00	3765415.00	1.56165	(13120808)
439739.00	3765415.00	1.56195	(13120808)
439744.00	3765415.00	1.56154	(13120808)
439749.00	3765415.00	1.56183	(13120808)
439774.00	3765415.00	1.56190	(13120808)
439779.00	3765415.00	1.56188	(13120808)
439784.00	3765415.00	1.56192	(13120808)
439789.00	3765415.00	1.56203	(13120808)
439794.00	3765415.00	1.56198	(13120808)
439799.00	3765415.00	1.56200	(13120808)
439804.00	3765415.00	1.56224	(13120808)
439809.00	3765415.00	1.56183	(13120808)
439814.00	3765415.00	1.56215	(13120808)
439819.00	3765415.00	1.56221	(13120808)
439824.00	3765415.00	1.56203	(13120808)
439829.00	3765415.00	1.56223	(13120808)

439834.00	3765415.00	1.56213	(13120808)
	439839.00	3765415.00	1.56227 (13120808)
439844.00	3765415.00	1.56216	(13120808)
	439849.00	3765415.00	1.56231 (13120808)
439854.00	3765415.00	1.56243	(13120808)
	439859.00	3765415.00	1.56224 (13120808)
439674.00	3765420.00	1.61088	(12011417)
	439679.00	3765420.00	1.60882 (12011417)
439684.00	3765420.00	1.60571	(12011417)
	439689.00	3765420.00	1.60409 (12011417)
439694.00	3765420.00	1.60040	(12011417)
	439699.00	3765420.00	1.59870 (12011417)
439704.00	3765420.00	1.59533	(12011417)
	439709.00	3765420.00	1.59341 (12011417)
439714.00	3765420.00	1.58957	(12011417)
	439719.00	3765420.00	1.58705 (12011417)
439729.00	3765420.00	1.58111	(12011417)
	439734.00	3765420.00	1.58012 (13120808)
439739.00	3765420.00	1.57977	(13120808)
	439744.00	3765420.00	1.58009 (13120808)
439749.00	3765420.00	1.58005	(13120808)
	439774.00	3765420.00	1.58002 (13120808)
439779.00	3765420.00	1.58010	(13120808)
	439784.00	3765420.00	1.58026 (13120808)
439789.00	3765420.00	1.58019	(13120808)
	439794.00	3765420.00	1.58015 (13120808)
439799.00	3765420.00	1.58039	(13120808)
	439804.00	3765420.00	1.58017 (13120808)
439809.00	3765420.00	1.58045	(13120808)
	439814.00	3765420.00	1.58022 (13120808)
439819.00	3765420.00	1.58049	(13120808)
	439824.00	3765420.00	1.58029 (13120808)
439829.00	3765420.00	1.58033	(13120808)
	439834.00	3765420.00	1.58041 (13120808)
439839.00	3765420.00	1.58032	(13120808)
	439844.00	3765420.00	1.58057 (13120808)
439849.00	3765420.00	1.58040	(13120808)
	439854.00	3765420.00	1.58051 (13120808)
439859.00	3765420.00	1.58060	(13120808)
	439674.00	3765425.00	1.63656 (12011417)
439679.00	3765425.00	1.63412	(12011417)
	439684.00	3765425.00	1.63171 (12011417)
439689.00	3765425.00	1.62891	(12011417)
	439694.00	3765425.00	1.62727 (12011417)
439699.00	3765425.00	1.62386	(12011417)
	439704.00	3765425.00	1.62209 (12011417)
439709.00	3765425.00	1.61835	(12011417)
	439714.00	3765425.00	1.61677 (12011417)
439719.00	3765425.00	1.61300	(12011417)
	439729.00	3765425.00	1.60737 (12011417)
439734.00	3765425.00	1.60471	(12011417)
	439739.00	3765425.00	1.60150 (12011417)

439744.00	3765425.00	1.59861	(13120808)
	439749.00	3765425.00	1.59894 (13120808)
439774.00	3765425.00	1.59892	(13120808)
	439779.00	3765425.00	1.59917 (13120808)
439784.00	3765425.00	1.59871	(13120808)
	439789.00	3765425.00	1.59890 (13120808)
439794.00	3765425.00	1.59908	(13120808)
	439799.00	3765425.00	1.59903 (13120808)
439804.00	3765425.00	1.59907	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439809.00	3765425.00	1.59888	(13120808)
439814.00	3765425.00	1.59939	(13120808)
439819.00	3765425.00	1.59897	(13120808)
439824.00	3765425.00	1.59955	(13120808)
439829.00	3765425.00	1.59904	(13120808)
439834.00	3765425.00	1.59956	(13120808)
439839.00	3765425.00	1.59920	(13120808)
439844.00	3765425.00	1.59932	(13120808)
439849.00	3765425.00	1.59922	(13120808)
439854.00	3765425.00	1.59934	(13120808)
439859.00	3765425.00	1.59933	(13120808)
439674.00	3765430.00	1.66271	(12011417)
439679.00	3765430.00	1.66013	(12011417)
439684.00	3765430.00	1.65797	(12011417)
439689.00	3765430.00	1.65538	(12011417)
439694.00	3765430.00	1.65272	(12011417)
439699.00	3765430.00	1.65087	(12011417)
439704.00	3765430.00	1.64767	(12011417)
439709.00	3765430.00	1.64612	(12011417)

439714.00	3765430.00	1.64195	(12011417)
	439719.00	3765430.00	1.64060 (12011417)
439729.00	3765430.00	1.63474	(12011417)
	439734.00	3765430.00	1.63106 (12011417)
439739.00	3765430.00	1.62900	(12011417)
	439744.00	3765430.00	1.62561 (12011417)
439749.00	3765430.00	1.62250	(12011417)
	439774.00	3765430.00	1.61832 (13120808)
439779.00	3765430.00	1.61825	(13120808)
	439784.00	3765430.00	1.61859 (13120808)
439789.00	3765430.00	1.61819	(13120808)
	439794.00	3765430.00	1.61858 (13120808)
439799.00	3765430.00	1.61813	(13120808)
	439804.00	3765430.00	1.61844 (13120808)
439809.00	3765430.00	1.61837	(13120808)
	439814.00	3765430.00	1.61822 (13120808)
439819.00	3765430.00	1.61858	(13120808)
	439824.00	3765430.00	1.61832 (13120808)
439829.00	3765430.00	1.61868	(13120808)
	439834.00	3765430.00	1.61826 (13120808)
439839.00	3765430.00	1.61885	(13120808)
	439844.00	3765430.00	1.61853 (13120808)
439849.00	3765430.00	1.61877	(13120808)
	439854.00	3765430.00	1.61863 (13120808)
439859.00	3765430.00	1.61893	(13120808)
	439674.00	3765435.00	1.68860 (12011417)
439679.00	3765435.00	1.68691	(12011417)
	439684.00	3765435.00	1.68435 (12011417)
439689.00	3765435.00	1.68222	(12011417)
	439694.00	3765435.00	1.67981 (12011417)
439699.00	3765435.00	1.67690	(12011417)
	439704.00	3765435.00	1.67516 (12011417)
439709.00	3765435.00	1.67187	(12011417)
	439714.00	3765435.00	1.67073 (12011417)
439719.00	3765435.00	1.66636	(12011417)
	439729.00	3765435.00	1.66124 (12011417)
439734.00	3765435.00	1.65972	(12011417)
	439739.00	3765435.00	1.65565 (12011417)
439744.00	3765435.00	1.65386	(12011417)
	439749.00	3765435.00	1.65008 (12011417)
439774.00	3765435.00	1.63818	(13120808)
	439779.00	3765435.00	1.63818 (13120808)
439784.00	3765435.00	1.63816	(13120808)
	439789.00	3765435.00	1.63858 (13120808)
439794.00	3765435.00	1.63794	(13120808)
	439799.00	3765435.00	1.63847 (13120808)
439804.00	3765435.00	1.63809	(13120808)
	439809.00	3765435.00	1.63856 (13120808)
439814.00	3765435.00	1.63820	(13120808)
	439819.00	3765435.00	1.63844 (13120808)
439824.00	3765435.00	1.63832	(13120808)
	439829.00	3765435.00	1.63855 (13120808)

439834.00	3765435.00	1.63850	(13120808)
	439839.00	3765435.00	1.63829 (13120808)
439844.00	3765435.00	1.63867	(13120808)
	439849.00	3765435.00	1.63857 (13120808)
439854.00	3765435.00	1.63866	(13120808)
	439859.00	3765435.00	1.63844 (13120808)
439674.00	3765440.00	1.71639	(12011417)
	439679.00	3765440.00	1.71329 (12011417)
439684.00	3765440.00	1.71193	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439689.00	3765440.00	1.70889	(12011417)
439694.00	3765440.00	1.70714	(12011417)
439699.00	3765440.00	1.70480	(12011417)
439704.00	3765440.00	1.70197	(12011417)
439709.00	3765440.00	1.70005	(12011417)
439714.00	3765440.00	1.69698	(12011417)
439719.00	3765440.00	1.69590	(12011417)
439729.00	3765440.00	1.69053	(12011417)
439734.00	3765440.00	1.68639	(12011417)
439739.00	3765440.00	1.68521	(12011417)
439744.00	3765440.00	1.68071	(12011417)
439749.00	3765440.00	1.67925	(12011417)
439774.00	3765440.00	1.66336	(12011417)
439779.00	3765440.00	1.65986	(12011417)
439784.00	3765440.00	1.65869	(13120808)
439789.00	3765440.00	1.65858	(13120808)
439794.00	3765440.00	1.65901	(13120808)
439799.00	3765440.00	1.65864	(13120808)
439804.00	3765440.00	1.65894	(13120808)

439809.00	3765440.00	1.65854	(13120808)
	439814.00	3765440.00	1.65943 (13120808)
439819.00	3765440.00	1.65869	(13120808)
	439824.00	3765440.00	1.65921 (13120808)
439829.00	3765440.00	1.65885	(13120808)
	439834.00	3765440.00	1.65925 (13120808)
439839.00	3765440.00	1.65910	(13120808)
	439844.00	3765440.00	1.65898 (13120808)
439849.00	3765440.00	1.65912	(13120808)
	439854.00	3765440.00	1.65914 (13120808)
439859.00	3765440.00	1.65935	(13120808)
	439674.00	3765445.00	1.74269 (12011417)
439679.00	3765445.00	1.74183	(12011417)
	439684.00	3765445.00	1.73882 (12011417)
439689.00	3765445.00	1.73744	(12011417)
	439694.00	3765445.00	1.73453 (12011417)
439699.00	3765445.00	1.73285	(12011417)
	439704.00	3765445.00	1.73039 (12011417)
439709.00	3765445.00	1.72793	(12011417)
	439714.00	3765445.00	1.72594 (12011417)
439719.00	3765445.00	1.72255	(12011417)
	439729.00	3765445.00	1.71768 (12011417)
439734.00	3765445.00	1.71632	(12011417)
	439739.00	3765445.00	1.71209 (12011417)
439744.00	3765445.00	1.71127	(12011417)
	439749.00	3765445.00	1.70676 (12011417)
439774.00	3765445.00	1.69257	(12011417)
	439779.00	3765445.00	1.68972 (12011417)
439784.00	3765445.00	1.68617	(12011417)
	439789.00	3765445.00	1.68339 (12011417)
439794.00	3765445.00	1.68012	(13120808)
	439799.00	3765445.00	1.68015 (13120808)
439804.00	3765445.00	1.67988	(13120808)
	439809.00	3765445.00	1.68027 (13120808)
439814.00	3765445.00	1.67988	(13120808)
	439819.00	3765445.00	1.68066 (13120808)
439824.00	3765445.00	1.67997	(13120808)
	439829.00	3765445.00	1.68050 (13120808)
439834.00	3765445.00	1.68005	(13120808)
	439839.00	3765445.00	1.68053 (13120808)
439844.00	3765445.00	1.68030	(13120808)
	439849.00	3765445.00	1.68031 (13120808)
439854.00	3765445.00	1.68038	(13120808)
	439859.00	3765445.00	1.68058 (13120808)
439674.00	3765450.00	1.77178	(12011417)
	439679.00	3765450.00	1.76888 (12011417)
439684.00	3765450.00	1.76811	(12011417)
	439689.00	3765450.00	1.76506 (12011417)
439694.00	3765450.00	1.76359	(12011417)
	439699.00	3765450.00	1.76087 (12011417)
439704.00	3765450.00	1.75942	(12011417)
	439709.00	3765450.00	1.75665 (12011417)

439714.00	3765450.00	1.75428	(12011417)
	439719.00	3765450.00	1.75235 (12011417)
439729.00	3765450.00	1.74793	(12011417)
	439734.00	3765450.00	1.74419 (12011417)
439739.00	3765450.00	1.74306	(12011417)
	439744.00	3765450.00	1.73869 (12011417)
439749.00	3765450.00	1.73794	(12011417)
	439774.00	3765450.00	1.72282 (12011417)
439844.00	3765450.00	1.70274	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439849.00	3765450.00	1.70212	(13120808)
439854.00	3765450.00	1.70258	(13120808)
439859.00	3765450.00	1.70205	(13120808)
439674.00	3765455.00	1.79951	(12011417)
439679.00	3765455.00	1.79879	(12011417)
439684.00	3765455.00	1.79587	(12011417)
439689.00	3765455.00	1.79494	(12011417)
439694.00	3765455.00	1.79206	(12011417)
439699.00	3765455.00	1.79059	(12011417)
439704.00	3765455.00	1.78796	(12011417)
439709.00	3765455.00	1.78625	(12011417)
439714.00	3765455.00	1.78380	(12011417)
439719.00	3765455.00	1.78133	(12011417)
439729.00	3765455.00	1.77634	(12011417)
439734.00	3765455.00	1.77528	(12011417)
439739.00	3765455.00	1.77153	(12011417)
439744.00	3765455.00	1.77040	(12011417)
439749.00	3765455.00	1.76641	(12011417)
439844.00	3765455.00	1.72468	(13120808)

439849.00	3765455.00	1.72524	(13120808)
	439854.00	3765455.00	1.72463 (13120808)
439859.00	3765455.00	1.72535	(13120808)
	439674.00	3765460.00	1.82975 (12011417)
439679.00	3765460.00	1.82686	(12011417)
	439684.00	3765460.00	1.82631 (12011417)
439689.00	3765460.00	1.82366	(12011417)
	439694.00	3765460.00	1.82259 (12011417)
439699.00	3765460.00	1.81948	(12011417)
	439704.00	3765460.00	1.81877 (12011417)
439709.00	3765460.00	1.81585	(12011417)
	439714.00	3765460.00	1.81415 (12011417)
439719.00	3765460.00	1.81182	(12011417)
	439729.00	3765460.00	1.80768 (12011417)
439734.00	3765460.00	1.80464	(12011417)
	439739.00	3765460.00	1.80324 (12011417)
439744.00	3765460.00	1.79975	(12011417)
	439749.00	3765460.00	1.79862 (12011417)
439789.00	3765460.00	1.77609	(12011417)
	439794.00	3765460.00	1.77317 (12011417)
439799.00	3765460.00	1.76960	(12011417)
	439804.00	3765460.00	1.76722 (12011417)
439809.00	3765460.00	1.76321	(12011417)
	439814.00	3765460.00	1.76074 (12011417)
439819.00	3765460.00	1.75654	(12011417)
	439824.00	3765460.00	1.75421 (12011417)
439829.00	3765460.00	1.74959	(12011417)
	439844.00	3765460.00	1.74834 (13120808)
439849.00	3765460.00	1.74829	(13120808)
	439854.00	3765460.00	1.74857 (13120808)
439859.00	3765460.00	1.74824	(13120808)
	439674.00	3765465.00	1.85937 (12011417)
439679.00	3765465.00	1.85814	(12011417)
	439684.00	3765465.00	1.85534 (12011417)
439689.00	3765465.00	1.85485	(12011417)
	439694.00	3765465.00	1.85228 (12011417)
439699.00	3765465.00	1.85122	(12011417)
	439704.00	3765465.00	1.84837 (12011417)
439709.00	3765465.00	1.84741	(12011417)
	439714.00	3765465.00	1.84456 (12011417)
439719.00	3765465.00	1.84309	(12011417)
	439729.00	3765465.00	1.83787 (12011417)
439734.00	3765465.00	1.83657	(12011417)
	439739.00	3765465.00	1.83375 (12011417)
439744.00	3765465.00	1.83214	(12011417)
	439749.00	3765465.00	1.82883 (12011417)
439789.00	3765465.00	1.80835	(12011417)
	439794.00	3765465.00	1.80542 (12011417)
439799.00	3765465.00	1.80277	(12011417)
	439804.00	3765465.00	1.79927 (12011417)
439809.00	3765465.00	1.79681	(12011417)
	439814.00	3765465.00	1.79261 (12011417)

439819.00	3765465.00	1.79061	(12011417)
	439824.00	3765465.00	1.78637 (12011417)
439829.00	3765465.00	1.78397	(12011417)
	439844.00	3765465.00	1.77247 (13120808)
439849.00	3765465.00	1.77263	(13120808)
	439854.00	3765465.00	1.77285 (13120808)
439859.00	3765465.00	1.77249	(13120808)
	439674.00	3765470.00	1.89079 (12011417)
439679.00	3765470.00	1.88839	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439684.00	3765470.00	1.88727	(12011417)
439689.00	3765470.00	1.88498	(12011417)
439694.00	3765470.00	1.88419	(12011417)
439699.00	3765470.00	1.88171	(12011417)
439704.00	3765470.00	1.88066	(12011417)
439709.00	3765470.00	1.87779	(12011417)
439714.00	3765470.00	1.87698	(12011417)
439719.00	3765470.00	1.87414	(12011417)
439729.00	3765470.00	1.87040	(12011417)
439734.00	3765470.00	1.86770	(12011417)
439739.00	3765470.00	1.86625	(12011417)
439744.00	3765470.00	1.86360	(12011417)
439749.00	3765470.00	1.86208	(12011417)
439789.00	3765470.00	1.84168	(12011417)
439794.00	3765470.00	1.83872	(12011417)
439799.00	3765470.00	1.83566	(12011417)
439804.00	3765470.00	1.83336	(12011417)
439809.00	3765470.00	1.82949	(12011417)
439814.00	3765470.00	1.82719	(12011417)

439819.00	3765470.00	1.82345	(12011417)
	439824.00	3765470.00	1.82116 (12011417)
439829.00	3765470.00	1.81703	(12011417)
	439844.00	3765470.00	1.80770 (12011417)
439849.00	3765470.00	1.80347	(12011417)
	439854.00	3765470.00	1.79979 (12011417)
439859.00	3765470.00	1.79817	(13120808)
	439674.00	3765475.00	1.92187 (12011417)
439679.00	3765475.00	1.92094	(12011417)
	439684.00	3765475.00	1.91846 (12011417)
439689.00	3765475.00	1.91780	(12011417)
	439694.00	3765475.00	1.91531 (12011417)
439699.00	3765475.00	1.91471	(12011417)
	439704.00	3765475.00	1.91201 (12011417)
439709.00	3765475.00	1.91098	(12011417)
	439714.00	3765475.00	1.90843 (12011417)
439719.00	3765475.00	1.90735	(12011417)
	439729.00	3765475.00	1.90311 (12011417)
439734.00	3765475.00	1.90092	(12011417)
	439739.00	3765475.00	1.89850 (12011417)
439744.00	3765475.00	1.89707	(12011417)
	439749.00	3765475.00	1.89437 (12011417)
439754.00	3765475.00	1.89283	(12011417)
	439789.00	3765475.00	1.87544 (12011417)
439794.00	3765475.00	1.87303	(12011417)
	439799.00	3765475.00	1.86995 (12011417)
439804.00	3765475.00	1.86697	(12011417)
	439809.00	3765475.00	1.86481 (12011417)
439814.00	3765475.00	1.86098	(12011417)
	439819.00	3765475.00	1.85860 (12011417)
439824.00	3765475.00	1.85508	(12011417)
	439829.00	3765475.00	1.85293 (12011417)
439269.00	3764900.00	0.78813	(13120808)
	439369.00	3764900.00	0.78646 (13120808)
439469.00	3764900.00	0.78208	(13120808)
	439569.00	3764900.00	0.77259 (13120808)
439669.00	3764900.00	0.76251	(12010217)
	439769.00	3764900.00	0.76045 (12010217)
439869.00	3764900.00	0.75431	(12010217)
	439969.00	3764900.00	0.74042 (15010717)
440069.00	3764900.00	0.74611	(15010717)
	440169.00	3764900.00	0.74873 (15010717)
440269.00	3764900.00	0.75012	(15010717)
	439269.00	3765000.00	0.86208 (13120808)
439369.00	3765000.00	0.86170	(13120808)
	439469.00	3765000.00	0.86017 (13120808)
439569.00	3765000.00	0.85612	(13120808)
	439669.00	3765000.00	0.84593 (13120808)
439769.00	3765000.00	0.83292	(12010217)
	439869.00	3765000.00	0.83019 (12010217)
439969.00	3765000.00	0.82132	(12010217)
	440069.00	3765000.00	0.81870 (15010717)

440169.00	3765000.00	0.81959	(15010717)
440269.00	3765000.00	0.81998	(15010717)
439269.00	3765100.00	0.95439	(13120808)
439369.00	3765100.00	0.95497	(13120808)
439469.00	3765100.00	0.95482	(13120808)
439569.00	3765100.00	0.95385	(13120808)
439669.00	3765100.00	0.94988	(13120808)
439769.00	3765100.00	0.93927	(13120808)
439869.00	3765100.00	0.92313	(12010217)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439969.00	3765100.00	0.91944	(12010217)
440069.00	3765100.00	0.90805	(15010717)
440169.00	3765100.00	0.90855	(15010717)
440269.00	3765100.00	0.90788	(15010717)
439269.00	3765200.00	1.07590	(13120808)
439369.00	3765200.00	1.07742	(13120808)
439469.00	3765200.00	1.07788	(13120808)
439569.00	3765200.00	1.07775	(13120808)
439669.00	3765200.00	1.07676	(13120808)
439769.00	3765200.00	1.07388	(13120808)
439869.00	3765200.00	1.06394	(13120808)
439969.00	3765200.00	1.04234	(12010217)
440069.00	3765200.00	1.03689	(12010217)
440169.00	3765200.00	1.02482	(15010717)
440269.00	3765200.00	1.02428	(15010717)
439269.00	3765300.00	1.30206	(12011417)
439369.00	3765300.00	1.27438	(12011417)
439469.00	3765300.00	1.24816	(13120808)
439569.00	3765300.00	1.24873	(13120808)

439669.00	3765300.00	1.24931	(13120808)
	439769.00	3765300.00	1.24946 (13120808)
439869.00	3765300.00	1.24665	(13120808)
	439969.00	3765300.00	1.23741 (13120808)
440069.00	3765300.00	1.20925	(12010217)
	440169.00	3765300.00	1.20108 (12010217)
440269.00	3765300.00	1.18723	(15010717)
	439269.00	3765400.00	1.62294 (12011417)
439369.00	3765400.00	1.61087	(12011417)
	439469.00	3765400.00	1.59119 (12011417)
439569.00	3765400.00	1.56135	(12011417)
	439669.00	3765400.00	1.51660 (12011417)
439769.00	3765400.00	1.51022	(13120808)
	439869.00	3765400.00	1.51047 (13120808)
439969.00	3765400.00	1.50924	(13120808)
	440069.00	3765400.00	1.50243 (13120808)
440169.00	3765400.00	1.47151	(13120808)
	440269.00	3765400.00	1.47451 (12011608)
439269.00	3765500.00	2.12851	(12011417)
	439369.00	3765500.00	2.12831 (12011417)
439469.00	3765500.00	2.12447	(12011417)
	439569.00	3765500.00	2.11418 (12011417)
439669.00	3765500.00	2.09663	(12011417)
	439769.00	3765500.00	2.06718 (12011417)
439869.00	3765500.00	2.01795	(12011417)
	439969.00	3765500.00	1.96994 (13120808)
440069.00	3765500.00	1.97016	(13120808)
	440169.00	3765500.00	1.96703 (13120808)
440269.00	3765500.00	1.97582	(12011608)
	439269.00	3765600.00	3.38216 (12101307)
439369.00	3765600.00	3.35982	(12101307)
	439469.00	3765600.00	3.32827 (12101307)
439569.00	3765600.00	3.30321	(12011417)
	439669.00	3765600.00	3.30542 (12011417)
439769.00	3765600.00	3.29868	(12011417)
	439869.00	3765600.00	3.28666 (12011417)
439969.00	3765600.00	3.29213	(14101107)
	440069.00	3765600.00	3.36797 (14101107)
440169.00	3765600.00	3.43126	(14101107)
	440269.00	3765600.00	3.48360 (14101107)
439269.00	3765700.00	14.46400	(12101307)
	439369.00	3765700.00	14.87799 (12101307)
439469.00	3765700.00	15.29784	(12101307)
	439569.00	3765700.00	15.87124 (14101107)
439669.00	3765700.00	16.25774	(14101107)
	439769.00	3765700.00	16.50261 (14101107)
439869.00	3765700.00	16.73890	(14101107)
	439969.00	3765700.00	16.78309 (14101107)
440069.00	3765700.00	17.07709	(12101207)
	440169.00	3765700.00	17.08460 (12101207)
440269.00	3765700.00	17.12930	(12101207)
	439269.00	3765800.00	4.21408 (12100707)

439369.00	3765800.00	4.16890	(12100707)
439469.00	3765800.00	4.12125	(12100707)
439569.00	3765800.00	4.07404	(12100707)
439669.00	3765800.00	4.02035	(12100707)
439769.00	3765800.00	3.95669	(12100707)
439869.00	3765800.00	3.88241	(12011717)
439969.00	3765800.00	3.91066	(12011717)
440069.00	3765800.00	3.93224	(12011717)
440169.00	3765800.00	3.94773	(12011717)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: FREEEXH \*\*\*

INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
440269.00	3765800.00	3.95991	(12011717)
439269.00	3765900.00	2.38141	(12100707)
439369.00	3765900.00	2.33400	(12100707)
439469.00	3765900.00	2.27911	(12100707)
439569.00	3765900.00	2.25388	(13111217)
439669.00	3765900.00	2.28003	(13111217)
439769.00	3765900.00	2.29606	(13111217)
439869.00	3765900.00	2.30377	(13111217)
439969.00	3765900.00	2.31008	(13111217)
440069.00	3765900.00	2.31386	(13111217)
440169.00	3765900.00	2.31703	(13111217)
440269.00	3765900.00	2.33252	(12011717)
439649.00	3765310.00	1.27016	(13120808)
439679.00	3765310.00	1.27044	(13120808)
439709.00	3765310.00	1.27081	(13120808)
439739.00	3765310.00	1.27035	(13120808)
439769.00	3765310.00	1.27002	(13120808)
439799.00	3765310.00	1.27007	(13120808)
439829.00	3765310.00	1.26960	(13120808)

439859.00	3765310.00	1.26901	(13120808)
	439889.00	3765310.00	1.26713 (13120808)
439649.00	3765340.00	1.33934	(13120808)
	439679.00	3765340.00	1.33932 (13120808)
439709.00	3765340.00	1.33913	(13120808)
	439739.00	3765340.00	1.33954 (13120808)
439769.00	3765340.00	1.33938	(13120808)
	439799.00	3765340.00	1.33949 (13120808)
439829.00	3765340.00	1.33888	(13120808)
	439859.00	3765340.00	1.33866 (13120808)
439889.00	3765340.00	1.33800	(13120808)
	439649.00	3765370.00	1.41799 (13120808)
439679.00	3765370.00	1.41803	(13120808)
	439709.00	3765370.00	1.41822 (13120808)
439739.00	3765370.00	1.41839	(13120808)
	439769.00	3765370.00	1.41847 (13120808)
439799.00	3765370.00	1.41856	(13120808)
	439829.00	3765370.00	1.41842 (13120808)
439859.00	3765370.00	1.41858	(13120808)
	439889.00	3765370.00	1.41807 (13120808)
439649.00	3765400.00	1.52731	(12011417)
	439679.00	3765400.00	1.51137 (12011417)
439709.00	3765400.00	1.50984	(13120808)
	439739.00	3765400.00	1.50998 (13120808)
439769.00	3765400.00	1.51022	(13120808)
	439799.00	3765400.00	1.51040 (13120808)
439829.00	3765400.00	1.51045	(13120808)
	439859.00	3765400.00	1.51046 (13120808)
439889.00	3765400.00	1.51049	(13120808)
	439649.00	3765430.00	1.67246 (12011417)
439679.00	3765430.00	1.66013	(12011417)
	439709.00	3765430.00	1.64612 (12011417)
439739.00	3765430.00	1.62900	(12011417)
	439769.00	3765430.00	1.61798 (13120808)
439799.00	3765430.00	1.61813	(13120808)
	439829.00	3765430.00	1.61868 (13120808)
439859.00	3765430.00	1.61893	(13120808)
	439889.00	3765430.00	1.61897 (13120808)
439649.00	3765460.00	1.83786	(12011417)
	439679.00	3765460.00	1.82686 (12011417)
439709.00	3765460.00	1.81585	(12011417)
	439739.00	3765460.00	1.80324 (12011417)
439769.00	3765460.00	1.78812	(12011417)
	439799.00	3765460.00	1.76960 (12011417)
439829.00	3765460.00	1.74959	(12011417)
	439859.00	3765460.00	1.74824 (13120808)
439889.00	3765460.00	1.74855	(13120808)
	439649.00	3765490.00	2.02994 (12011417)
439679.00	3765490.00	2.02121	(12011417)
	439709.00	3765490.00	2.01295 (12011417)
439739.00	3765490.00	2.00287	(12011417)
	439769.00	3765490.00	1.99158 (12011417)

439799.00	3765490.00	1.97783	(12011417)
	439829.00	3765490.00	1.96204 (12011417)
439859.00	3765490.00	1.94396	(12011417)
	439889.00	3765490.00	1.92300 (12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439674.00	3765310.00	0.05503	(13101107)
439679.00	3765310.00	0.05563	(14100607)
439684.00	3765310.00	0.05634	(14100607)
439689.00	3765310.00	0.05708	(14100607)
439694.00	3765310.00	0.05781	(14100607)
439699.00	3765310.00	0.05854	(14100607)
439704.00	3765310.00	0.05926	(14100607)
439709.00	3765310.00	0.06000	(14100607)
439714.00	3765310.00	0.06071	(14100607)
439719.00	3765310.00	0.06142	(14100607)
439729.00	3765310.00	0.06279	(14100607)
439734.00	3765310.00	0.06346	(14100607)
439739.00	3765310.00	0.06410	(14100607)
439744.00	3765310.00	0.06474	(14100607)
439749.00	3765310.00	0.06532	(14100607)
439764.00	3765310.00	0.06698	(14100607)
439769.00	3765310.00	0.06745	(14100607)

439774.00	3765310.00	0.06790	(14100607)
	439779.00	3765310.00	0.06831 (14100607)
439784.00	3765310.00	0.06870	(14100607)
	439789.00	3765310.00	0.06903 (14100607)
439794.00	3765310.00	0.06932	(14100607)
	439799.00	3765310.00	0.06959 (14100607)
439804.00	3765310.00	0.06980	(14100607)
	439809.00	3765310.00	0.07000 (14100607)
439814.00	3765310.00	0.07011	(14100607)
	439819.00	3765310.00	0.07022 (14100607)
439824.00	3765310.00	0.07027	(14100607)
	439829.00	3765310.00	0.07029 (14100607)
439839.00	3765310.00	0.07019	(14100607)
	439844.00	3765310.00	0.07009 (14100607)
439849.00	3765310.00	0.06996	(14100607)
	439854.00	3765310.00	0.06978 (14100607)
439859.00	3765310.00	0.06954	(14100607)
	439864.00	3765310.00	0.06931 (14100607)
439869.00	3765310.00	0.06903	(14100607)
	439874.00	3765310.00	0.06873 (14100607)
439879.00	3765310.00	0.06839	(14100607)
	439884.00	3765310.00	0.06802 (14100607)
439674.00	3765315.00	0.05554	(13101107)
	439679.00	3765315.00	0.05577 (13101107)
439684.00	3765315.00	0.05629	(14100607)
	439689.00	3765315.00	0.05702 (14100607)
439694.00	3765315.00	0.05778	(14100607)
	439699.00	3765315.00	0.05854 (14100607)
439704.00	3765315.00	0.05930	(14100607)
	439709.00	3765315.00	0.06004 (14100607)
439714.00	3765315.00	0.06079	(14100607)
	439719.00	3765315.00	0.06152 (14100607)
439729.00	3765315.00	0.06295	(14100607)
	439734.00	3765315.00	0.06366 (14100607)
439739.00	3765315.00	0.06433	(14100607)
	439744.00	3765315.00	0.06500 (14100607)
439749.00	3765315.00	0.06564	(14100607)
	439764.00	3765315.00	0.06738 (14100607)
439769.00	3765315.00	0.06791	(14100607)
	439774.00	3765315.00	0.06840 (14100607)
439779.00	3765315.00	0.06884	(14100607)
	439784.00	3765315.00	0.06926 (14100607)
439789.00	3765315.00	0.06964	(14100607)
	439794.00	3765315.00	0.06999 (14100607)
439799.00	3765315.00	0.07027	(14100607)
	439804.00	3765315.00	0.07053 (14100607)
439809.00	3765315.00	0.07074	(14100607)
	439814.00	3765315.00	0.07092 (14100607)
439819.00	3765315.00	0.07104	(14100607)
	439824.00	3765315.00	0.07112 (14100607)
439829.00	3765315.00	0.07116	(14100607)
	439839.00	3765315.00	0.07113 (14100607)

439844.00	3765315.00	0.07105	(14100607)
	439849.00	3765315.00	0.07093 (14100607)
439854.00	3765315.00	0.07078	(14100607)
	439859.00	3765315.00	0.07059 (14100607)
439864.00	3765315.00	0.07036	(14100607)
	439869.00	3765315.00	0.07009 (14100607)
439874.00	3765315.00	0.06981	(14100607)
	439879.00	3765315.00	0.06949 (14100607)
439884.00	3765315.00	0.06913	(14100607)
	439674.00	3765320.00	0.05604 (13101107)
439679.00	3765320.00	0.05629	(13101107)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439684.00	3765320.00	0.05654	(13101107)
439689.00	3765320.00	0.05697	(14100607)
439694.00	3765320.00	0.05774	(14100607)
439699.00	3765320.00	0.05851	(14100607)
439704.00	3765320.00	0.05929	(14100607)
439709.00	3765320.00	0.06007	(14100607)
439714.00	3765320.00	0.06084	(14100607)
439719.00	3765320.00	0.06160	(14100607)
439729.00	3765320.00	0.06312	(14100607)
439734.00	3765320.00	0.06383	(14100607)
439739.00	3765320.00	0.06456	(14100607)
439744.00	3765320.00	0.06524	(14100607)
439749.00	3765320.00	0.06593	(14100607)
439764.00	3765320.00	0.06778	(14100607)
439769.00	3765320.00	0.06835	(14100607)
439774.00	3765320.00	0.06887	(14100607)
439779.00	3765320.00	0.06939	(14100607)

439784.00	3765320.00	0.06982	(14100607)
	439789.00	3765320.00	0.07024 (14100607)
439794.00	3765320.00	0.07062	(14100607)
	439799.00	3765320.00	0.07095 (14100607)
439804.00	3765320.00	0.07125	(14100607)
	439809.00	3765320.00	0.07148 (14100607)
439814.00	3765320.00	0.07170	(14100607)
	439819.00	3765320.00	0.07185 (14100607)
439824.00	3765320.00	0.07198	(14100607)
	439829.00	3765320.00	0.07204 (14100607)
439839.00	3765320.00	0.07207	(14100607)
	439844.00	3765320.00	0.07202 (14100607)
439849.00	3765320.00	0.07192	(14100607)
	439854.00	3765320.00	0.07179 (14100607)
439859.00	3765320.00	0.07162	(14100607)
	439864.00	3765320.00	0.07141 (14100607)
439869.00	3765320.00	0.07117	(14100607)
	439874.00	3765320.00	0.07088 (14100607)
439879.00	3765320.00	0.07059	(14100607)
	439884.00	3765320.00	0.07026 (14100607)
439674.00	3765325.00	0.05652	(13101107)
	439679.00	3765325.00	0.05681 (13101107)
439684.00	3765325.00	0.05706	(13101107)
	439689.00	3765325.00	0.05732 (13101107)
439694.00	3765325.00	0.05767	(14100607)
	439699.00	3765325.00	0.05847 (14100607)
439704.00	3765325.00	0.05927	(14100607)
	439709.00	3765325.00	0.06008 (14100607)
439714.00	3765325.00	0.06087	(14100607)
	439719.00	3765325.00	0.06167 (14100607)
439729.00	3765325.00	0.06322	(14100607)
	439734.00	3765325.00	0.06399 (14100607)
439739.00	3765325.00	0.06474	(14100607)
	439744.00	3765325.00	0.06548 (14100607)
439749.00	3765325.00	0.06618	(14100607)
	439754.00	3765325.00	0.06688 (14100607)
439769.00	3765325.00	0.06876	(14100607)
	439774.00	3765325.00	0.06934 (14100607)
439779.00	3765325.00	0.06987	(14100607)
	439784.00	3765325.00	0.07038 (14100607)
439789.00	3765325.00	0.07082	(14100607)
	439794.00	3765325.00	0.07124 (14100607)
439799.00	3765325.00	0.07162	(14100607)
	439804.00	3765325.00	0.07195 (14100607)
439809.00	3765325.00	0.07224	(14100607)
	439814.00	3765325.00	0.07246 (14100607)
439819.00	3765325.00	0.07267	(14100607)
	439824.00	3765325.00	0.07282 (14100607)
439829.00	3765325.00	0.07293	(14100607)
	439839.00	3765325.00	0.07300 (14100607)
439844.00	3765325.00	0.07298	(14100607)
	439849.00	3765325.00	0.07293 (14100607)

439854.00	3765325.00	0.07281	(14100607)
	439859.00	3765325.00	0.07266 (14100607)
439864.00	3765325.00	0.07248	(14100607)
	439869.00	3765325.00	0.07226 (14100607)
439874.00	3765325.00	0.07201	(14100607)
	439879.00	3765325.00	0.07170 (14100607)
439884.00	3765325.00	0.07139	(14100607)
	439674.00	3765330.00	0.05708 (15102007)
439679.00	3765330.00	0.05729	(13101107)
	439684.00	3765330.00	0.05760 (13101107)
439689.00	3765330.00	0.05786	(13101107)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439694.00	3765330.00	0.05813	(13101107)
439699.00	3765330.00	0.05840	(14100607)
439704.00	3765330.00	0.05923	(14100607)
439709.00	3765330.00	0.06004	(14100607)
439714.00	3765330.00	0.06089	(14100607)
439719.00	3765330.00	0.06169	(14100607)
439729.00	3765330.00	0.06331	(14100607)
439734.00	3765330.00	0.06413	(14100607)
439739.00	3765330.00	0.06490	(14100607)
439744.00	3765330.00	0.06568	(14100607)
439749.00	3765330.00	0.06642	(14100607)
439754.00	3765330.00	0.06715	(14100607)
439774.00	3765330.00	0.06979	(14100607)
439779.00	3765330.00	0.07035	(14100607)
439784.00	3765330.00	0.07090	(14100607)
439789.00	3765330.00	0.07139	(14100607)
439794.00	3765330.00	0.07186	(14100607)

439799.00	3765330.00	0.07226	(14100607)
	439804.00	3765330.00	0.07264 (14100607)
439809.00	3765330.00	0.07296	(14100607)
	439814.00	3765330.00	0.07324 (14100607)
439819.00	3765330.00	0.07349	(14100607)
	439824.00	3765330.00	0.07366 (14100607)
439829.00	3765330.00	0.07380	(14100607)
	439839.00	3765330.00	0.07394 (14100607)
439844.00	3765330.00	0.07395	(14100607)
	439849.00	3765330.00	0.07391 (14100607)
439854.00	3765330.00	0.07384	(14100607)
	439859.00	3765330.00	0.07372 (14100607)
439864.00	3765330.00	0.07355	(14100607)
	439869.00	3765330.00	0.07333 (14100607)
439874.00	3765330.00	0.07311	(14100607)
	439879.00	3765330.00	0.07285 (14100607)
439884.00	3765330.00	0.07253	(14100607)
	439674.00	3765335.00	0.05787 (15102007)
439679.00	3765335.00	0.05795	(15102007)
	439684.00	3765335.00	0.05807 (13101107)
439689.00	3765335.00	0.05840	(13101107)
	439694.00	3765335.00	0.05868 (13101107)
439699.00	3765335.00	0.05896	(13101107)
	439704.00	3765335.00	0.05920 (13101107)
439709.00	3765335.00	0.06000	(14100607)
	439714.00	3765335.00	0.06085 (14100607)
439719.00	3765335.00	0.06171	(14100607)
	439729.00	3765335.00	0.06341 (14100607)
439734.00	3765335.00	0.06423	(14100607)
	439739.00	3765335.00	0.06505 (14100607)
439744.00	3765335.00	0.06585	(14100607)
	439749.00	3765335.00	0.06664 (14100607)
439774.00	3765335.00	0.07020	(14100607)
	439779.00	3765335.00	0.07084 (14100607)
439784.00	3765335.00	0.07139	(14100607)
	439789.00	3765335.00	0.07195 (14100607)
439794.00	3765335.00	0.07245	(14100607)
	439839.00	3765335.00	0.07489 (14100607)
439844.00	3765335.00	0.07494	(14100607)
	439849.00	3765335.00	0.07491 (14100607)
439854.00	3765335.00	0.07487	(14100607)
	439859.00	3765335.00	0.07477 (14100607)
439864.00	3765335.00	0.07463	(14100607)
	439869.00	3765335.00	0.07445 (14100607)
439874.00	3765335.00	0.07423	(14100607)
	439879.00	3765335.00	0.07398 (14100607)
439884.00	3765335.00	0.07370	(14100607)
	439674.00	3765340.00	0.05864 (15102007)
439679.00	3765340.00	0.05877	(15102007)
	439684.00	3765340.00	0.05886 (15102007)
439689.00	3765340.00	0.05894	(15102007)
	439694.00	3765340.00	0.05922 (13101107)

439699.00	3765340.00	0.05952	(13101107)
	439704.00	3765340.00	0.05982 (13101107)
439709.00	3765340.00	0.06006	(13101107)
	439714.00	3765340.00	0.06081 (14100607)
439719.00	3765340.00	0.06170	(14100607)
	439729.00	3765340.00	0.06344 (14100607)
439734.00	3765340.00	0.06430	(14100607)
	439739.00	3765340.00	0.06516 (14100607)
439744.00	3765340.00	0.06600	(14100607)
	439749.00	3765340.00	0.06682 (14100607)
439774.00	3765340.00	0.07060	(14100607)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439779.00	3765340.00	0.07127	(14100607)
439784.00	3765340.00	0.07191	(14100607)
439789.00	3765340.00	0.07249	(14100607)
439794.00	3765340.00	0.07303	(14100607)
439839.00	3765340.00	0.07583	(14100607)
439844.00	3765340.00	0.07589	(14100607)
439849.00	3765340.00	0.07594	(14100607)
439854.00	3765340.00	0.07590	(14100607)
439859.00	3765340.00	0.07583	(14100607)
439864.00	3765340.00	0.07572	(14100607)
439869.00	3765340.00	0.07557	(14100607)
439874.00	3765340.00	0.07536	(14100607)
439879.00	3765340.00	0.07513	(14100607)
439884.00	3765340.00	0.07486	(14100607)
439674.00	3765345.00	0.05939	(15102007)
439679.00	3765345.00	0.05955	(15102007)
439684.00	3765345.00	0.05969	(15102007)

439689.00	3765345.00	0.05979	(15102007)
	439694.00	3765345.00	0.05988 (15102007)
439699.00	3765345.00	0.06006	(13101107)
	439704.00	3765345.00	0.06039 (13101107)
439709.00	3765345.00	0.06070	(13101107)
	439714.00	3765345.00	0.06095 (13101107)
439719.00	3765345.00	0.06165	(14100607)
	439729.00	3765345.00	0.06346 (14100607)
439734.00	3765345.00	0.06436	(14100607)
	439739.00	3765345.00	0.06524 (14100607)
439744.00	3765345.00	0.06613	(14100607)
	439749.00	3765345.00	0.06699 (14100607)
439774.00	3765345.00	0.07100	(14100607)
	439779.00	3765345.00	0.07168 (14100607)
439784.00	3765345.00	0.07238	(14100607)
	439789.00	3765345.00	0.07300 (14100607)
439794.00	3765345.00	0.07361	(14100607)
	439839.00	3765345.00	0.07678 (14100607)
439844.00	3765345.00	0.07687	(14100607)
	439849.00	3765345.00	0.07694 (14100607)
439854.00	3765345.00	0.07695	(14100607)
	439859.00	3765345.00	0.07690 (14100607)
439864.00	3765345.00	0.07682	(14100607)
	439869.00	3765345.00	0.07668 (14100607)
439874.00	3765345.00	0.07651	(14100607)
	439879.00	3765345.00	0.07630 (14100607)
439884.00	3765345.00	0.07605	(14100607)
	439674.00	3765350.00	0.06010 (15102007)
439679.00	3765350.00	0.06030	(15102007)
	439684.00	3765350.00	0.06047 (15102007)
439689.00	3765350.00	0.06064	(15102007)
	439694.00	3765350.00	0.06074 (15102007)
439699.00	3765350.00	0.06085	(15102007)
	439704.00	3765350.00	0.06093 (13101107)
439709.00	3765350.00	0.06127	(13101107)
	439714.00	3765350.00	0.06160 (13101107)
439719.00	3765350.00	0.06187	(13101107)
	439729.00	3765350.00	0.06346 (14100607)
439734.00	3765350.00	0.06438	(14100607)
	439739.00	3765350.00	0.06530 (14100607)
439744.00	3765350.00	0.06622	(14100607)
	439749.00	3765350.00	0.06713 (14100607)
439774.00	3765350.00	0.07134	(14100607)
	439779.00	3765350.00	0.07211 (14100607)
439784.00	3765350.00	0.07281	(14100607)
	439789.00	3765350.00	0.07350 (14100607)
439794.00	3765350.00	0.07414	(14100607)
	439839.00	3765350.00	0.07773 (14100607)
439844.00	3765350.00	0.07788	(14100607)
	439849.00	3765350.00	0.07794 (14100607)
439854.00	3765350.00	0.07799	(14100607)
	439859.00	3765350.00	0.07798 (14100607)

439864.00	3765350.00	0.07792	(14100607)
	439869.00	3765350.00	0.07781 (14100607)
439874.00	3765350.00	0.07767	(14100607)
	439879.00	3765350.00	0.07747 (14100607)
439884.00	3765350.00	0.07725	(14100607)
	439674.00	3765355.00	0.06079 (15102007)
439679.00	3765355.00	0.06103	(15102007)
	439684.00	3765355.00	0.06123 (15102007)
439689.00	3765355.00	0.06142	(15102007)
	439694.00	3765355.00	0.06160 (15102007)
439699.00	3765355.00	0.06173	(15102007)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
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 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439704.00	3765355.00	0.06185	(15102007)
439709.00	3765355.00	0.06192	(15102007)
439714.00	3765355.00	0.06218	(13101107)
439719.00	3765355.00	0.06252	(13101107)
439729.00	3765355.00	0.06340	(14100607)
439734.00	3765355.00	0.06438	(14100607)
439739.00	3765355.00	0.06533	(14100607)
439744.00	3765355.00	0.06629	(14100607)
439749.00	3765355.00	0.06723	(14100607)
439774.00	3765355.00	0.07166	(14100607)
439779.00	3765355.00	0.07247	(14100607)
439784.00	3765355.00	0.07324	(14100607)
439789.00	3765355.00	0.07398	(14100607)
439794.00	3765355.00	0.07465	(14100607)
439839.00	3765355.00	0.07867	(14100607)
439844.00	3765355.00	0.07884	(14100607)
439849.00	3765355.00	0.07898	(14100607)

439854.00	3765355.00	0.07905	(14100607)
	439859.00	3765355.00	0.07906 (14100607)
439864.00	3765355.00	0.07904	(14100607)
	439869.00	3765355.00	0.07897 (14100607)
439874.00	3765355.00	0.07883	(14100607)
	439879.00	3765355.00	0.07867 (14100607)
439884.00	3765355.00	0.07845	(14100607)
	439674.00	3765360.00	0.06148 (15102007)
439679.00	3765360.00	0.06173	(15102007)
	439684.00	3765360.00	0.06198 (15102007)
439689.00	3765360.00	0.06220	(15102007)
	439694.00	3765360.00	0.06240 (15102007)
439699.00	3765360.00	0.06259	(15102007)
	439704.00	3765360.00	0.06274 (15102007)
439709.00	3765360.00	0.06288	(15102007)
	439714.00	3765360.00	0.06296 (15102007)
439719.00	3765360.00	0.06313	(13101107)
	439729.00	3765360.00	0.06378 (13101107)
439734.00	3765360.00	0.06434	(14100607)
	439739.00	3765360.00	0.06533 (14100607)
439744.00	3765360.00	0.06632	(14100607)
	439749.00	3765360.00	0.06731 (14100607)
439774.00	3765360.00	0.07197	(14100607)
	439779.00	3765360.00	0.07282 (14100607)
439784.00	3765360.00	0.07365	(14100607)
	439789.00	3765360.00	0.07442 (14100607)
439794.00	3765360.00	0.07518	(14100607)
	439799.00	3765360.00	0.07586 (14100607)
439804.00	3765360.00	0.07652	(14100607)
	439809.00	3765360.00	0.07712 (14100607)
439814.00	3765360.00	0.07768	(14100607)
	439839.00	3765360.00	0.07962 (14100607)
439844.00	3765360.00	0.07982	(14100607)
	439849.00	3765360.00	0.08000 (14100607)
439854.00	3765360.00	0.08010	(14100607)
	439859.00	3765360.00	0.08016 (14100607)
439864.00	3765360.00	0.08016	(14100607)
	439869.00	3765360.00	0.08012 (14100607)
439874.00	3765360.00	0.08001	(14100607)
	439879.00	3765360.00	0.07987 (14100607)
439884.00	3765360.00	0.07968	(14100607)
	439674.00	3765365.00	0.06209 (15102007)
439679.00	3765365.00	0.06242	(15102007)
	439684.00	3765365.00	0.06270 (15102007)
439689.00	3765365.00	0.06296	(15102007)
	439694.00	3765365.00	0.06320 (15102007)
439699.00	3765365.00	0.06340	(15102007)
	439704.00	3765365.00	0.06361 (15102007)
439709.00	3765365.00	0.06377	(15102007)
	439714.00	3765365.00	0.06392 (15102007)
439719.00	3765365.00	0.06403	(15102007)
	439729.00	3765365.00	0.06444 (13101107)

439734.00	3765365.00	0.06479	(13101107)
	439739.00	3765365.00	0.06531 (14100607)
439744.00	3765365.00	0.06632	(14100607)
	439749.00	3765365.00	0.06736 (14100607)
439774.00	3765365.00	0.07224	(14100607)
	439779.00	3765365.00	0.07315 (14100607)
439784.00	3765365.00	0.07401	(14100607)
	439789.00	3765365.00	0.07486 (14100607)
439794.00	3765365.00	0.07565	(14100607)
	439799.00	3765365.00	0.07640 (14100607)
439804.00	3765365.00	0.07711	(14100607)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
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 A0000028 , A0000029 , A0000030 ,  
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 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439809.00	3765365.00	0.07776	(14100607)
439814.00	3765365.00	0.07838	(14100607)
439839.00	3765365.00	0.08056	(14100607)
439844.00	3765365.00	0.08082	(14100607)
439849.00	3765365.00	0.08101	(14100607)
439854.00	3765365.00	0.08116	(14100607)
439859.00	3765365.00	0.08126	(14100607)
439864.00	3765365.00	0.08130	(14100607)
439869.00	3765365.00	0.08127	(14100607)
439874.00	3765365.00	0.08121	(14100607)
439879.00	3765365.00	0.08108	(14100607)
439884.00	3765365.00	0.08093	(14100607)
439674.00	3765370.00	0.06270	(15102007)
439679.00	3765370.00	0.06304	(15102007)
439684.00	3765370.00	0.06338	(15102007)
439689.00	3765370.00	0.06368	(15102007)
439694.00	3765370.00	0.06397	(15102007)

439699.00	3765370.00	0.06422	(15102007)
	439704.00	3765370.00	0.06445 (15102007)
439709.00	3765370.00	0.06466	(15102007)
	439714.00	3765370.00	0.06483 (15102007)
439719.00	3765370.00	0.06500	(15102007)
	439729.00	3765370.00	0.06521 (15102007)
439734.00	3765370.00	0.06545	(13101107)
	439739.00	3765370.00	0.06581 (13101107)
439744.00	3765370.00	0.06631	(14100607)
	439749.00	3765370.00	0.06734 (14100607)
439774.00	3765370.00	0.07249	(14100607)
	439779.00	3765370.00	0.07344 (14100607)
439784.00	3765370.00	0.07436	(14100607)
	439789.00	3765370.00	0.07526 (14100607)
439794.00	3765370.00	0.07610	(14100607)
	439799.00	3765370.00	0.07692 (14100607)
439804.00	3765370.00	0.07767	(14100607)
	439809.00	3765370.00	0.07840 (14100607)
439814.00	3765370.00	0.07905	(14100607)
	439839.00	3765370.00	0.08150 (14100607)
439844.00	3765370.00	0.08180	(14100607)
	439849.00	3765370.00	0.08204 (14100607)
439854.00	3765370.00	0.08224	(14100607)
	439859.00	3765370.00	0.08236 (14100607)
439864.00	3765370.00	0.08244	(14100607)
	439869.00	3765370.00	0.08245 (14100607)
439874.00	3765370.00	0.08243	(14100607)
	439879.00	3765370.00	0.08232 (14100607)
439884.00	3765370.00	0.08218	(14100607)
	439674.00	3765375.00	0.06328 (15102007)
439679.00	3765375.00	0.06366	(15102007)
	439684.00	3765375.00	0.06402 (15102007)
439689.00	3765375.00	0.06437	(15102007)
	439694.00	3765375.00	0.06469 (15102007)
439699.00	3765375.00	0.06500	(15102007)
	439704.00	3765375.00	0.06528 (15102007)
439709.00	3765375.00	0.06552	(15102007)
	439714.00	3765375.00	0.06575 (15102007)
439719.00	3765375.00	0.06592	(15102007)
	439729.00	3765375.00	0.06623 (15102007)
439734.00	3765375.00	0.06635	(15102007)
	439739.00	3765375.00	0.06651 (13101107)
439744.00	3765375.00	0.06687	(13101107)
	439749.00	3765375.00	0.06734 (14100607)
439754.00	3765375.00	0.06842	(14100607)
	439774.00	3765375.00	0.07268 (14100607)
439779.00	3765375.00	0.07369	(14100607)
	439784.00	3765375.00	0.07469 (14100607)
439789.00	3765375.00	0.07562	(14100607)
	439794.00	3765375.00	0.07654 (14100607)
439799.00	3765375.00	0.07740	(14100607)
	439804.00	3765375.00	0.07823 (14100607)

439809.00	3765375.00	0.07899	(14100607)
	439814.00	3765375.00	0.07970 (14100607)
439839.00	3765375.00	0.08242	(14100607)
	439844.00	3765375.00	0.08278 (14100607)
439849.00	3765375.00	0.08308	(14100607)
	439854.00	3765375.00	0.08330 (14100607)
439859.00	3765375.00	0.08347	(14100607)
	439864.00	3765375.00	0.08359 (14100607)
439869.00	3765375.00	0.08364	(14100607)
	439874.00	3765375.00	0.08363 (14100607)
439879.00	3765375.00	0.08358	(14100607)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
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 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
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 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439884.00	3765375.00	0.08345	(14100607)
439774.00	3765380.00	0.07286	(14100607)
439779.00	3765380.00	0.07394	(14100607)
439784.00	3765380.00	0.07496	(14100607)
439789.00	3765380.00	0.07597	(14100607)
439794.00	3765380.00	0.07694	(14100607)
439799.00	3765380.00	0.07785	(14100607)
439804.00	3765380.00	0.07875	(14100607)
439809.00	3765380.00	0.07956	(14100607)
439814.00	3765380.00	0.08037	(14100607)
439769.00	3765385.00	0.07185	(14100607)
439819.00	3765385.00	0.08175	(14100607)
439769.00	3765400.00	0.07277	(15102007)
439844.00	3765400.00	0.08761	(14100607)
439849.00	3765400.00	0.08819	(14100607)
439674.00	3765405.00	0.06587	(15102007)
439714.00	3765405.00	0.07048	(15102007)

439719.00	3765405.00	0.07097	(15102007)
	439734.00	3765405.00	0.07229 (15102007)
439749.00	3765405.00	0.07328	(15102007)
	439754.00	3765405.00	0.07355 (15102007)
439774.00	3765405.00	0.07415	(15102007)
	439779.00	3765405.00	0.07450 (14100607)
439784.00	3765405.00	0.07582	(14100607)
	439789.00	3765405.00	0.07716 (14100607)
439794.00	3765405.00	0.07842	(14100607)
	439799.00	3765405.00	0.07968 (14100607)
439804.00	3765405.00	0.08089	(14100607)
	439809.00	3765405.00	0.08206 (14100607)
439814.00	3765405.00	0.08319	(14100607)
	439819.00	3765405.00	0.08425 (14100607)
439824.00	3765405.00	0.08524	(14100607)
	439829.00	3765405.00	0.08619 (14100607)
439834.00	3765405.00	0.08706	(14100607)
	439839.00	3765405.00	0.08784 (14100607)
439844.00	3765405.00	0.08858	(14100607)
	439849.00	3765405.00	0.08921 (14100607)
439854.00	3765405.00	0.08977	(14100607)
	439859.00	3765405.00	0.09024 (14100607)
439674.00	3765410.00	0.06614	(15102007)
	439679.00	3765410.00	0.06681 (15102007)
439684.00	3765410.00	0.06746	(15102007)
	439689.00	3765410.00	0.06811 (15102007)
439694.00	3765410.00	0.06874	(15102007)
	439699.00	3765410.00	0.06936 (15102007)
439704.00	3765410.00	0.06998	(15102007)
	439709.00	3765410.00	0.07056 (15102007)
439714.00	3765410.00	0.07114	(15102007)
	439719.00	3765410.00	0.07167 (15102007)
439729.00	3765410.00	0.07268	(15102007)
	439734.00	3765410.00	0.07315 (15102007)
439739.00	3765410.00	0.07359	(15102007)
	439744.00	3765410.00	0.07399 (15102007)
439749.00	3765410.00	0.07434	(15102007)
	439774.00	3765410.00	0.07552 (15102007)
439779.00	3765410.00	0.07561	(15102007)
	439784.00	3765410.00	0.07588 (14100607)
439789.00	3765410.00	0.07725	(14100607)
	439794.00	3765410.00	0.07861 (14100607)
439799.00	3765410.00	0.07994	(14100607)
	439804.00	3765410.00	0.08120 (14100607)
439809.00	3765410.00	0.08246	(14100607)
	439814.00	3765410.00	0.08366 (14100607)
439819.00	3765410.00	0.08479	(14100607)
	439824.00	3765410.00	0.08589 (14100607)
439829.00	3765410.00	0.08689	(14100607)
	439834.00	3765410.00	0.08784 (14100607)
439839.00	3765410.00	0.08871	(14100607)
	439844.00	3765410.00	0.08951 (14100607)

439849.00	3765410.00	0.09021	(14100607)
	439854.00	3765410.00	0.09084 (14100607)
439859.00	3765410.00	0.09140	(14100607)
	439674.00	3765415.00	0.06694 (13032007)
439679.00	3765415.00	0.06707	(15102007)
	439684.00	3765415.00	0.06778 (15102007)
439689.00	3765415.00	0.06846	(15102007)
	439694.00	3765415.00	0.06914 (15102007)
439699.00	3765415.00	0.06981	(15102007)
	439704.00	3765415.00	0.07046 (15102007)
439709.00	3765415.00	0.07111	(15102007)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
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 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439714.00	3765415.00	0.07172	(15102007)
439719.00	3765415.00	0.07234	(15102007)
439729.00	3765415.00	0.07346	(15102007)
439734.00	3765415.00	0.07398	(15102007)
439739.00	3765415.00	0.07446	(15102007)
439744.00	3765415.00	0.07493	(15102007)
439749.00	3765415.00	0.07535	(15102007)
439774.00	3765415.00	0.07683	(15102007)
439779.00	3765415.00	0.07700	(15102007)
439784.00	3765415.00	0.07711	(15102007)
439789.00	3765415.00	0.07732	(14100607)
439794.00	3765415.00	0.07876	(14100607)
439799.00	3765415.00	0.08012	(14100607)
439804.00	3765415.00	0.08150	(14100607)
439809.00	3765415.00	0.08282	(14100607)
439814.00	3765415.00	0.08409	(14100607)
439819.00	3765415.00	0.08532	(14100607)

439824.00	3765415.00	0.08648	(14100607)
	439829.00	3765415.00	0.08758 (14100607)
439834.00	3765415.00	0.08861	(14100607)
	439839.00	3765415.00	0.08955 (14100607)
439844.00	3765415.00	0.09041	(14100607)
	439849.00	3765415.00	0.09123 (14100607)
439854.00	3765415.00	0.09192	(14100607)
	439859.00	3765415.00	0.09253 (14100607)
439674.00	3765420.00	0.06828	(13032007)
	439679.00	3765420.00	0.06840 (13032007)
439684.00	3765420.00	0.06851	(13032007)
	439689.00	3765420.00	0.06877 (15102007)
439694.00	3765420.00	0.06949	(15102007)
	439699.00	3765420.00	0.07021 (15102007)
439704.00	3765420.00	0.07092	(15102007)
	439709.00	3765420.00	0.07159 (15102007)
439714.00	3765420.00	0.07228	(15102007)
	439719.00	3765420.00	0.07292 (15102007)
439729.00	3765420.00	0.07418	(15102007)
	439734.00	3765420.00	0.07477 (15102007)
439739.00	3765420.00	0.07532	(15102007)
	439744.00	3765420.00	0.07583 (15102007)
439749.00	3765420.00	0.07632	(15102007)
	439774.00	3765420.00	0.07813 (15102007)
439779.00	3765420.00	0.07834	(15102007)
	439784.00	3765420.00	0.07853 (15102007)
439789.00	3765420.00	0.07865	(15102007)
	439794.00	3765420.00	0.07882 (14100607)
439799.00	3765420.00	0.08032	(14100607)
	439804.00	3765420.00	0.08172 (14100607)
439809.00	3765420.00	0.08313	(14100607)
	439814.00	3765420.00	0.08449 (14100607)
439819.00	3765420.00	0.08580	(14100607)
	439824.00	3765420.00	0.08705 (14100607)
439829.00	3765420.00	0.08824	(14100607)
	439834.00	3765420.00	0.08933 (14100607)
439839.00	3765420.00	0.09038	(14100607)
	439844.00	3765420.00	0.09134 (14100607)
439849.00	3765420.00	0.09220	(14100607)
	439854.00	3765420.00	0.09298 (14100607)
439859.00	3765420.00	0.09367	(14100607)
	439674.00	3765425.00	0.06957 (13032007)
439679.00	3765425.00	0.06976	(13032007)
	439684.00	3765425.00	0.06990 (13032007)
439689.00	3765425.00	0.07004	(13032007)
	439694.00	3765425.00	0.07013 (13032007)
439699.00	3765425.00	0.07054	(15102007)
	439704.00	3765425.00	0.07130 (15102007)
439709.00	3765425.00	0.07205	(15102007)
	439714.00	3765425.00	0.07276 (15102007)
439719.00	3765425.00	0.07349	(15102007)
	439729.00	3765425.00	0.07485 (15102007)

439734.00	3765425.00	0.07549	(15102007)
	439739.00	3765425.00	0.07612 (15102007)
439744.00	3765425.00	0.07671	(15102007)
	439749.00	3765425.00	0.07725 (15102007)
439774.00	3765425.00	0.07941	(15102007)
	439779.00	3765425.00	0.07970 (15102007)
439784.00	3765425.00	0.07992	(15102007)
	439789.00	3765425.00	0.08012 (15102007)
439794.00	3765425.00	0.08025	(15102007)
	439799.00	3765425.00	0.08040 (14100607)
439804.00	3765425.00	0.08192	(14100607)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
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 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439809.00	3765425.00	0.08340	(14100607)
439814.00	3765425.00	0.08483	(14100607)
439819.00	3765425.00	0.08624	(14100607)
439824.00	3765425.00	0.08757	(14100607)
439829.00	3765425.00	0.08884	(14100607)
439834.00	3765425.00	0.09006	(14100607)
439839.00	3765425.00	0.09118	(14100607)
439844.00	3765425.00	0.09221	(14100607)
439849.00	3765425.00	0.09317	(14100607)
439854.00	3765425.00	0.09405	(14100607)
439859.00	3765425.00	0.09481	(14100607)
439674.00	3765430.00	0.07082	(13032007)
439679.00	3765430.00	0.07104	(13032007)
439684.00	3765430.00	0.07127	(13032007)
439689.00	3765430.00	0.07143	(13032007)
439694.00	3765430.00	0.07160	(13032007)
439699.00	3765430.00	0.07174	(13032007)

439704.00	3765430.00	0.07182	(13032007)
	439709.00	3765430.00	0.07242 (15102007)
439714.00	3765430.00	0.07322	(15102007)
	439719.00	3765430.00	0.07397 (15102007)
439729.00	3765430.00	0.07545	(15102007)
	439734.00	3765430.00	0.07616 (15102007)
439739.00	3765430.00	0.07684	(15102007)
	439744.00	3765430.00	0.07750 (15102007)
439749.00	3765430.00	0.07814	(15102007)
	439774.00	3765430.00	0.08064 (15102007)
439779.00	3765430.00	0.08100	(15102007)
	439784.00	3765430.00	0.08133 (15102007)
439789.00	3765430.00	0.08157	(15102007)
	439794.00	3765430.00	0.08177 (15102007)
439799.00	3765430.00	0.08191	(15102007)
	439804.00	3765430.00	0.08206 (14100607)
439809.00	3765430.00	0.08361	(14100607)
	439814.00	3765430.00	0.08516 (14100607)
439819.00	3765430.00	0.08662	(14100607)
	439824.00	3765430.00	0.08805 (14100607)
439829.00	3765430.00	0.08944	(14100607)
	439834.00	3765430.00	0.09072 (14100607)
439839.00	3765430.00	0.09194	(14100607)
	439844.00	3765430.00	0.09308 (14100607)
439849.00	3765430.00	0.09414	(14100607)
	439854.00	3765430.00	0.09508 (14100607)
439859.00	3765430.00	0.09594	(14100607)
	439674.00	3765435.00	0.07205 (13032007)
439679.00	3765435.00	0.07233	(13032007)
	439684.00	3765435.00	0.07256 (13032007)
439689.00	3765435.00	0.07281	(13032007)
	439694.00	3765435.00	0.07302 (13032007)
439699.00	3765435.00	0.07320	(13032007)
	439704.00	3765435.00	0.07338 (13032007)
439709.00	3765435.00	0.07350	(13032007)
	439714.00	3765435.00	0.07361 (13032007)
439719.00	3765435.00	0.07441	(15102007)
	439729.00	3765435.00	0.07602 (15102007)
439734.00	3765435.00	0.07678	(15102007)
	439739.00	3765435.00	0.07753 (15102007)
439744.00	3765435.00	0.07825	(15102007)
	439749.00	3765435.00	0.07894 (15102007)
439774.00	3765435.00	0.08182	(15102007)
	439779.00	3765435.00	0.08227 (15102007)
439784.00	3765435.00	0.08265	(15102007)
	439789.00	3765435.00	0.08300 (15102007)
439794.00	3765435.00	0.08328	(15102007)
	439799.00	3765435.00	0.08350 (15102007)
439804.00	3765435.00	0.08364	(15102007)
	439809.00	3765435.00	0.08379 (14100607)
439814.00	3765435.00	0.08539	(14100607)
	439819.00	3765435.00	0.08698 (14100607)

439824.00	3765435.00	0.08851	(14100607)
	439829.00	3765435.00	0.08996 (14100607)
439834.00	3765435.00	0.09135	(14100607)
	439839.00	3765435.00	0.09269 (14100607)
439844.00	3765435.00	0.09393	(14100607)
	439849.00	3765435.00	0.09506 (14100607)
439854.00	3765435.00	0.09611	(14100607)
	439859.00	3765435.00	0.09707 (14100607)
439674.00	3765440.00	0.07322	(13032007)
	439679.00	3765440.00	0.07355 (13032007)
439684.00	3765440.00	0.07387	(13032007)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439689.00	3765440.00	0.07414	(13032007)
439694.00	3765440.00	0.07440	(13032007)
439699.00	3765440.00	0.07466	(13032007)
439704.00	3765440.00	0.07486	(13032007)
439709.00	3765440.00	0.07507	(13032007)
439714.00	3765440.00	0.07522	(13032007)
439719.00	3765440.00	0.07536	(13032007)
439729.00	3765440.00	0.07649	(15102007)
439734.00	3765440.00	0.07733	(15102007)
439739.00	3765440.00	0.07815	(15102007)
439744.00	3765440.00	0.07895	(15102007)
439749.00	3765440.00	0.07971	(15102007)
439774.00	3765440.00	0.08300	(15102007)
439779.00	3765440.00	0.08350	(15102007)
439784.00	3765440.00	0.08397	(15102007)
439789.00	3765440.00	0.08438	(15102007)
439794.00	3765440.00	0.08474	(15102007)

439799.00	3765440.00	0.08504	(15102007)
	439804.00	3765440.00	0.08528 (15102007)
439809.00	3765440.00	0.08545	(15102007)
	439814.00	3765440.00	0.08560 (14100607)
439819.00	3765440.00	0.08727	(14100607)
	439824.00	3765440.00	0.08889 (14100607)
439829.00	3765440.00	0.09046	(14100607)
	439834.00	3765440.00	0.09198 (14100607)
439839.00	3765440.00	0.09338	(14100607)
	439844.00	3765440.00	0.09472 (14100607)
439849.00	3765440.00	0.09598	(14100607)
	439854.00	3765440.00	0.09714 (14100607)
439859.00	3765440.00	0.09817	(14100607)
	439674.00	3765445.00	0.07433 (13032007)
439679.00	3765445.00	0.07473	(13032007)
	439684.00	3765445.00	0.07508 (13032007)
439689.00	3765445.00	0.07545	(13032007)
	439694.00	3765445.00	0.07577 (13032007)
439699.00	3765445.00	0.07606	(13032007)
	439704.00	3765445.00	0.07634 (13032007)
439709.00	3765445.00	0.07658	(13032007)
	439714.00	3765445.00	0.07680 (13032007)
439719.00	3765445.00	0.07700	(13032007)
	439729.00	3765445.00	0.07731 (13032007)
439734.00	3765445.00	0.07782	(15102007)
	439739.00	3765445.00	0.07870 (15102007)
439744.00	3765445.00	0.07957	(15102007)
	439749.00	3765445.00	0.08041 (15102007)
439774.00	3765445.00	0.08408	(15102007)
	439779.00	3765445.00	0.08470 (15102007)
439784.00	3765445.00	0.08525	(15102007)
	439789.00	3765445.00	0.08575 (15102007)
439794.00	3765445.00	0.08618	(15102007)
	439799.00	3765445.00	0.08656 (15102007)
439804.00	3765445.00	0.08687	(15102007)
	439809.00	3765445.00	0.08712 (15102007)
439814.00	3765445.00	0.08732	(15102007)
	439819.00	3765445.00	0.08750 (14100607)
439824.00	3765445.00	0.08923	(14100607)
	439829.00	3765445.00	0.09090 (14100607)
439834.00	3765445.00	0.09250	(14100607)
	439839.00	3765445.00	0.09405 (14100607)
439844.00	3765445.00	0.09551	(14100607)
	439849.00	3765445.00	0.09687 (14100607)
439854.00	3765445.00	0.09811	(14100607)
	439859.00	3765445.00	0.09928 (14100607)
439674.00	3765450.00	0.07541	(13032007)
	439679.00	3765450.00	0.07583 (13032007)
439684.00	3765450.00	0.07627	(13032007)
	439689.00	3765450.00	0.07666 (13032007)
439694.00	3765450.00	0.07705	(13032007)
	439699.00	3765450.00	0.07744 (13032007)

439704.00	3765450.00	0.07776	(13032007)
	439709.00	3765450.00	0.07809 (13032007)
439714.00	3765450.00	0.07837	(13032007)
	439719.00	3765450.00	0.07861 (13032007)
439729.00	3765450.00	0.07902	(13032007)
	439734.00	3765450.00	0.07920 (13032007)
439739.00	3765450.00	0.07932	(13032007)
	439744.00	3765450.00	0.08012 (15102007)
439749.00	3765450.00	0.08104	(15102007)
	439774.00	3765450.00	0.08513 (15102007)
439844.00	3765450.00	0.09623	(14100607)

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439849.00	3765450.00	0.09771	(14100607)
439854.00	3765450.00	0.09909	(14100607)
439859.00	3765450.00	0.10035	(14100607)
439674.00	3765455.00	0.07644	(13032007)
439679.00	3765455.00	0.07694	(13032007)
439684.00	3765455.00	0.07740	(13032007)
439689.00	3765455.00	0.07786	(13032007)
439694.00	3765455.00	0.07831	(13032007)
439699.00	3765455.00	0.07871	(13032007)
439704.00	3765455.00	0.07914	(13032007)
439709.00	3765455.00	0.07951	(13032007)
439714.00	3765455.00	0.07987	(13032007)
439719.00	3765455.00	0.08021	(13032007)
439729.00	3765455.00	0.08076	(13032007)
439734.00	3765455.00	0.08097	(13032007)
439739.00	3765455.00	0.08118	(13032007)
439744.00	3765455.00	0.08133	(13032007)

439749.00	3765455.00	0.08159	(15102007)
	439844.00	3765455.00	0.09694 (14100607)
439849.00	3765455.00	0.09853	(14100607)
	439854.00	3765455.00	0.10003 (14100607)
439859.00	3765455.00	0.10141	(14100607)
	439674.00	3765460.00	0.07739 (13032007)
439679.00	3765460.00	0.07792	(13032007)
	439684.00	3765460.00	0.07848 (13032007)
439689.00	3765460.00	0.07901	(13032007)
	439694.00	3765460.00	0.07950 (13032007)
439699.00	3765460.00	0.08000	(13032007)
	439704.00	3765460.00	0.08044 (13032007)
439709.00	3765460.00	0.08089	(13032007)
	439714.00	3765460.00	0.08132 (13032007)
439719.00	3765460.00	0.08171	(13032007)
	439729.00	3765460.00	0.08242 (13032007)
439734.00	3765460.00	0.08274	(13032007)
	439739.00	3765460.00	0.08301 (13032007)
439744.00	3765460.00	0.08322	(13032007)
	439749.00	3765460.00	0.08342 (13032007)
439789.00	3765460.00	0.08952	(15102007)
	439794.00	3765460.00	0.09025 (15102007)
439799.00	3765460.00	0.09089	(15102007)
	439804.00	3765460.00	0.09149 (15102007)
439809.00	3765460.00	0.09203	(15102007)
	439814.00	3765460.00	0.09248 (15102007)
439819.00	3765460.00	0.09288	(15102007)
	439824.00	3765460.00	0.09316 (15102007)
439829.00	3765460.00	0.09337	(15102007)
	439844.00	3765460.00	0.09756 (14100607)
439849.00	3765460.00	0.09930	(14100607)
	439854.00	3765460.00	0.10093 (14100607)
439859.00	3765460.00	0.10246	(14100607)
	439674.00	3765465.00	0.07827 (13032007)
439679.00	3765465.00	0.07888	(13032007)
	439684.00	3765465.00	0.07946 (13032007)
439689.00	3765465.00	0.08004	(13032007)
	439694.00	3765465.00	0.08063 (13032007)
439699.00	3765465.00	0.08117	(13032007)
	439704.00	3765465.00	0.08172 (13032007)
439709.00	3765465.00	0.08224	(13032007)
	439714.00	3765465.00	0.08271 (13032007)
439719.00	3765465.00	0.08319	(13032007)
	439729.00	3765465.00	0.08404 (13032007)
439734.00	3765465.00	0.08442	(13032007)
	439739.00	3765465.00	0.08477 (13032007)
439744.00	3765465.00	0.08510	(13032007)
	439749.00	3765465.00	0.08536 (13032007)
439789.00	3765465.00	0.09065	(15102007)
	439794.00	3765465.00	0.09148 (15102007)
439799.00	3765465.00	0.09227	(15102007)
	439804.00	3765465.00	0.09295 (15102007)

439809.00	3765465.00	0.09359	(15102007)
	439814.00	3765465.00	0.09415 (15102007)
439819.00	3765465.00	0.09461	(15102007)
	439824.00	3765465.00	0.09504 (15102007)
439829.00	3765465.00	0.09536	(15102007)
	439844.00	3765465.00	0.09816 (14100607)
439849.00	3765465.00	0.10003	(14100607)
	439854.00	3765465.00	0.10180 (14100607)
439859.00	3765465.00	0.10345	(14100607)
	439674.00	3765470.00	0.07927 (12093007)
439679.00	3765470.00	0.07978	(12093007)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
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 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439684.00	3765470.00	0.08041	(13032007)
439689.00	3765470.00	0.08105	(13032007)
439694.00	3765470.00	0.08166	(13032007)
439699.00	3765470.00	0.08229	(13032007)
439704.00	3765470.00	0.08289	(13032007)
439709.00	3765470.00	0.08348	(13032007)
439714.00	3765470.00	0.08407	(13032007)
439719.00	3765470.00	0.08460	(13032007)
439729.00	3765470.00	0.08561	(13032007)
439734.00	3765470.00	0.08605	(13032007)
439739.00	3765470.00	0.08649	(13032007)
439744.00	3765470.00	0.08688	(13032007)
439749.00	3765470.00	0.08725	(13032007)
439789.00	3765470.00	0.09172	(15102007)
439794.00	3765470.00	0.09265	(15102007)
439799.00	3765470.00	0.09352	(15102007)
439804.00	3765470.00	0.09437	(15102007)

439809.00	3765470.00	0.09511	(15102007)
	439814.00	3765470.00	0.09578 (15102007)
439819.00	3765470.00	0.09637	(15102007)
	439824.00	3765470.00	0.09686 (15102007)
439829.00	3765470.00	0.09730	(15102007)
	439844.00	3765470.00	0.09866 (14100607)
439849.00	3765470.00	0.10069	(14100607)
	439854.00	3765470.00	0.10261 (14100607)
439859.00	3765470.00	0.10442	(14100607)
	439674.00	3765475.00	0.08038 (12093007)
439679.00	3765475.00	0.08094	(12093007)
	439684.00	3765475.00	0.08151 (12093007)
439689.00	3765475.00	0.08204	(12093007)
	439694.00	3765475.00	0.08268 (13032007)
439699.00	3765475.00	0.08334	(13032007)
	439704.00	3765475.00	0.08400 (13032007)
439709.00	3765475.00	0.08467	(13032007)
	439714.00	3765475.00	0.08529 (13032007)
439719.00	3765475.00	0.08593	(13032007)
	439729.00	3765475.00	0.08710 (13032007)
439734.00	3765475.00	0.08767	(13032007)
	439739.00	3765475.00	0.08815 (13032007)
439744.00	3765475.00	0.08865	(13032007)
	439749.00	3765475.00	0.08908 (13032007)
439754.00	3765475.00	0.08949	(13032007)
	439789.00	3765475.00	0.09271 (15102007)
439794.00	3765475.00	0.09377	(15102007)
	439799.00	3765475.00	0.09474 (15102007)
439804.00	3765475.00	0.09568	(15102007)
	439809.00	3765475.00	0.09656 (15102007)
439814.00	3765475.00	0.09736	(15102007)
	439819.00	3765475.00	0.09808 (15102007)
439824.00	3765475.00	0.09870	(15102007)
	439829.00	3765475.00	0.09922 (15102007)
439269.00	3764900.00	0.03146	(14100607)
	439369.00	3764900.00	0.03301 (14100607)
439469.00	3764900.00	0.03382	(14100607)
	439569.00	3764900.00	0.03321 (13120808)
439669.00	3764900.00	0.03222	(13120808)
	439769.00	3764900.00	0.03135 (13102607)
439869.00	3764900.00	0.03325	(13101207)
	439969.00	3764900.00	0.03552 (13101207)
440069.00	3764900.00	0.03508	(12032207)
	440169.00	3764900.00	0.03293 (13102707)
440269.00	3764900.00	0.03378	(14102507)
	439269.00	3765000.00	0.03313 (13120808)
439369.00	3765000.00	0.03469	(14100607)
	439469.00	3765000.00	0.03734 (14100607)
439569.00	3765000.00	0.03875	(14100607)
	439669.00	3765000.00	0.03783 (13120808)
439769.00	3765000.00	0.03571	(13032507)
	439869.00	3765000.00	0.03625 (13102607)

439969.00	3765000.00	0.03961	(13101207)
	440069.00	3765000.00	0.03988 (12032207)
440169.00	3765000.00	0.03699	(13102707)
	440269.00	3765000.00	0.03789 (14102507)
439269.00	3765100.00	0.03697	(13120808)
	439369.00	3765100.00	0.03610 (13120808)
439469.00	3765100.00	0.03891	(14100607)
	439569.00	3765100.00	0.04339 (14100607)
439669.00	3765100.00	0.04543	(14100607)
	439769.00	3765100.00	0.04388 (13120808)
439869.00	3765100.00	0.04104	(13102607)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439969.00	3765100.00	0.04453	(13101207)
440069.00	3765100.00	0.04572	(12032207)
440169.00	3765100.00	0.04211	(13102707)
440269.00	3765100.00	0.04302	(14102507)
439269.00	3765200.00	0.04193	(13120808)
439369.00	3765200.00	0.04163	(13120808)
439469.00	3765200.00	0.04052	(12011808)
439569.00	3765200.00	0.04490	(14100607)
439669.00	3765200.00	0.05236	(14100607)
439769.00	3765200.00	0.05456	(14100607)
439869.00	3765200.00	0.05132	(13120808)
439969.00	3765200.00	0.05083	(13101207)
440069.00	3765200.00	0.05338	(13101207)
440169.00	3765200.00	0.04989	(12032207)
440269.00	3765200.00	0.04954	(14102507)
439269.00	3765300.00	0.04692	(13120808)
439369.00	3765300.00	0.05023	(13120808)

439469.00	3765300.00	0.04642	(13120808)
	439569.00	3765300.00	0.05031 (15102007)
439669.00	3765300.00	0.05436	(14100607)
	439769.00	3765300.00	0.06648 (14100607)
439869.00	3765300.00	0.06693	(14100607)
	439969.00	3765300.00	0.06015 (13120808)
440069.00	3765300.00	0.06393	(13101207)
	440169.00	3765300.00	0.06060 (12032207)
440269.00	3765300.00	0.05822	(14102507)
	439269.00	3765400.00	0.05650 (12011808)
439369.00	3765400.00	0.06175	(13120808)
	439469.00	3765400.00	0.06005 (13120808)
439569.00	3765400.00	0.05996	(13032007)
	439669.00	3765400.00	0.06494 (15102007)
439769.00	3765400.00	0.07277	(15102007)
	439869.00	3765400.00	0.08972 (14100607)
439969.00	3765400.00	0.08425	(14100607)
	440069.00	3765400.00	0.07999 (13101207)
440169.00	3765400.00	0.07678	(13101207)
	440269.00	3765400.00	0.07111 (14102507)
439269.00	3765500.00	0.07304	(12112508)
	439369.00	3765500.00	0.07668 (12011808)
439469.00	3765500.00	0.08196	(13120808)
	439569.00	3765500.00	0.07458 (13120808)
439669.00	3765500.00	0.08631	(13092507)
	439769.00	3765500.00	0.10069 (13032007)
439869.00	3765500.00	0.11446	(14100607)
	439969.00	3765500.00	0.12770 (14100607)
440069.00	3765500.00	0.11493	(14100607)
	440169.00	3765500.00	0.10491 (13101207)
440269.00	3765500.00	0.09865	(14012707)
	439269.00	3765600.00	0.10053 (12101307)
439369.00	3765600.00	0.11445	(12112508)
	439469.00	3765600.00	0.12197 (13120808)
439569.00	3765600.00	0.12010	(13120808)
	439669.00	3765600.00	0.10585 (13120808)
439769.00	3765600.00	0.13404	(12101307)
	439869.00	3765600.00	0.21237 (13092507)
439969.00	3765600.00	0.26503	(14100607)
	440069.00	3765600.00	0.22845 (14100607)
440169.00	3765600.00	0.19644	(14100607)
	440269.00	3765600.00	0.18235 (14101107)
439269.00	3765700.00	0.15311	(14012908)
	439369.00	3765700.00	0.22285 (14012908)
439469.00	3765700.00	0.36489	(12101307)
	439569.00	3765700.00	0.22139 (12101307)
439669.00	3765700.00	0.18334	(13120808)
	439769.00	3765700.00	0.15224 (14101107)
439869.00	3765700.00	0.17982	(14101007)
	439969.00	3765700.00	0.25248 (12100707)
440069.00	3765700.00	0.30579	(12100707)
	440169.00	3765700.00	0.39705 (12100707)

440269.00	3765700.00	0.56725	(12100707)
	439269.00	3765800.00	0.14001 (13021408)
439369.00	3765800.00	0.20031	(12100707)
	439469.00	3765800.00	0.22437 (12100707)
439569.00	3765800.00	0.24192	(12100707)
	439669.00	3765800.00	0.28816 (12100707)
439769.00	3765800.00	0.35635	(12100707)
	439869.00	3765800.00	0.51964 (13111217)
439969.00	3765800.00	0.23629	(12100707)
	440069.00	3765800.00	0.17804 (12092507)
440169.00	3765800.00	0.17697	(15033007)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ONOFFEXH \*\*\*  
 INCLUDING SOURCE(S):  
 A0000023 , A0000024 , A0000025 , A0000026 ,  
 A0000027 ,  
 A0000028 , A0000029 , A0000030 ,  
 A0000031 , A0000032 , A0000033 , A0000034 ,  
 A0000035 ,  
 A0000036 , A0000037 , A0000038 ,  
 A0000039 , A0000040 , A0000041 , A0000042 ,  
 A0000043 ,  
 A0000044 , A0000045 , A0000046 ,  
 A0000047 , A0000048 , A0000049 ,  
 A0000050 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
440269.00	3765800.00	0.18035	(15033007)
439269.00	3765900.00	0.10907	(12100707)
439369.00	3765900.00	0.11457	(12100707)
439469.00	3765900.00	0.11579	(12100707)
439569.00	3765900.00	0.11814	(12011908)
439669.00	3765900.00	0.11436	(12011908)
439769.00	3765900.00	0.10787	(15110207)
439869.00	3765900.00	0.11934	(13111217)
439969.00	3765900.00	0.11572	(13111217)
440069.00	3765900.00	0.09870	(12092507)
440169.00	3765900.00	0.09981	(12092507)
440269.00	3765900.00	0.10581	(15033007)
439649.00	3765310.00	0.05378	(13101107)
439679.00	3765310.00	0.05563	(14100607)
439709.00	3765310.00	0.06000	(14100607)
439739.00	3765310.00	0.06410	(14100607)
439769.00	3765310.00	0.06745	(14100607)

439799.00	3765310.00	0.06959	(14100607)
	439829.00	3765310.00	0.07029 (14100607)
439859.00	3765310.00	0.06954	(14100607)
	439889.00	3765310.00	0.06763 (14100607)
439649.00	3765340.00	0.05771	(15102007)
	439679.00	3765340.00	0.05877 (15102007)
439709.00	3765340.00	0.06006	(13101107)
	439739.00	3765340.00	0.06516 (14100607)
439769.00	3765340.00	0.06991	(14100607)
	439799.00	3765340.00	0.07354 (14100607)
439829.00	3765340.00	0.07556	(14100607)
	439859.00	3765340.00	0.07583 (14100607)
439889.00	3765340.00	0.07457	(14100607)
	439649.00	3765370.00	0.06074 (15102007)
439679.00	3765370.00	0.06304	(15102007)
	439709.00	3765370.00	0.06466 (15102007)
439739.00	3765370.00	0.06581	(13101107)
	439769.00	3765370.00	0.07148 (14100607)
439799.00	3765370.00	0.07692	(14100607)
	439829.00	3765370.00	0.08069 (14100607)
439859.00	3765370.00	0.08236	(14100607)
	439889.00	3765370.00	0.08201 (14100607)
439649.00	3765400.00	0.06272	(13032007)
	439679.00	3765400.00	0.06613 (15102007)
439709.00	3765400.00	0.06932	(15102007)
	439739.00	3765400.00	0.07168 (15102007)
439769.00	3765400.00	0.07277	(15102007)
	439799.00	3765400.00	0.07938 (14100607)
439829.00	3765400.00	0.08545	(14100607)
	439859.00	3765400.00	0.08910 (14100607)
439889.00	3765400.00	0.09009	(14100607)
	439649.00	3765430.00	0.06943 (13032007)
439679.00	3765430.00	0.07104	(13032007)
	439709.00	3765430.00	0.07242 (15102007)
439739.00	3765430.00	0.07684	(15102007)
	439769.00	3765430.00	0.08022 (15102007)
439799.00	3765430.00	0.08191	(15102007)
	439829.00	3765430.00	0.08944 (14100607)
439859.00	3765430.00	0.09594	(14100607)
	439889.00	3765430.00	0.09896 (14100607)
439649.00	3765460.00	0.07469	(12093007)
	439679.00	3765460.00	0.07792 (13032007)
439709.00	3765460.00	0.08089	(13032007)
	439739.00	3765460.00	0.08301 (13032007)
439769.00	3765460.00	0.08610	(15102007)
	439799.00	3765460.00	0.09089 (15102007)
439829.00	3765460.00	0.09337	(15102007)
	439859.00	3765460.00	0.10246 (14100607)
439889.00	3765460.00	0.10880	(14100607)
	439649.00	3765490.00	0.08148 (13092507)
439679.00	3765490.00	0.08482	(13092507)
	439709.00	3765490.00	0.08835 (12093007)

439739.00	3765490.00	0.09271	(13032007)
439769.00	3765490.00	0.09680	(13032007)
439799.00	3765490.00	0.09915	(13032007)
439829.00	3765490.00	0.10480	(15102007)
439859.00	3765490.00	0.10821	(15102007)
439889.00	3765490.00	0.11962	(14100607)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439674.00	3765310.00	1.31612	(13120808)
439679.00	3765310.00	1.31670	(13120808)
439684.00	3765310.00	1.31705	(13120808)
439689.00	3765310.00	1.31782	(13120808)
439694.00	3765310.00	1.31803	(13120808)
439699.00	3765310.00	1.31894	(13120808)
439704.00	3765310.00	1.31920	(13120808)
439709.00	3765310.00	1.32027	(13120808)
439714.00	3765310.00	1.32024	(13120808)
439719.00	3765310.00	1.32148	(13120808)
439729.00	3765310.00	1.32258	(13120808)
439734.00	3765310.00	1.32296	(13120808)
439739.00	3765310.00	1.32370	(13120808)
439744.00	3765310.00	1.32434	(13120808)
439749.00	3765310.00	1.32490	(13120808)
439764.00	3765310.00	1.32726	(13120808)
439769.00	3765310.00	1.32752	(13120808)

439774.00	3765310.00	1.32859	(13120808)
	439779.00	3765310.00	1.32889 (13120808)
439784.00	3765310.00	1.32992	(13120808)
	439789.00	3765310.00	1.33004 (13120808)
439794.00	3765310.00	1.33092	(13120808)
	439799.00	3765310.00	1.33138 (13120808)
439804.00	3765310.00	1.33171	(13120808)
	439809.00	3765310.00	1.33224 (13120808)
439814.00	3765310.00	1.33253	(13120808)
	439819.00	3765310.00	1.33326 (13120808)
439824.00	3765310.00	1.33321	(13120808)
	439829.00	3765310.00	1.33388 (13120808)
439839.00	3765310.00	1.33458	(13120808)
	439844.00	3765310.00	1.33421 (13120808)
439849.00	3765310.00	1.33489	(13120808)
	439854.00	3765310.00	1.33438 (13120808)
439859.00	3765310.00	1.33500	(13120808)
	439864.00	3765310.00	1.33445 (13120808)
439869.00	3765310.00	1.33451	(13120808)
	439874.00	3765310.00	1.33440 (13120808)
439879.00	3765310.00	1.33413	(13120808)
	439884.00	3765310.00	1.33419 (13120808)
439674.00	3765315.00	1.32690	(13120808)
	439679.00	3765315.00	1.32790 (13120808)
439684.00	3765315.00	1.32777	(13120808)
	439689.00	3765315.00	1.32893 (13120808)
439694.00	3765315.00	1.32893	(13120808)
	439699.00	3765315.00	1.32961 (13120808)
439704.00	3765315.00	1.33012	(13120808)
	439709.00	3765315.00	1.33071 (13120808)
439714.00	3765315.00	1.33148	(13120808)
	439719.00	3765315.00	1.33173 (13120808)
439729.00	3765315.00	1.33318	(13120808)
	439734.00	3765315.00	1.33411 (13120808)
439739.00	3765315.00	1.33443	(13120808)
	439744.00	3765315.00	1.33565 (13120808)
439749.00	3765315.00	1.33592	(13120808)
	439764.00	3765315.00	1.33823 (13120808)
439769.00	3765315.00	1.33881	(13120808)
	439774.00	3765315.00	1.33935 (13120808)
439779.00	3765315.00	1.34020	(13120808)
	439784.00	3765315.00	1.34061 (13120808)
439789.00	3765315.00	1.34153	(13120808)
	439794.00	3765315.00	1.34174 (13120808)
439799.00	3765315.00	1.34274	(13120808)
	439804.00	3765315.00	1.34295 (13120808)
439809.00	3765315.00	1.34398	(13120808)
	439814.00	3765315.00	1.34391 (13120808)
439819.00	3765315.00	1.34486	(13120808)
	439824.00	3765315.00	1.34489 (13120808)
439829.00	3765315.00	1.34540	(13120808)
	439839.00	3765315.00	1.34572 (13120808)

439844.00	3765315.00	1.34618	(13120808)
	439849.00	3765315.00	1.34603 (13120808)
439854.00	3765315.00	1.34633	(13120808)
	439859.00	3765315.00	1.34623 (13120808)
439864.00	3765315.00	1.34661	(13120808)
	439869.00	3765315.00	1.34627 (13120808)
439874.00	3765315.00	1.34651	(13120808)
	439879.00	3765315.00	1.34605 (13120808)
439884.00	3765315.00	1.34646	(13120808)
	439674.00	3765320.00	1.33823 (13120808)
439679.00	3765320.00	1.33856	(13120808)



439784.00	3765320.00	1.35197	(13120808)
	439789.00	3765320.00	1.35316 (13120808)
439794.00	3765320.00	1.35331	(13120808)
	439799.00	3765320.00	1.35415 (13120808)
439804.00	3765320.00	1.35449	(13120808)
	439809.00	3765320.00	1.35519 (13120808)
439814.00	3765320.00	1.35568	(13120808)
	439819.00	3765320.00	1.35610 (13120808)
439824.00	3765320.00	1.35667	(13120808)
	439829.00	3765320.00	1.35692 (13120808)
439839.00	3765320.00	1.35748	(13120808)
	439844.00	3765320.00	1.35817 (13120808)
439849.00	3765320.00	1.35800	(13120808)
	439854.00	3765320.00	1.35861 (13120808)
439859.00	3765320.00	1.35823	(13120808)
	439864.00	3765320.00	1.35853 (13120808)
439869.00	3765320.00	1.35847	(13120808)
	439874.00	3765320.00	1.35833 (13120808)
439879.00	3765320.00	1.35833	(13120808)
	439884.00	3765320.00	1.35809 (13120808)
439674.00	3765325.00	1.34958	(13120808)
	439679.00	3765325.00	1.34997 (13120808)
439684.00	3765325.00	1.35058	(13120808)
	439689.00	3765325.00	1.35082 (13120808)
439694.00	3765325.00	1.35145	(13120808)
	439699.00	3765325.00	1.35212 (13120808)
439704.00	3765325.00	1.35248	(13120808)
	439709.00	3765325.00	1.35321 (13120808)
439714.00	3765325.00	1.35367	(13120808)
	439719.00	3765325.00	1.35448 (13120808)
439729.00	3765325.00	1.35586	(13120808)
	439734.00	3765325.00	1.35627 (13120808)
439739.00	3765325.00	1.35747	(13120808)
	439744.00	3765325.00	1.35785 (13120808)
439749.00	3765325.00	1.35883	(13120808)
	439754.00	3765325.00	1.35925 (13120808)
439769.00	3765325.00	1.36165	(13120808)
	439774.00	3765325.00	1.36226 (13120808)
439779.00	3765325.00	1.36296	(13120808)
	439784.00	3765325.00	1.36375 (13120808)
439789.00	3765325.00	1.36430	(13120808)
	439794.00	3765325.00	1.36514 (13120808)
439799.00	3765325.00	1.36562	(13120808)
	439804.00	3765325.00	1.36653 (13120808)
439809.00	3765325.00	1.36680	(13120808)
	439814.00	3765325.00	1.36769 (13120808)
439819.00	3765325.00	1.36800	(13120808)
	439824.00	3765325.00	1.36876 (13120808)
439829.00	3765325.00	1.36889	(13120808)
	439839.00	3765325.00	1.36970 (13120808)
439844.00	3765325.00	1.36997	(13120808)
	439849.00	3765325.00	1.37023 (13120808)

439854.00	3765325.00	1.37042	(13120808)
	439859.00	3765325.00	1.37062 (13120808)
439864.00	3765325.00	1.37059	(13120808)
	439869.00	3765325.00	1.37086 (13120808)
439874.00	3765325.00	1.37063	(13120808)
	439879.00	3765325.00	1.37093 (13120808)
439884.00	3765325.00	1.37041	(13120808)
	439674.00	3765330.00	1.36097 (13120808)
439679.00	3765330.00	1.36130	(13120808)
	439684.00	3765330.00	1.36198 (13120808)
439689.00	3765330.00	1.36246	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439694.00	3765330.00	1.36278	(13120808)
439699.00	3765330.00	1.36353	(13120808)
439704.00	3765330.00	1.36396	(13120808)
439709.00	3765330.00	1.36499	(13120808)
439714.00	3765330.00	1.36520	(13120808)
439719.00	3765330.00	1.36616	(13120808)
439729.00	3765330.00	1.36754	(13120808)
439734.00	3765330.00	1.36805	(13120808)
439739.00	3765330.00	1.36870	(13120808)
439744.00	3765330.00	1.36958	(13120808)
439749.00	3765330.00	1.37026	(13120808)
439754.00	3765330.00	1.37112	(13120808)
439774.00	3765330.00	1.37429	(13120808)
439779.00	3765330.00	1.37461	(13120808)
439784.00	3765330.00	1.37595	(13120808)
439789.00	3765330.00	1.37618	(13120808)
439794.00	3765330.00	1.37722	(13120808)

439799.00	3765330.00	1.37753	(13120808)
	439804.00	3765330.00	1.37849 (13120808)
439809.00	3765330.00	1.37888	(13120808)
	439814.00	3765330.00	1.37957 (13120808)
439819.00	3765330.00	1.38010	(13120808)
	439824.00	3765330.00	1.38069 (13120808)
439829.00	3765330.00	1.38122	(13120808)
	439839.00	3765330.00	1.38211 (13120808)
439844.00	3765330.00	1.38229	(13120808)
	439849.00	3765330.00	1.38288 (13120808)
439854.00	3765330.00	1.38277	(13120808)
	439859.00	3765330.00	1.38323 (13120808)
439864.00	3765330.00	1.38324	(13120808)
	439869.00	3765330.00	1.38323 (13120808)
439874.00	3765330.00	1.38337	(13120808)
	439879.00	3765330.00	1.38333 (13120808)
439884.00	3765330.00	1.38324	(13120808)
	439674.00	3765335.00	1.37292 (13120808)
439679.00	3765335.00	1.37324	(13120808)
	439684.00	3765335.00	1.37362 (13120808)
439689.00	3765335.00	1.37434	(13120808)
	439694.00	3765335.00	1.37473 (13120808)
439699.00	3765335.00	1.37529	(13120808)
	439704.00	3765335.00	1.37567 (13120808)
439709.00	3765335.00	1.37655	(13120808)
	439714.00	3765335.00	1.37711 (13120808)
439719.00	3765335.00	1.37777	(13120808)
	439729.00	3765335.00	1.37918 (13120808)
439734.00	3765335.00	1.38007	(13120808)
	439739.00	3765335.00	1.38058 (13120808)
439744.00	3765335.00	1.38132	(13120808)
	439749.00	3765335.00	1.38213 (13120808)
439774.00	3765335.00	1.38613	(13120808)
	439779.00	3765335.00	1.38685 (13120808)
439784.00	3765335.00	1.38754	(13120808)
	439789.00	3765335.00	1.38848 (13120808)
439794.00	3765335.00	1.38916	(13120808)
	439839.00	3765335.00	1.39456 (13120808)
439844.00	3765335.00	1.39484	(13120808)
	439849.00	3765335.00	1.39534 (13120808)
439854.00	3765335.00	1.39555	(13120808)
	439859.00	3765335.00	1.39570 (13120808)
439864.00	3765335.00	1.39607	(13120808)
	439869.00	3765335.00	1.39591 (13120808)
439874.00	3765335.00	1.39628	(13120808)
	439879.00	3765335.00	1.39603 (13120808)
439884.00	3765335.00	1.39648	(13120808)
	439674.00	3765340.00	1.38492 (13120808)
439679.00	3765340.00	1.38545	(13120808)
	439684.00	3765340.00	1.38575 (13120808)
439689.00	3765340.00	1.38612	(13120808)
	439694.00	3765340.00	1.38688 (13120808)

439699.00	3765340.00	1.38718	(13120808)
	439704.00	3765340.00	1.38802 (13120808)
439709.00	3765340.00	1.38828	(13120808)
	439714.00	3765340.00	1.38932 (13120808)
439719.00	3765340.00	1.38983	(13120808)
	439729.00	3765340.00	1.39116 (13120808)
439734.00	3765340.00	1.39211	(13120808)
	439739.00	3765340.00	1.39287 (13120808)
439744.00	3765340.00	1.39346	(13120808)
	439749.00	3765340.00	1.39425 (13120808)
439774.00	3765340.00	1.39816	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439779.00	3765340.00	1.39948	(13120808)
439784.00	3765340.00	1.39982	(13120808)
439789.00	3765340.00	1.40080	(13120808)
439794.00	3765340.00	1.40141	(13120808)
439839.00	3765340.00	1.40723	(13120808)
439844.00	3765340.00	1.40792	(13120808)
439849.00	3765340.00	1.40814	(13120808)
439854.00	3765340.00	1.40867	(13120808)
439859.00	3765340.00	1.40874	(13120808)
439864.00	3765340.00	1.40913	(13120808)
439869.00	3765340.00	1.40916	(13120808)
439874.00	3765340.00	1.40939	(13120808)
439879.00	3765340.00	1.40915	(13120808)
439884.00	3765340.00	1.40940	(13120808)
439674.00	3765345.00	1.39736	(13120808)
439679.00	3765345.00	1.39767	(13120808)
439684.00	3765345.00	1.39832	(13120808)

439689.00	3765345.00	1.39860	(13120808)
	439694.00	3765345.00	1.39929 (13120808)
439699.00	3765345.00	1.39942	(13120808)
	439704.00	3765345.00	1.40043 (13120808)
439709.00	3765345.00	1.40056	(13120808)
	439714.00	3765345.00	1.40155 (13120808)
439719.00	3765345.00	1.40214	(13120808)
	439729.00	3765345.00	1.40350 (13120808)
439734.00	3765345.00	1.40432	(13120808)
	439739.00	3765345.00	1.40501 (13120808)
439744.00	3765345.00	1.40599	(13120808)
	439749.00	3765345.00	1.40677 (13120808)
439774.00	3765345.00	1.41072	(13120808)
	439779.00	3765345.00	1.41175 (13120808)
439784.00	3765345.00	1.41273	(13120808)
	439789.00	3765345.00	1.41332 (13120808)
439794.00	3765345.00	1.41414	(13120808)
	439839.00	3765345.00	1.42026 (13120808)
439844.00	3765345.00	1.42095	(13120808)
	439849.00	3765345.00	1.42138 (13120808)
439854.00	3765345.00	1.42167	(13120808)
	439859.00	3765345.00	1.42214 (13120808)
439864.00	3765345.00	1.42217	(13120808)
	439869.00	3765345.00	1.42267 (13120808)
439874.00	3765345.00	1.42256	(13120808)
	439879.00	3765345.00	1.42302 (13120808)
439884.00	3765345.00	1.42277	(13120808)
	439674.00	3765350.00	1.41020 (13120808)
439679.00	3765350.00	1.41050	(13120808)
	439684.00	3765350.00	1.41061 (13120808)
439689.00	3765350.00	1.41121	(13120808)
	439694.00	3765350.00	1.41175 (13120808)
439699.00	3765350.00	1.41237	(13120808)
	439704.00	3765350.00	1.41270 (13120808)
439709.00	3765350.00	1.41346	(13120808)
	439714.00	3765350.00	1.41403 (13120808)
439719.00	3765350.00	1.41480	(13120808)
	439729.00	3765350.00	1.41626 (13120808)
439734.00	3765350.00	1.41695	(13120808)
	439739.00	3765350.00	1.41777 (13120808)
439744.00	3765350.00	1.41853	(13120808)
	439749.00	3765350.00	1.41937 (13120808)
439774.00	3765350.00	1.42368	(13120808)
	439779.00	3765350.00	1.42449 (13120808)
439784.00	3765350.00	1.42546	(13120808)
	439789.00	3765350.00	1.42636 (13120808)
439794.00	3765350.00	1.42723	(13120808)
	439839.00	3765350.00	1.43369 (13120808)
439844.00	3765350.00	1.43417	(13120808)
	439849.00	3765350.00	1.43492 (13120808)
439854.00	3765350.00	1.43518	(13120808)
	439859.00	3765350.00	1.43562 (13120808)

439864.00	3765350.00	1.43586	(13120808)
	439869.00	3765350.00	1.43637 (13120808)
439874.00	3765350.00	1.43611	(13120808)
	439879.00	3765350.00	1.43654 (13120808)
439884.00	3765350.00	1.43653	(13120808)
	439674.00	3765355.00	1.42294 (13120808)
439679.00	3765355.00	1.42365	(13120808)
	439684.00	3765355.00	1.42382 (13120808)
439689.00	3765355.00	1.42425	(13120808)
	439694.00	3765355.00	1.42441 (13120808)
439699.00	3765355.00	1.42554	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439704.00	3765355.00	1.42553	(13120808)
439709.00	3765355.00	1.42624	(13120808)
439714.00	3765355.00	1.42691	(13120808)
439719.00	3765355.00	1.42775	(13120808)
439729.00	3765355.00	1.42894	(13120808)
439734.00	3765355.00	1.42972	(13120808)
439739.00	3765355.00	1.43066	(13120808)
439744.00	3765355.00	1.43159	(13120808)
439749.00	3765355.00	1.43222	(13120808)
439774.00	3765355.00	1.43686	(13120808)
439779.00	3765355.00	1.43768	(13120808)
439784.00	3765355.00	1.43864	(13120808)
439789.00	3765355.00	1.43951	(13120808)
439794.00	3765355.00	1.44054	(13120808)
439839.00	3765355.00	1.44730	(13120808)
439844.00	3765355.00	1.44779	(13120808)
439849.00	3765355.00	1.44849	(13120808)

439854.00	3765355.00	1.44913	(13120808)
	439859.00	3765355.00	1.44922 (13120808)
439864.00	3765355.00	1.44963	(13120808)
	439869.00	3765355.00	1.45009 (13120808)
439874.00	3765355.00	1.45044	(13120808)
	439879.00	3765355.00	1.45049 (13120808)
439884.00	3765355.00	1.45048	(13120808)
	439674.00	3765360.00	1.43629 (13120808)
439679.00	3765360.00	1.43659	(13120808)
	439684.00	3765360.00	1.43719 (13120808)
439689.00	3765360.00	1.43748	(13120808)
	439694.00	3765360.00	1.43779 (13120808)
439699.00	3765360.00	1.43844	(13120808)
	439704.00	3765360.00	1.43912 (13120808)
439709.00	3765360.00	1.43957	(13120808)
	439714.00	3765360.00	1.43996 (13120808)
439719.00	3765360.00	1.44072	(13120808)
	439729.00	3765360.00	1.44219 (13120808)
439734.00	3765360.00	1.44296	(13120808)
	439739.00	3765360.00	1.44379 (13120808)
439744.00	3765360.00	1.44483	(13120808)
	439749.00	3765360.00	1.44544 (13120808)
439774.00	3765360.00	1.45009	(13120808)
	439779.00	3765360.00	1.45097 (13120808)
439784.00	3765360.00	1.45205	(13120808)
	439789.00	3765360.00	1.45317 (13120808)
439794.00	3765360.00	1.45390	(13120808)
	439799.00	3765360.00	1.45480 (13120808)
439804.00	3765360.00	1.45575	(13120808)
	439809.00	3765360.00	1.45668 (13120808)
439814.00	3765360.00	1.45742	(13120808)
	439839.00	3765360.00	1.46128 (13120808)
439844.00	3765360.00	1.46175	(13120808)
	439849.00	3765360.00	1.46239 (13120808)
439854.00	3765360.00	1.46320	(13120808)
	439859.00	3765360.00	1.46353 (13120808)
439864.00	3765360.00	1.46392	(13120808)
	439869.00	3765360.00	1.46395 (13120808)
439874.00	3765360.00	1.46469	(13120808)
	439879.00	3765360.00	1.46480 (13120808)
439884.00	3765360.00	1.46482	(13120808)
	439674.00	3765365.00	1.44994 (13120808)
439679.00	3765365.00	1.45032	(13120808)
	439684.00	3765365.00	1.45087 (13120808)
439689.00	3765365.00	1.45105	(13120808)
	439694.00	3765365.00	1.45165 (13120808)
439699.00	3765365.00	1.45173	(13120808)
	439704.00	3765365.00	1.45252 (13120808)
439709.00	3765365.00	1.45331	(13120808)
	439714.00	3765365.00	1.45373 (13120808)
439719.00	3765365.00	1.45425	(13120808)
	439729.00	3765365.00	1.45586 (13120808)

439734.00	3765365.00	1.45648	(13120808)
	439739.00	3765365.00	1.45730 (13120808)
439744.00	3765365.00	1.45806	(13120808)
	439749.00	3765365.00	1.45950 (14100607)
439774.00	3765365.00	1.46384	(13120808)
	439779.00	3765365.00	1.46480 (13120808)
439784.00	3765365.00	1.46567	(13120808)
	439789.00	3765365.00	1.46701 (13120808)
439794.00	3765365.00	1.46761	(13120808)
	439799.00	3765365.00	1.46870 (13120808)
439804.00	3765365.00	1.46959	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439809.00	3765365.00	1.47059	(13120808)
439814.00	3765365.00	1.47152	(13120808)
439839.00	3765365.00	1.47547	(13120808)
439844.00	3765365.00	1.47616	(13120808)
439849.00	3765365.00	1.47669	(13120808)
439854.00	3765365.00	1.47734	(13120808)
439859.00	3765365.00	1.47785	(13120808)
439864.00	3765365.00	1.47843	(13120808)
439869.00	3765365.00	1.47859	(13120808)
439874.00	3765365.00	1.47913	(13120808)
439879.00	3765365.00	1.47931	(13120808)
439884.00	3765365.00	1.47971	(13120808)
439674.00	3765370.00	1.46394	(13120808)
439679.00	3765370.00	1.46419	(13120808)
439684.00	3765370.00	1.46471	(13120808)
439689.00	3765370.00	1.46498	(13120808)
439694.00	3765370.00	1.46552	(13120808)

439699.00	3765370.00	1.46579	(13120808)
	439704.00	3765370.00	1.46644 (13120808)
439709.00	3765370.00	1.46693	(13120808)
	439714.00	3765370.00	1.46749 (13120808)
439719.00	3765370.00	1.46841	(13120808)
	439729.00	3765370.00	1.46972 (13120808)
439734.00	3765370.00	1.47055	(13120808)
	439739.00	3765370.00	1.47127 (13120808)
439744.00	3765370.00	1.47183	(13120808)
	439749.00	3765370.00	1.47302 (13120808)
439774.00	3765370.00	1.47807	(14100607)
	439779.00	3765370.00	1.47872 (13120808)
439784.00	3765370.00	1.47989	(13120808)
	439789.00	3765370.00	1.48072 (13120808)
439794.00	3765370.00	1.48210	(13120808)
	439799.00	3765370.00	1.48285 (13120808)
439804.00	3765370.00	1.48390	(13120808)
	439809.00	3765370.00	1.48460 (13120808)
439814.00	3765370.00	1.48595	(13120808)
	439839.00	3765370.00	1.49008 (13120808)
439844.00	3765370.00	1.49062	(13120808)
	439849.00	3765370.00	1.49141 (13120808)
439854.00	3765370.00	1.49209	(13120808)
	439859.00	3765370.00	1.49280 (13120808)
439864.00	3765370.00	1.49295	(13120808)
	439869.00	3765370.00	1.49362 (13120808)
439874.00	3765370.00	1.49386	(13120808)
	439879.00	3765370.00	1.49421 (13120808)
439884.00	3765370.00	1.49459	(13120808)
	439674.00	3765375.00	1.47842 (13120808)
439679.00	3765375.00	1.47866	(13120808)
	439684.00	3765375.00	1.47895 (13120808)
439689.00	3765375.00	1.47955	(13120808)
	439694.00	3765375.00	1.47958 (13120808)
439699.00	3765375.00	1.48000	(13120808)
	439704.00	3765375.00	1.48073 (13120808)
439709.00	3765375.00	1.48131	(13120808)
	439714.00	3765375.00	1.48172 (13120808)
439719.00	3765375.00	1.48244	(13120808)
	439729.00	3765375.00	1.48378 (13120808)
439734.00	3765375.00	1.48461	(13120808)
	439739.00	3765375.00	1.48540 (13120808)
439744.00	3765375.00	1.48668	(14100607)
	439749.00	3765375.00	1.48719 (13120808)
439754.00	3765375.00	1.48820	(14100607)
	439774.00	3765375.00	1.49224 (13120808)
439779.00	3765375.00	1.49312	(13120808)
	439784.00	3765375.00	1.49436 (13120808)
439789.00	3765375.00	1.49494	(13120808)
	439794.00	3765375.00	1.49633 (13120808)
439799.00	3765375.00	1.49742	(13120808)
	439804.00	3765375.00	1.49839 (13120808)

439809.00	3765375.00	1.49940	(13120808)
	439814.00	3765375.00	1.50043 (13120808)
439839.00	3765375.00	1.50515	(13120808)
	439844.00	3765375.00	1.50566 (13120808)
439849.00	3765375.00	1.50627	(13120808)
	439854.00	3765375.00	1.50687 (13120808)
439859.00	3765375.00	1.50789	(13120808)
	439864.00	3765375.00	1.50824 (13120808)
439869.00	3765375.00	1.50871	(13120808)
	439874.00	3765375.00	1.50905 (13120808)
439879.00	3765375.00	1.50969	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439884.00	3765375.00	1.50995	(13120808)
439774.00	3765380.00	1.50673	(14100607)
439779.00	3765380.00	1.50818	(14100607)
439784.00	3765380.00	1.50884	(13120808)
439789.00	3765380.00	1.51031	(14100607)
439794.00	3765380.00	1.51106	(13120808)
439799.00	3765380.00	1.51214	(13120808)
439804.00	3765380.00	1.51314	(13120808)
439809.00	3765380.00	1.51442	(13120808)
439814.00	3765380.00	1.51528	(13120808)
439769.00	3765385.00	1.52073	(14100607)
439819.00	3765385.00	1.53170	(13120808)
439769.00	3765400.00	1.56826	(14100607)
439844.00	3765400.00	1.58582	(13120808)
439849.00	3765400.00	1.58694	(13120808)
439674.00	3765405.00	1.58403	(12011417)
439714.00	3765405.00	1.57955	(12011808)

439719.00	3765405.00	1.57922	(12011808)
	439734.00	3765405.00	1.57966 (12011808)
439749.00	3765405.00	1.58035	(13120808)
	439754.00	3765405.00	1.58132 (13120808)
439774.00	3765405.00	1.58630	(14100607)
	439779.00	3765405.00	1.58746 (14100607)
439784.00	3765405.00	1.58901	(14100607)
	439789.00	3765405.00	1.59057 (14100607)
439794.00	3765405.00	1.59135	(14100607)
	439799.00	3765405.00	1.59277 (14100607)
439804.00	3765405.00	1.59390	(14100607)
	439809.00	3765405.00	1.59508 (14100607)
439814.00	3765405.00	1.59574	(13120808)
	439819.00	3765405.00	1.59706 (13120808)
439824.00	3765405.00	1.59833	(13120808)
	439829.00	3765405.00	1.59969 (13120808)
439834.00	3765405.00	1.60082	(13120808)
	439839.00	3765405.00	1.60212 (13120808)
439844.00	3765405.00	1.60308	(13120808)
	439849.00	3765405.00	1.60417 (13120808)
439854.00	3765405.00	1.60529	(13120808)
	439859.00	3765405.00	1.60631 (13120808)
439674.00	3765410.00	1.60830	(12011417)
	439679.00	3765410.00	1.60634 (12011417)
439684.00	3765410.00	1.60303	(12011417)
	439689.00	3765410.00	1.60160 (12011417)
439694.00	3765410.00	1.59839	(12011417)
	439699.00	3765410.00	1.59717 (12011808)
439704.00	3765410.00	1.59773	(12011808)
	439709.00	3765410.00	1.59782 (12011808)
439714.00	3765410.00	1.59797	(12011808)
	439719.00	3765410.00	1.59819 (12011808)
439729.00	3765410.00	1.59861	(12011808)
	439734.00	3765410.00	1.59804 (12011808)
439739.00	3765410.00	1.59867	(12011808)
	439744.00	3765410.00	1.59809 (12011808)
439749.00	3765410.00	1.59895	(12011808)
	439774.00	3765410.00	1.60330 (14100607)
439779.00	3765410.00	1.60494	(14100607)
	439784.00	3765410.00	1.60562 (14100607)
439789.00	3765410.00	1.60774	(14100607)
	439794.00	3765410.00	1.60905 (14100607)
439799.00	3765410.00	1.61003	(14100607)
	439804.00	3765410.00	1.61119 (14100607)
439809.00	3765410.00	1.61246	(14100607)
	439814.00	3765410.00	1.61416 (14100607)
439819.00	3765410.00	1.61457	(14100607)
	439824.00	3765410.00	1.61585 (14100607)
439829.00	3765410.00	1.61712	(13120808)
	439834.00	3765410.00	1.61843 (13120808)
439839.00	3765410.00	1.61975	(13120808)
	439844.00	3765410.00	1.62087 (13120808)

439849.00	3765410.00	1.62206	(13120808)
	439854.00	3765410.00	1.62304 (13120808)
439859.00	3765410.00	1.62411	(13120808)
	439674.00	3765415.00	1.63418 (12011417)
439679.00	3765415.00	1.63095	(12011417)
	439684.00	3765415.00	1.62937 (12011417)
439689.00	3765415.00	1.62579	(12011417)
	439694.00	3765415.00	1.62443 (12011417)
439699.00	3765415.00	1.62118	(12011417)
	439704.00	3765415.00	1.61906 (12011417)
439709.00	3765415.00	1.61685	(12011808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439714.00	3765415.00	1.61659	(12011808)
439719.00	3765415.00	1.61727	(12011808)
439729.00	3765415.00	1.61737	(12011808)
439734.00	3765415.00	1.61765	(12011808)
439739.00	3765415.00	1.61771	(12011808)
439744.00	3765415.00	1.61800	(12011808)
439749.00	3765415.00	1.61777	(12011808)
439774.00	3765415.00	1.62103	(14100607)
439779.00	3765415.00	1.62219	(14100607)
439784.00	3765415.00	1.62400	(14100607)
439789.00	3765415.00	1.62461	(14100607)
439794.00	3765415.00	1.62651	(14100607)
439799.00	3765415.00	1.62796	(14100607)
439804.00	3765415.00	1.62938	(14100607)
439809.00	3765415.00	1.63035	(14100607)
439814.00	3765415.00	1.63155	(14100607)
439819.00	3765415.00	1.63324	(14100607)

439824.00	3765415.00	1.63388	(14100607)
	439829.00	3765415.00	1.63514 (13120808)
439834.00	3765415.00	1.63636	(13120808)
	439839.00	3765415.00	1.63781 (13120808)
439844.00	3765415.00	1.63896	(13120808)
	439849.00	3765415.00	1.64032 (13120808)
439854.00	3765415.00	1.64159	(13120808)
	439859.00	3765415.00	1.64252 (13120808)
439674.00	3765420.00	1.65883	(12011417)
	439679.00	3765420.00	1.65702 (12011417)
439684.00	3765420.00	1.65416	(12011417)
	439689.00	3765420.00	1.65278 (12011417)
439694.00	3765420.00	1.64933	(12011417)
	439699.00	3765420.00	1.64783 (12011417)
439704.00	3765420.00	1.64468	(12011417)
	439709.00	3765420.00	1.64294 (12011417)
439714.00	3765420.00	1.63928	(12011417)
	439719.00	3765420.00	1.63693 (12011417)
439729.00	3765420.00	1.63639	(12011808)
	439734.00	3765420.00	1.63717 (12011808)
439739.00	3765420.00	1.63701	(12011808)
	439744.00	3765420.00	1.63785 (12011808)
439749.00	3765420.00	1.63734	(12011808)
	439774.00	3765420.00	1.63858 (14100607)
439779.00	3765420.00	1.64015	(14100607)
	439784.00	3765420.00	1.64166 (14100607)
439789.00	3765420.00	1.64347	(14100607)
	439794.00	3765420.00	1.64448 (14100607)
439799.00	3765420.00	1.64619	(14100607)
	439804.00	3765420.00	1.64749 (14100607)
439809.00	3765420.00	1.64892	(14100607)
	439814.00	3765420.00	1.64992 (14100607)
439819.00	3765420.00	1.65139	(14100607)
	439824.00	3765420.00	1.65274 (14100607)
439829.00	3765420.00	1.65404	(14100607)
	439834.00	3765420.00	1.65497 (14100607)
439839.00	3765420.00	1.65621	(13120808)
	439844.00	3765420.00	1.65778 (13120808)
439849.00	3765420.00	1.65890	(13120808)
	439854.00	3765420.00	1.66025 (13120808)
439859.00	3765420.00	1.66150	(13120808)
	439674.00	3765425.00	1.68504 (12011417)
439679.00	3765425.00	1.68286	(12011417)
	439684.00	3765425.00	1.68072 (12011417)
439689.00	3765425.00	1.67819	(12011417)
	439694.00	3765425.00	1.67681 (12011417)
439699.00	3765425.00	1.67365	(12011417)
	439704.00	3765425.00	1.67212 (12011417)
439709.00	3765425.00	1.66861	(12011417)
	439714.00	3765425.00	1.66724 (12011417)
439719.00	3765425.00	1.66366	(12011417)
	439729.00	3765425.00	1.65837 (12011417)

439734.00	3765425.00	1.65690	(12011808)
	439739.00	3765425.00	1.65766 (12011808)
439744.00	3765425.00	1.65728	(12011808)
	439749.00	3765425.00	1.65863 (12011808)
439774.00	3765425.00	1.65841	(12011808)
	439779.00	3765425.00	1.65888 (12011808)
439784.00	3765425.00	1.66011	(14100607)
	439789.00	3765425.00	1.66180 (14100607)
439794.00	3765425.00	1.66359	(14100607)
	439799.00	3765425.00	1.66482 (14100607)
439804.00	3765425.00	1.66634	(14100607)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439809.00	3765425.00	1.66760	(14100607)
439814.00	3765425.00	1.66956	(14100607)
439819.00	3765425.00	1.67041	(14100607)
439824.00	3765425.00	1.67198	(14100607)
439829.00	3765425.00	1.67291	(14100607)
439834.00	3765425.00	1.67452	(14100607)
439839.00	3765425.00	1.67540	(13120808)
439844.00	3765425.00	1.67694	(13120808)
439849.00	3765425.00	1.67820	(13120808)
439854.00	3765425.00	1.67962	(13120808)
439859.00	3765425.00	1.68086	(13120808)
439674.00	3765430.00	1.71166	(12011417)
439679.00	3765430.00	1.70940	(12011417)
439684.00	3765430.00	1.70752	(12011417)
439689.00	3765430.00	1.70522	(12011417)
439694.00	3765430.00	1.70285	(12011417)
439699.00	3765430.00	1.70128	(12011417)

439704.00	3765430.00	1.69835	(12011417)
	439709.00	3765430.00	1.69707 (12011417)
439714.00	3765430.00	1.69314	(12011417)
	439719.00	3765430.00	1.69204 (12011417)
439729.00	3765430.00	1.68659	(12011417)
	439734.00	3765430.00	1.68308 (12011417)
439739.00	3765430.00	1.68119	(12011417)
	439744.00	3765430.00	1.67867 (12011808)
439749.00	3765430.00	1.67841	(12011808)
	439774.00	3765430.00	1.68072 (12011808)
439779.00	3765430.00	1.67941	(12011808)
	439784.00	3765430.00	1.68045 (12011808)
439789.00	3765430.00	1.68068	(14100607)
	439794.00	3765430.00	1.68227 (14100607)
439799.00	3765430.00	1.68418	(14100607)
	439804.00	3765430.00	1.68582 (14100607)
439809.00	3765430.00	1.68731	(14100607)
	439814.00	3765430.00	1.68842 (14100607)
439819.00	3765430.00	1.69041	(14100607)
	439824.00	3765430.00	1.69156 (14100607)
439829.00	3765430.00	1.69291	(14100607)
	439834.00	3765430.00	1.69385 (14100607)
439839.00	3765430.00	1.69572	(14100607)
	439844.00	3765430.00	1.69653 (13120808)
439849.00	3765430.00	1.69819	(13120808)
	439854.00	3765430.00	1.69944 (13120808)
439859.00	3765430.00	1.70109	(13120808)
	439674.00	3765435.00	1.73801 (12011417)
439679.00	3765435.00	1.73663	(12011417)
	439684.00	3765435.00	1.73442 (12011417)
439689.00	3765435.00	1.73262	(12011417)
	439694.00	3765435.00	1.73051 (12011417)
439699.00	3765435.00	1.72792	(12011417)
	439704.00	3765435.00	1.72647 (12011417)
439709.00	3765435.00	1.72347	(12011417)
	439714.00	3765435.00	1.72262 (12011417)
439719.00	3765435.00	1.71852	(12011417)
	439729.00	3765435.00	1.71390 (12011417)
439734.00	3765435.00	1.71260	(12011417)
	439739.00	3765435.00	1.70873 (12011417)
439744.00	3765435.00	1.70712	(12011417)
	439749.00	3765435.00	1.70350 (12011417)
439774.00	3765435.00	1.70117	(12011808)
	439779.00	3765435.00	1.70258 (12011808)
439784.00	3765435.00	1.70167	(12011808)
	439789.00	3765435.00	1.70253 (12011808)
439794.00	3765435.00	1.70215	(14100607)
	439799.00	3765435.00	1.70377 (14100607)
439804.00	3765435.00	1.70563	(14100607)
	439809.00	3765435.00	1.70727 (14100607)
439814.00	3765435.00	1.70878	(14100607)
	439819.00	3765435.00	1.71017 (14100607)

439824.00	3765435.00	1.71181	(14100607)
	439829.00	3765435.00	1.71352 (14100607)
439834.00	3765435.00	1.71479	(14100607)
	439839.00	3765435.00	1.71559 (14100607)
439844.00	3765435.00	1.71745	(14100607)
	439849.00	3765435.00	1.71842 (13120808)
439854.00	3765435.00	1.72000	(13120808)
	439859.00	3765435.00	1.72117 (13120808)
439674.00	3765440.00	1.76621	(12011417)
	439679.00	3765440.00	1.76348 (12011417)
439684.00	3765440.00	1.76245	(12011417)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439689.00	3765440.00	1.75977	(12011417)
439694.00	3765440.00	1.75838	(12011417)
439699.00	3765440.00	1.75638	(12011417)
439704.00	3765440.00	1.75389	(12011417)
439709.00	3765440.00	1.75229	(12011417)
439714.00	3765440.00	1.74953	(12011417)
439719.00	3765440.00	1.74876	(12011417)
439729.00	3765440.00	1.74398	(12011417)
439734.00	3765440.00	1.74010	(12011417)
439739.00	3765440.00	1.73916	(12011417)
439744.00	3765440.00	1.73489	(12011417)
439749.00	3765440.00	1.73362	(12011417)
439774.00	3765440.00	1.72363	(12011808)
439779.00	3765440.00	1.72400	(12011808)
439784.00	3765440.00	1.72475	(12011808)
439789.00	3765440.00	1.72472	(12011808)
439794.00	3765440.00	1.72524	(12011808)

439799.00	3765440.00	1.72453	(12011808)
	439804.00	3765440.00	1.72587 (12011808)
439809.00	3765440.00	1.72756	(14100607)
	439814.00	3765440.00	1.72946 (14100607)
439819.00	3765440.00	1.73106	(14100607)
	439824.00	3765440.00	1.73269 (14100607)
439829.00	3765440.00	1.73402	(14100607)
	439834.00	3765440.00	1.73569 (14100607)
439839.00	3765440.00	1.73716	(14100607)
	439844.00	3765440.00	1.73833 (14100607)
439849.00	3765440.00	1.73947	(14100607)
	439854.00	3765440.00	1.74096 (13120808)
439859.00	3765440.00	1.74266	(13120808)
	439674.00	3765445.00	1.79292 (12011417)
439679.00	3765445.00	1.79243	(12011417)
	439684.00	3765445.00	1.78980 (12011417)
439689.00	3765445.00	1.78880	(12011417)
	439694.00	3765445.00	1.78626 (12011417)
439699.00	3765445.00	1.78496	(12011417)
	439704.00	3765445.00	1.78286 (12011417)
439709.00	3765445.00	1.78076	(12011417)
	439714.00	3765445.00	1.77915 (12011417)
439719.00	3765445.00	1.77608	(12011417)
	439729.00	3765445.00	1.77187 (12011417)
439734.00	3765445.00	1.77081	(12011417)
	439739.00	3765445.00	1.76687 (12011417)
439744.00	3765445.00	1.76632	(12011417)
	439749.00	3765445.00	1.76206 (12011417)
439774.00	3765445.00	1.74872	(12011417)
	439779.00	3765445.00	1.74647 (12011808)
439784.00	3765445.00	1.74756	(12011808)
	439789.00	3765445.00	1.74740 (12011808)
439794.00	3765445.00	1.74847	(12011808)
	439799.00	3765445.00	1.74854 (12011808)
439804.00	3765445.00	1.74830	(12011808)
	439809.00	3765445.00	1.74919 (12011808)
439814.00	3765445.00	1.75040	(14100607)
	439819.00	3765445.00	1.75224 (14100607)
439824.00	3765445.00	1.75402	(14100607)
	439829.00	3765445.00	1.75563 (14100607)
439834.00	3765445.00	1.75700	(14100607)
	439839.00	3765445.00	1.75874 (14100607)
439844.00	3765445.00	1.76005	(14100607)
	439849.00	3765445.00	1.76184 (14100607)
439854.00	3765445.00	1.76265	(13120808)
	439859.00	3765445.00	1.76445 (13120808)
439674.00	3765450.00	1.82235	(12011417)
	439679.00	3765450.00	1.81987 (12011417)
439684.00	3765450.00	1.81950	(12011417)
	439689.00	3765450.00	1.81686 (12011417)
439694.00	3765450.00	1.81579	(12011417)
	439699.00	3765450.00	1.81346 (12011417)

439704.00	3765450.00	1.81242	(12011417)
	439709.00	3765450.00	1.81005 (12011417)
439714.00	3765450.00	1.80806	(12011417)
	439719.00	3765450.00	1.80653 (12011417)
439729.00	3765450.00	1.80285	(12011417)
	439734.00	3765450.00	1.79944 (12011417)
439739.00	3765450.00	1.79865	(12011417)
	439744.00	3765450.00	1.79459 (12011417)
439749.00	3765450.00	1.79413	(12011417)
	439774.00	3765450.00	1.78012 (12011417)
439844.00	3765450.00	1.78274	(14100607)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439849.00	3765450.00	1.78406	(14100607)
439854.00	3765450.00	1.78545	(14100607)
439859.00	3765450.00	1.78648	(14100607)
439674.00	3765455.00	1.85042	(12011417)
439679.00	3765455.00	1.85012	(12011417)
439684.00	3765455.00	1.84763	(12011417)
439689.00	3765455.00	1.84713	(12011417)
439694.00	3765455.00	1.84468	(12011417)
439699.00	3765455.00	1.84366	(12011417)
439704.00	3765455.00	1.84145	(12011417)
439709.00	3765455.00	1.84017	(12011417)
439714.00	3765455.00	1.83815	(12011417)
439719.00	3765455.00	1.83610	(12011417)
439729.00	3765455.00	1.83192	(12011417)
439734.00	3765455.00	1.83127	(12011417)
439739.00	3765455.00	1.82790	(12011417)
439744.00	3765455.00	1.82713	(12011417)

439749.00	3765455.00	1.82347	(12011417)
	439844.00	3765455.00	1.80561 (14100607)
439849.00	3765455.00	1.80707	(14100607)
	439854.00	3765455.00	1.80889 (14100607)
439859.00	3765455.00	1.81036	(14100607)
	439674.00	3765460.00	1.88097 (12011417)
439679.00	3765460.00	1.87852	(12011417)
	439684.00	3765460.00	1.87840 (12011417)
439689.00	3765460.00	1.87621	(12011417)
	439694.00	3765460.00	1.87561 (12011417)
439699.00	3765460.00	1.87294	(12011417)
	439704.00	3765460.00	1.87271 (12011417)
439709.00	3765460.00	1.87026	(12011417)
	439714.00	3765460.00	1.86903 (12011417)
439719.00	3765460.00	1.86716	(12011417)
	439729.00	3765460.00	1.86390 (12011417)
439734.00	3765460.00	1.86129	(12011417)
	439739.00	3765460.00	1.86032 (12011417)
439744.00	3765460.00	1.85725	(12011417)
	439749.00	3765460.00	1.85651 (12011417)
439789.00	3765460.00	1.83622	(12011417)
	439794.00	3765460.00	1.83344 (12011417)
439799.00	3765460.00	1.82996	(12011417)
	439804.00	3765460.00	1.82763 (12011417)
439809.00	3765460.00	1.82364	(12011417)
	439814.00	3765460.00	1.82310 (12011808)
439819.00	3765460.00	1.82443	(12011808)
	439824.00	3765460.00	1.82320 (12011808)
439829.00	3765460.00	1.82431	(12011808)
	439844.00	3765460.00	1.82912 (14100607)
439849.00	3765460.00	1.83164	(14100607)
	439854.00	3765460.00	1.83310 (14100607)
439859.00	3765460.00	1.83409	(14100607)
	439674.00	3765465.00	1.91085 (12011417)
439679.00	3765465.00	1.91008	(12011417)
	439684.00	3765465.00	1.90774 (12011417)
439689.00	3765465.00	1.90774	(12011417)
	439694.00	3765465.00	1.90564 (12011417)
439699.00	3765465.00	1.90508	(12011417)
	439704.00	3765465.00	1.90272 (12011417)
439709.00	3765465.00	1.90226	(12011417)
	439714.00	3765465.00	1.89991 (12011417)
439719.00	3765465.00	1.89894	(12011417)
	439729.00	3765465.00	1.89471 (12011417)
439734.00	3765465.00	1.89387	(12011417)
	439739.00	3765465.00	1.89152 (12011417)
439744.00	3765465.00	1.89037	(12011417)
	439749.00	3765465.00	1.88750 (12011417)
439789.00	3765465.00	1.86972	(12011417)
	439794.00	3765465.00	1.86698 (12011417)
439799.00	3765465.00	1.86449	(12011417)
	439804.00	3765465.00	1.86110 (12011417)

439809.00	3765465.00	1.85871	(12011417)
	439814.00	3765465.00	1.85455 (12011417)
439819.00	3765465.00	1.85252	(12011417)
	439824.00	3765465.00	1.85125 (12011808)
439829.00	3765465.00	1.85036	(12011808)
	439844.00	3765465.00	1.85435 (14100607)
439849.00	3765465.00	1.85569	(14100607)
	439854.00	3765465.00	1.85761 (14100607)
439859.00	3765465.00	1.85972	(14100607)
	439674.00	3765470.00	1.94250 (12011417)
439679.00	3765470.00	1.94058	(12011417)



439809.00	3765470.00	1.89286	(12011417)
	439814.00	3765470.00	1.89066 (12011417)
439819.00	3765470.00	1.88695	(12011417)
	439824.00	3765470.00	1.88465 (12011417)
439829.00	3765470.00	1.88045	(12011417)
	439844.00	3765470.00	1.87916 (14100607)
439849.00	3765470.00	1.88121	(14100607)
	439854.00	3765470.00	1.88322 (14100607)
439859.00	3765470.00	1.88545	(14100607)
	439674.00	3765475.00	1.97380 (12011417)
439679.00	3765475.00	1.97335	(12011417)
	439684.00	3765475.00	1.97137 (12011417)
439689.00	3765475.00	1.97123	(12011417)
	439694.00	3765475.00	1.96926 (12011417)
439699.00	3765475.00	1.96920	(12011417)
	439704.00	3765475.00	1.96705 (12011417)
439709.00	3765475.00	1.96659	(12011417)
	439714.00	3765475.00	1.96460 (12011417)
439719.00	3765475.00	1.96409	(12011417)
	439729.00	3765475.00	1.96099 (12011417)
439734.00	3765475.00	1.95936	(12011417)
	439739.00	3765475.00	1.95751 (12011417)
439744.00	3765475.00	1.95664	(12011417)
	439749.00	3765475.00	1.95449 (12011417)
439754.00	3765475.00	1.95348	(12011417)
	439789.00	3765475.00	1.93922 (12011417)
439794.00	3765475.00	1.93712	(12011417)
	439799.00	3765475.00	1.93433 (12011417)
439804.00	3765475.00	1.93159	(12011417)
	439809.00	3765475.00	1.92962 (12011417)
439814.00	3765475.00	1.92596	(12011417)
	439819.00	3765475.00	1.92369 (12011417)
439824.00	3765475.00	1.92022	(12011417)
	439829.00	3765475.00	1.91807 (12011417)
439269.00	3764900.00	0.81860	(13120808)
	439369.00	3764900.00	0.81738 (13120808)
439469.00	3764900.00	0.81421	(13120808)
	439569.00	3764900.00	0.80580 (13120808)
439669.00	3764900.00	0.78696	(12010217)
	439769.00	3764900.00	0.78488 (12010217)
439869.00	3764900.00	0.77825	(12010217)
	439969.00	3764900.00	0.75971 (12010217)
440069.00	3764900.00	0.76638	(15010717)
	440169.00	3764900.00	0.77186 (15010717)
440269.00	3764900.00	0.77514	(15010717)
	439269.00	3765000.00	0.89521 (13120808)
439369.00	3765000.00	0.89461	(13120808)
	439469.00	3765000.00	0.89407 (13120808)
439569.00	3765000.00	0.89240	(13120808)
	439669.00	3765000.00	0.88376 (13120808)
439769.00	3765000.00	0.85967	(12010217)
	439869.00	3765000.00	0.85734 (12010217)

439969.00	3765000.00	0.84706	(12010217)
	440069.00	3765000.00	0.84339 (15010717)
440169.00	3765000.00	0.84664	(15010717)
	440269.00	3765000.00	0.84848 (15010717)
439269.00	3765100.00	0.99136	(13120808)
	439369.00	3765100.00	0.99107 (13120808)
439469.00	3765100.00	0.99051	(13120808)
	439569.00	3765100.00	0.99203 (13120808)
439669.00	3765100.00	0.99228	(13120808)
	439769.00	3765100.00	0.98315 (13120808)
439869.00	3765100.00	0.95380	(13120808)

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
 Legacy\_Ops-HRA\_20221004\Ontario\_PUD-Legacy\_Ops- \*\*\*  
 10/05/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
 \*\*\* 12:31:02

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
439969.00	3765100.00	0.94992	(12010217)
440069.00	3765100.00	0.93766	(15010717)
440169.00	3765100.00	0.93990	(15010717)
440269.00	3765100.00	0.94031	(15010717)
439269.00	3765200.00	1.11783	(13120808)
439369.00	3765200.00	1.11904	(13120808)
439469.00	3765200.00	1.11696	(13120808)
439569.00	3765200.00	1.11716	(13120808)
439669.00	3765200.00	1.12179	(13120808)
439769.00	3765200.00	1.12546	(13120808)
439869.00	3765200.00	1.11526	(13120808)
439969.00	3765200.00	1.07910	(13120808)
440069.00	3765200.00	1.07036	(12010217)
440169.00	3765200.00	1.06123	(15010717)
440269.00	3765200.00	1.06152	(15010717)
439269.00	3765300.00	1.33818	(12011417)
439369.00	3765300.00	1.30845	(12011417)

439469.00	3765300.00	1.29458	(13120808)
	439569.00	3765300.00	1.29112 (13120808)
439669.00	3765300.00	1.29474	(13120808)
	439769.00	3765300.00	1.30661 (13120808)
439869.00	3765300.00	1.31146	(13120808)
	439969.00	3765300.00	1.29756 (13120808)
440069.00	3765300.00	1.25571	(13120808)
	440169.00	3765300.00	1.23672 (12010217)
440269.00	3765300.00	1.23086	(15010717)
	439269.00	3765400.00	1.67154 (12011417)
439369.00	3765400.00	1.65476	(12011417)
	439469.00	3765400.00	1.63212 (12011417)
439569.00	3765400.00	1.60324	(12011417)
	439669.00	3765400.00	1.56211 (12011417)
439769.00	3765400.00	1.56826	(14100607)
	439869.00	3765400.00	1.59038 (13120808)
439969.00	3765400.00	1.59150	(13120808)
	440069.00	3765400.00	1.57499 (13120808)
440169.00	3765400.00	1.52549	(13120808)
	440269.00	3765400.00	1.52387 (12011608)
439269.00	3765500.00	2.19780	(12011417)
	439369.00	3765500.00	2.19361 (12011417)
439469.00	3765500.00	2.18060	(12011417)
	439569.00	3765500.00	2.16371 (12011417)
439669.00	3765500.00	2.14880	(12011417)
	439769.00	3765500.00	2.13312 (12011417)
439869.00	3765500.00	2.09228	(12011417)
	439969.00	3765500.00	2.08853 (13120808)
440069.00	3765500.00	2.08038	(13120808)
	440169.00	3765500.00	2.06199 (13120808)
440269.00	3765500.00	2.06692	(12011608)
	439269.00	3765600.00	3.48269 (12101307)
439369.00	3765600.00	3.46847	(12101307)
	439469.00	3765600.00	3.43151 (12101307)
439569.00	3765600.00	3.38714	(12011417)
	439669.00	3765600.00	3.37011 (12011417)
439769.00	3765600.00	3.36283	(12011417)
	439869.00	3765600.00	3.39883 (12011417)
439969.00	3765600.00	3.42312	(12011417)
	440069.00	3765600.00	3.53049 (14101107)
440169.00	3765600.00	3.61368	(14101107)
	440269.00	3765600.00	3.66595 (14101107)
439269.00	3765700.00	14.56472	(12101307)
	439369.00	3765700.00	15.07590 (12101307)
439469.00	3765700.00	15.66274	(12101307)
	439569.00	3765700.00	16.04418 (14101107)
439669.00	3765700.00	16.42742	(14101107)
	439769.00	3765700.00	16.65484 (14101107)
439869.00	3765700.00	16.87478	(14101107)
	439969.00	3765700.00	16.90265 (14101107)
440069.00	3765700.00	17.19848	(12101207)
	440169.00	3765700.00	17.28501 (12101207)

440269.00	3765700.00	17.52593	(12101207)
	439269.00	3765800.00	4.32810 (12100707)
439369.00	3765800.00	4.36921	(12100707)
	439469.00	3765800.00	4.34561 (12100707)
439569.00	3765800.00	4.31596	(12100707)
	439669.00	3765800.00	4.30851 (12100707)
439769.00	3765800.00	4.31304	(12100707)
	439869.00	3765800.00	4.38199 (13111217)
439969.00	3765800.00	4.12393	(12011717)
	440069.00	3765800.00	4.06776 (12011717)
440169.00	3765800.00	4.06044	(12011717)

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE 1ST HIGHEST 1-HR AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
 INCLUDING SOURCE(S):  
 A0000012 , A0000013 , A0000014 , A0000015 ,  
 A0000016 ,  
 A0000017 , A0000018 , A0000019 ,  
 A0000020 , A0000021 , A0000022 , A0000001 ,  
 A0000002 ,  
 A0000003 , A0000004 , A0000005 ,  
 A0000006 , A0000007 , A0000008 , A0000009 ,  
 A0000010 ,  
 A0000011 , A0000023 , A0000024 ,  
 A0000025 , A0000026 , A0000027 ,  
 A0000028 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
440269.00	3765800.00	4.07663	(12011717)
439269.00	3765900.00	2.49048	(12100707)
439369.00	3765900.00	2.44857	(12100707)
439469.00	3765900.00	2.39490	(12100707)
439569.00	3765900.00	2.32766	(12100707)
439669.00	3765900.00	2.34570	(13111217)
439769.00	3765900.00	2.39147	(13111217)
439869.00	3765900.00	2.42311	(13111217)
439969.00	3765900.00	2.42579	(13111217)
440069.00	3765900.00	2.39105	(13111217)
440169.00	3765900.00	2.38063	(13111217)
440269.00	3765900.00	2.39922	(12011717)
439649.00	3765310.00	1.31420	(13120808)
439679.00	3765310.00	1.31670	(13120808)
439709.00	3765310.00	1.32027	(13120808)
439739.00	3765310.00	1.32370	(13120808)
439769.00	3765310.00	1.32752	(13120808)

439799.00	3765310.00	1.33138	(13120808)
	439829.00	3765310.00	1.33388 (13120808)
439859.00	3765310.00	1.33500	(13120808)
	439889.00	3765310.00	1.33348 (13120808)
439649.00	3765340.00	1.38371	(13120808)
	439679.00	3765340.00	1.38545 (13120808)
439709.00	3765340.00	1.38828	(13120808)
	439739.00	3765340.00	1.39287 (13120808)
439769.00	3765340.00	1.39757	(13120808)
	439799.00	3765340.00	1.40256 (13120808)
439829.00	3765340.00	1.40612	(13120808)
	439859.00	3765340.00	1.40874 (13120808)
439889.00	3765340.00	1.40931	(13120808)
	439649.00	3765370.00	1.46317 (13120808)
439679.00	3765370.00	1.46419	(13120808)
	439709.00	3765370.00	1.46693 (13120808)
439739.00	3765370.00	1.47127	(13120808)
	439769.00	3765370.00	1.47678 (13120808)
439799.00	3765370.00	1.48285	(13120808)
	439829.00	3765370.00	1.48834 (13120808)
439859.00	3765370.00	1.49280	(13120808)
	439889.00	3765370.00	1.49469 (13120808)
439649.00	3765400.00	1.57213	(12011417)
	439679.00	3765400.00	1.56119 (12011808)
439709.00	3765400.00	1.56142	(12011808)
	439739.00	3765400.00	1.56204 (13120808)
439769.00	3765400.00	1.56826	(14100607)
	439799.00	3765400.00	1.57546 (14100607)
439829.00	3765400.00	1.58255	(13120808)
	439859.00	3765400.00	1.58877 (13120808)
439889.00	3765400.00	1.59279	(13120808)
	439649.00	3765430.00	1.71989 (12011417)
439679.00	3765430.00	1.70940	(12011417)
	439709.00	3765430.00	1.69707 (12011417)
439739.00	3765430.00	1.68119	(12011417)
	439769.00	3765430.00	1.67905 (12011808)
439799.00	3765430.00	1.68418	(14100607)
	439829.00	3765430.00	1.69291 (14100607)
439859.00	3765430.00	1.70109	(13120808)
	439889.00	3765430.00	1.70744 (13120808)
439649.00	3765460.00	1.88705	(12011417)
	439679.00	3765460.00	1.87852 (12011417)
439709.00	3765460.00	1.87026	(12011417)
	439739.00	3765460.00	1.86032 (12011417)
439769.00	3765460.00	1.84734	(12011417)
	439799.00	3765460.00	1.82996 (12011417)
439829.00	3765460.00	1.82431	(12011808)
	439859.00	3765460.00	1.83409 (14100607)
439889.00	3765460.00	1.84365	(13120808)
	439649.00	3765490.00	2.08024 (12011417)
439679.00	3765490.00	2.07413	(12011417)
	439709.00	3765490.00	2.06936 (12011417)

439739.00	3765490.00	2.06333	(12011417)
439769.00	3765490.00	2.05619	(12011417)
439799.00	3765490.00	2.04596	(12011417)
439829.00	3765490.00	2.03231	(12011417)
439859.00	3765490.00	2.01424	(12011417)
439889.00	3765490.00	2.01037	(13120808)

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE SUMMARY OF  
 MAXIMUM PERIOD ( 43848 HRS) RESULTS \*\*\*

\*\* CONC OF PM\_10 IN  
 \*\*  
 MICROGRAMS/M\*\*3

NETWORK		AVERAGE CONC			
GROUP ID					
RECEPTOR	(XR, YR, ZELEV, ZHILL, ZFLAG)	OF	TYPE	GRID-ID	
-----					
EXH	1ST HIGHEST VALUE IS	2.18082	AT (	440269.00,	
3765700.00,	289.00, 289.00,	0.00)	DC		
	2ND HIGHEST VALUE IS	2.14786	AT (	440169.00,	
3765700.00,	289.00, 289.00,	0.00)	DC		
	3RD HIGHEST VALUE IS	2.11887	AT (	440069.00,	
3765700.00,	289.00, 289.00,	0.00)	DC		
	4TH HIGHEST VALUE IS	2.07937	AT (	439969.00,	
3765700.00,	289.00, 289.00,	0.00)	DC		
	5TH HIGHEST VALUE IS	2.05444	AT (	439869.00,	
3765700.00,	289.00, 289.00,	0.00)	DC		
	6TH HIGHEST VALUE IS	2.03560	AT (	439769.00,	
3765700.00,	289.00, 289.00,	0.00)	DC		
	7TH HIGHEST VALUE IS	1.99410	AT (	439669.00,	
3765700.00,	289.00, 289.00,	0.00)	DC		
	8TH HIGHEST VALUE IS	1.93748	AT (	439569.00,	
3765700.00,	289.00, 289.00,	0.00)	DC		
	9TH HIGHEST VALUE IS	1.85402	AT (	439469.00,	
3765700.00,	289.00, 289.00,	0.00)	DC		
	10TH HIGHEST VALUE IS	1.75481	AT (	439369.00,	
3765700.00,	289.00, 289.00,	0.00)	DC		
FREEEXH	1ST HIGHEST VALUE IS	2.08198	AT (	440169.00,	
3765700.00,	289.00, 289.00,	0.00)	DC		
	2ND HIGHEST VALUE IS	2.08072	AT (	440269.00,	
3765700.00,	289.00, 289.00,	0.00)	DC		
	3RD HIGHEST VALUE IS	2.07627	AT (	440069.00,	
3765700.00,	289.00, 289.00,	0.00)	DC		
	4TH HIGHEST VALUE IS	2.05764	AT (	439969.00,	
3765700.00,	289.00, 289.00,	0.00)	DC		

3765700.00,	5TH HIGHEST VALUE IS	2.03652	AT (	439869.00,
289.00,				0.00) DC
3765700.00,	6TH HIGHEST VALUE IS	2.01278	AT (	439769.00,
289.00,				0.00) DC
3765700.00,	7TH HIGHEST VALUE IS	1.96641	AT (	439669.00,
289.00,				0.00) DC
3765700.00,	8TH HIGHEST VALUE IS	1.90454	AT (	439569.00,
289.00,				0.00) DC
3765700.00,	9TH HIGHEST VALUE IS	1.82739	AT (	439469.00,
289.00,				0.00) DC
3765700.00,	10TH HIGHEST VALUE IS	1.74831	AT (	439369.00,
289.00,				0.00) DC
ONOFFEXH 3765700.00,	1ST HIGHEST VALUE IS	0.10010	AT (	440269.00,
289.00,				0.00) DC
3765800.00,	2ND HIGHEST VALUE IS	0.07144	AT (	439869.00,
289.00,				0.00) DC
3765700.00,	3RD HIGHEST VALUE IS	0.06589	AT (	440169.00,
289.00,				0.00) DC
3765800.00,	4TH HIGHEST VALUE IS	0.04688	AT (	439769.00,
289.00,				0.00) DC
3765700.00,	5TH HIGHEST VALUE IS	0.04260	AT (	440069.00,
289.00,				0.00) DC
3765800.00,	6TH HIGHEST VALUE IS	0.03377	AT (	439969.00,
289.00,				0.00) DC
3765700.00,	7TH HIGHEST VALUE IS	0.03295	AT (	439569.00,
289.00,				0.00) DC
3765800.00,	8TH HIGHEST VALUE IS	0.03178	AT (	439669.00,
289.00,				0.00) DC
3765700.00,	9TH HIGHEST VALUE IS	0.02769	AT (	439669.00,
289.00,				0.00) DC
3765700.00,	10TH HIGHEST VALUE IS	0.02663	AT (	439469.00,
289.00,				0.00) DC
ALL 3765700.00,	1ST HIGHEST VALUE IS	2.18082	AT (	440269.00,
289.00,				0.00) DC
3765700.00,	2ND HIGHEST VALUE IS	2.14786	AT (	440169.00,
289.00,				0.00) DC
3765700.00,	3RD HIGHEST VALUE IS	2.11887	AT (	440069.00,
289.00,				0.00) DC
3765700.00,	4TH HIGHEST VALUE IS	2.07937	AT (	439969.00,
289.00,				0.00) DC
3765700.00,	5TH HIGHEST VALUE IS	2.05444	AT (	439869.00,
289.00,				0.00) DC
3765700.00,	6TH HIGHEST VALUE IS	2.03560	AT (	439769.00,
289.00,				0.00) DC
3765700.00,	7TH HIGHEST VALUE IS	1.99410	AT (	439669.00,
289.00,				0.00) DC
3765700.00,	8TH HIGHEST VALUE IS	1.93748	AT (	439569.00,
289.00,				0.00) DC
3765700.00,	9TH HIGHEST VALUE IS	1.85402	AT (	439469.00,
289.00,				0.00) DC

10TH HIGHEST VALUE IS 1.75481 AT ( 439369.00,  
3765700.00, 289.00, 289.00, 0.00) DC

\*\*\* RECEPTOR TYPES: GC = GRIDCART  
GP = GRIDPOLR  
DC = DISCCART  
DP = DISCPOLR

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE SUMMARY

OF HIGHEST 1-HR RESULTS \*\*\*

MICROGRAMS/M**3			** CONC OF PM_10 IN	
			**	
			DATE	
NETWORK			AVERAGE CONC	(YYMMDDHH)
GROUP ID			OF TYPE	GRID-ID
RECEPTOR	(XR, YR, ZELEV, ZHILL, ZFLAG)			
- - - - -				
- - - - -				
EXH	HIGH	1ST HIGH VALUE IS	17.52593	ON 12101207: AT
(	440269.00,	3765700.00, 289.00,	289.00,	0.00) DC
FREEEXH	HIGH	1ST HIGH VALUE IS	17.12930	ON 12101207: AT
(	440269.00,	3765700.00, 289.00,	289.00,	0.00) DC
ONOFFEXH	HIGH	1ST HIGH VALUE IS	0.56725	ON 12100707: AT
(	440269.00,	3765700.00, 289.00,	289.00,	0.00) DC
ALL	HIGH	1ST HIGH VALUE IS	17.52593	ON 12101207: AT
(	440269.00,	3765700.00, 289.00,	289.00,	0.00) DC

\*\*\* RECEPTOR TYPES: GC = GRIDCART  
 GP = GRIDPOLR  
 DC = DISCCART  
 DP = DISCPOLR

\*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* C:\Lakes\Ontario\_PUD-  
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10/05/22  
\*\*\* AERMET - VERSION 16216 \*\*\* \*\*\*  
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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* Message Summary : AERMOD Model Execution \*\*\*

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)  
A Total of 2 Warning Message(s)  
A Total of 1628 Informational Message(s)  
  
A Total of 43848 Hours Were Processed  
  
A Total of 1278 Calm Hours Identified  
  
A Total of 350 Missing Hours Identified ( 0.80  
Percent)

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*  
\*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*  
ME W186 1734 MEOPEN: THRESH\_1MIN 1-min ASOS wind speed  
threshold used 0.50  
ME W187 1734 MEOPEN: ADJ\_U\* Option for Stable Low Winds  
used in AERMET

\*\*\*\*\*  
\*\*\* AERMOD Finishes Successfully \*\*\*  
\*\*\*\*\*



# Historic Preservation Subcommittee

August 9, 2023

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## DECISION NO:

**FILE NO:** File No. PHP22-015

**DESCRIPTION:** A hearing to consider a Certificate of Appropriateness to facilitate the construction of a mixed-use development consisting of 346 apartment units and 5,400 square feet of commercial space on 9.4 acres of land located at the northwest corner of Euclid Avenue and Walnut Avenue, within the Mixed-Use – Neighborhood Hub 8e – Euclid and Walnut (MU-NH 8e) zoning district. APNs: 1051-271-67 and 1051-271-66. **Submitted by Legacy/Collier Residential LLC. Planning/Historic Preservation Commission action is required.**

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## PART I: BACKGROUND & ANALYSIS

LEGACY/COLLIER RESIDENTIAL LLC, (herein after referred to as "Applicant") has filed an application for the approval of a Certificate of Appropriateness, File No. PHP22-015, as described in the subject of this Decision (herein after referred to as "Application" or "Project").

**(1) Project Setting:** The Project site is comprised of 2 parcels of land totaling 9.4 acres and is generally located at the northwest corner of Euclid Avenue and Walnut Street, depicted in *Exhibit A: Project Location Map*. The Project site is developed with commercial buildings that were constructed during the early- to mid-1980s that include a vacant K-Mart site, a Carl's Jr. fast food drive-thru restaurant, and a one-story multi-tenant retail building, and are illustrated in *Exhibit B: Photographs*.

Surrounding the Project site are commercial and residential developments to the north, south, west, and east. The multiple-family homes to the west of the Project site and commercial strip center to the east, across Euclid Avenue, were built in the early 1980s. The single-family residential homes to the north were built in the 1950s, and the surrounding commercial development was constructed in phases between the 1960s and 1980s. The single-family residential homes to the south of the Project site were built between the late 1960s and late 1970s.

**(2) Background:** On May 25, 2022, the Applicant filed a Certificate of Appropriateness, File No. PHP22-015) in conjunction with a Planned Unit Development (PUD), File No. PUD22-004, to establish the development standards and design guidelines for a two-phase, 10.6-acre project area and a Development Plan to raze two existing commercial buildings (totaling 100,950 square feet) and construct a mixed-use

development comprised of 346 dwelling units and 5,400 square feet of ground-floor commercial space on 9.6 acres of land. A Lot Line Adjustment to consolidate the Project site into a single lot will also be processed. The Development Plan will implement Phase 1, as identified in the PUD, and Development of Phase 2, which includes demolition of the Carl's Jr. drive-thru restaurant, will require review and approval of a subsequent Development Plan by the Planning/Historic Preservation Commission.

Final approval of the Certificate of Appropriateness is contingent upon City Council adoption of the PUD and Addendum for the Project site and Development Plan approval by the Planning Commission.

**(3) Project Description:** The Applicant is requesting a Certificate of Appropriateness to allow for the development of 7 residential buildings and one commercial and residential mixed-use building at an overall density of 36.7 dwelling units per acre and intensity of 0.01 FAR, along with all required improvements such as landscaping, recreational facilities, and pedestrian and vehicular circulation (see Exhibit B: Site and Landscape Plan).

Buildings 1 and 2 are four-stories and will be oriented toward Euclid Avenue and Walnut Street, respectively, and Buildings 3 to 8 are three-story buildings and will be located interior to the site, depicted in *Exhibit C: Site Plan*. The buildings are largely oriented in a linear north-south direction, aside from Building 1, which is an L-shaped building and Building 2, which is a C-shaped building. Four of the three-story buildings face onto a courtyard/paseo with active and passive recreational facilities such as cornhole and patio furniture. The major recreational facilities are located within or adjacent to Building 1, toward the northeast corner of the Project site. The Project will provide a range of dwelling types, including studio, one-bedroom, and two-bedroom apartments.

The commercial portion of the Project (located within Building 1) will have direct access from Euclid Avenue, and the residential portion of the Project will have gated entry access points for both vehicles and pedestrians from Euclid Avenue and Walnut Street. Pedestrian circulation is provided throughout the Project site via sidewalks and decorative drive aisle crossings. Residents and their guests will have access to assigned private parking facilities, including garages, carports, and uncovered spaces. Commercial circulation is limited to the easterly Project boundary, along Euclid Avenue, and includes shared vehicular access to the existing Carl's Jr. drive-thru restaurant located at the Project site's southeast corner.

The Project requires 580 residential parking spaces and 22 retail/visitor parking spaces for a total of 602 on-site parking spaces. The Project is designed to provide 582 residential and 24 retail/visitor parking spaces, which is the minimum required by the proposed PUD. A parking management plan will be submitted for Planning Department review and approval, to accompany a rental/lease agreement for the site's residents and businesses to ensure adequate supply of parking spaces.

The buildings are designed in a contemporary architectural style, as depicted in Exhibit D: Conceptual Renderings. An assortment of complementary colors, materials, and textures are proposed, including exterior plaster, fiber cement lap siding, fiber cement trim boards, stone veneer, metal awnings and trellises, and aluminum storefront windows. The color palette largely consists of neutral earth tones with vibrant color accent panels in orange, yellow, or green. The residential units will feature balconies for private open space and Building 1 will also offer a rooftop deck as common open space.

The storefront design in Building 1 include metal awnings and trellises to provide visual interest at the retail tenant entries. Buildings 2 through 8 will be consistent with and complementary to Building 1, featuring stone veneer accents along the ground floor and stucco and fiber cement siding along the upper floors. The residential balconies will also feature contemporary metal railings.

Approximately 67,404 square feet of common open space and indoor and outdoor recreation amenities are provided throughout the site, including a pool court, dog park, landscaped paseos, courtyards, club, fitness room, sports lounge, roof deck, and leasing office (see Exhibit B: Site and Landscape Plan). Additional on-site amenities for residential tenants include private open space (minimum of 50 square feet per dwelling unit) and private storage units (minimum of 150 cubic feet per dwelling unit). Common and private open space and amenities exceed the minimum requirement of 60,550 square feet, with 67,404 square feet provided at a ratio of 195 square feet per dwelling unit.

Landscaping is provided for the full length of the Project street frontages, along pedestrian walkways and recreation areas, and throughout the parking lot, for a total of 52,971 square feet (12.9 percent) of landscape coverage for the Project site. A variety of accent and shade trees in 24- to 60-inch box sizes, as well as one- to five-gallon shrubs, groundcovers, and vines, will be planted throughout the site. Decorative paving and lighting will be provided at entries, pedestrian walkways, and other key locations throughout the Project site.

**(4) Historic Context:** The Chaffey brothers planned Ontario with a 200-foot-wide boulevard, Euclid Avenue, running through the center from its southern boundary up to the foothills to the north. Seven miles long, Euclid Avenue—with twin roadways and a central median—was the stately backbone of the colony: its long, easy incline from the Southern Pacific tracks on the south to the tableland at the mouth of San Antonio Canyon on the north was ideal for gravity irrigation.

The public right-of-way of Euclid Avenue from Philadelphia Street to the I-10 was designated as Local Landmark No. 67 on January 16, 2001. On August 10, 2005, the public right-of-way of Euclid Avenue from Philadelphia Street in Ontario to 24th Street in Upland was listed on the National Register of Historic Places as a cultural landscape historic district. The public right-of-way includes north and south bound streets, sidewalks, light fixtures, parkways, median, trees, and stone and concrete curbs and gutters. Contributing character-defining features include the 60-foot wide median, historic rock

curb, scored sidewalks, King standard light posts, double planting of California pepper trees (*Schinus molle*), silk oaks trees (*Grevillea robusta*), and other mature vegetation such as deodar trees (*Cedrus deodara*) and Canary Island palms (*Phoenix canariensis*). Non-contributing features include the bridge which crosses the I-10 and the bridge railroad crossings at Emporia and State Streets.

Euclid Avenue is defined by various periods of development that have occurred since the boulevard's construction. The segment of Euclid Avenue between G and State Streets is the historic core of the City and features commercial buildings built directly on property lines with no setback from Euclid Avenue. The shift to commercial buildings and uses between G and I Streets occurred during the 1950s and makes up a "transition area" from downtown commercial to the residential historic district to the north. The segment of Euclid Avenue south of State Street to Mission Boulevard is primarily developed with residential and is considered another "transition area" that connects to the commercial uses to the south. Euclid Avenue south of Mission Boulevard originally contained agricultural uses but has been developed with commercial uses over the past 70 years.

**(5) Project Analysis:** Section 6.01.035 (Overlay Zoning Districts) of the Ontario Development Code requires Certificate of Appropriateness approval for development projects located within the EA Overlay district. The EA Overlay district is intended to recognize, protect, and enhance the visual character and quality of Euclid Avenue as a historic resource (cultural landscape) and safeguard Euclid Avenue's position on the National Register of Historic Places. The intent of the district is not to create a false sense of history with any new development along the Euclid Avenue corridor, but rather to ensure that new development does not cause an adverse effect on the character-defining features of Euclid Avenue, such as the 60-foot wide landscaped median, rock curbs, and King's Standard lampposts. Additionally, all new construction should be compatible with the surrounding developments in site design, massing, and scale.

Other commercial properties located on Euclid Avenue adjacent to the Project site have been developed with landscape planters or parking lots along the corridor, with the building placement setback from Euclid Avenue. The Project is consistent with that of the surrounding area. The design, site configuration and landscaping of the mixed-use building is appropriate in scale and massing for the infill construction and will not detract or adversely affect the historic character of Euclid Avenue. Impacts to the Euclid Avenue Historic District are not likely to occur because the Project site is located approximately one-half mile south of the designated historic district. Furthermore, the Project site does not contain historic resources, is not located adjacent to any historic properties, and does not propose any alterations to the designated-historic portions of Euclid Avenue.

**(6) Environmental:** On August 16, 2022, the City Council certified The Ontario Plan 2050 ("TOP") Supplemental Environmental Impact Report ("SEIR", State Clearinghouse No. 2021070364) in conjunction with File No. PGPA20-002. The SEIR

analyzed the Project site and 5.4 acres of land to the north of the Project site, also located within the same mixed-use district, and established guidelines for development. These guidelines include, but are not limited to, general land use (mixed-use residential and commercial), maximum density and development intensity (20-75 dwelling units per acre and 1.0 non-residential floor area ratio ("FAR"), respectively), and assumed dwelling units and commercial square footage (369 and 142,840, respectively).

An Addendum to the SEIR was submitted in conjunction with the Project and is available for review at the Planning Department. The Addendum did not require additional mitigation measures beyond those already implemented by SEIR and made findings that the Project site does not contain any buildings or structures constructed more than 50 years ago which cannot be considered for eligibility for listing in the national, state or local historic registers. Further, there are no potential or proposed historic resources within the immediate surrounding area of the Project site. Lastly, the Project does not propose to alter or affect any designated historical districts or resources in the City.

## **PART II: RECITALS**

WHEREAS, the Application is a project pursuant to the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) ("CEQA") and an initial study has been prepared to determine possible environmental impacts; and

WHEREAS, the TOP SEIR Environmental Impact Report (State Clearinghouse No. 2021070364) was certified on August 16, 2022 (hereinafter referred to as "Certified SEIR"), in which development and use of the Project site was discussed; and

WHEREAS, the Planning Director of the City of Ontario prepared and approved for attachment to the certified Environmental Impact Report, an Addendum to the Certified SEIR (hereinafter referred to as "SEIR Addendum") in accordance with the requirements of the California Environmental Quality Act of 1970, together with State and local guidelines implementing said Act, all as amended to date (collectively referred to as "CEQA"); and

WHEREAS, the environmental impacts of this Project were thoroughly analyzed in the SEIR Addendum, which concluded that implementation of the Project could result in a number of significant effects on the environment that were previously analyzed in the Certified SEIR, and that the Certified SEIR identified mitigation measures that would reduce each of those significant effects to a less-than-significant level; and

WHEREAS, the City's "Local Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent projects are adequately analyzed; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the Historic Preservation Subcommittee (“HPSC”) the responsibility and authority to make recommendation to the Planning/Historic Preservation Commission, on the subject Application; and

WHEREAS, all members of the HPSC of the City of Ontario were provided the opportunity to review and comment on the Application, and no comments were received opposing the proposed; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, as the first action on the Project, on August 9, 2023, the HPSC issued a Decision recommending that the Planning/Historic Preservation Commission recommend that the City Council adopt the SEIR Addendum, finding that the proposed Project introduces no new significant environmental impacts and applying all previously adopted mitigation measures to the Project, which were incorporated by reference; and

WHEREAS, on August 9, 2023, the Historic Preservation Subcommittee of the City of Ontario conducted a hearing on the Application and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Decision have occurred.

### **PART III: THE DECISION**

NOW, THEREFORE, IT IS HEREBY FOUND AND DETERMINED by the Historic Preservation Subcommittee of the City of Ontario, as follows:

SECTION 1: As the recommending body for the Project, the HPSC has reviewed and considered the information contained in the administrative record for the Project. Based upon the facts and information contained in the Addendum, the initial study, and the administrative record, including all written and oral evidence presented to the HPSC, the HPSC finds as follows:

(1) The environmental impacts of the Project were reviewed in conjunction with an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364), certified by the Ontario City Council on August 16, 2022, in conjunction with File No. PGPA20-002; and

(2) The SEIR Addendum and administrative record have been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(3) The City's "Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental assessment in situations where the impacts of subsequent Projects are adequately analyzed. This Application introduces no new significant environmental impacts; and

(4) All previously adopted mitigation measures shall be a condition of Project approval, as they are applicable to the Project, and are incorporated herein by this reference; and

(5) The SEIR Addendum contains a complete and accurate reporting of the environmental impacts associated with the Project, and reflects the independent judgment of the HPSC; and

(6) There is no substantial evidence in the administrative record supporting a fair argument that the Project may result in significant environmental impacts.

SECTION 2: Subsequent or Supplemental Environmental Review Not Required.  
Based on the SEIR Addendum, all related information presented to the HPSC, and the specific findings set forth in Section 1, above, the HPSC finds that the preparation of a subsequent or supplemental Certified EIR is not required for the Project, as the Project:

(1) Does not constitute substantial changes to the Certified SEIR that will require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(2) Does not constitute substantial changes with respect to the circumstances under which the Certified SEIR was prepared, that will require major revisions to the Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

(3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified SEIR was certified/adopted, that shows any of the following:

(a) The Project will have one or more significant effects not discussed in the Certified SEIR; or

(b) Significant effects previously examined will be substantially more severe than shown in the Certified SEIR; or

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or

(d) Mitigation measures or alternatives considerably different from those analyzed in the Certified SEIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 3: Based upon the substantial evidence presented to the HPSC during the above-referenced hearing and upon the specific findings set forth in Section 1 and 2, above, the HPSC hereby concludes as follows:

- (1) The new construction, in whole or in part,
  - a. Will not detrimentally change, destroy, or adversely affect any significant architectural feature of the historic resource because no significant architectural feature exists on or adjacent to the Project site. While the Project site has frontage along Euclid Avenue and is within the EA Overlay district, there are no identified historic resources within the immediate surrounding area of the proposed Project; and
  - b. Will not detrimentally change, destroy, or adversely affect the historic character or value of the resource because no notable historical resource is located on or adjacent to the Project site and, although the Project fronts Euclid Avenue, the Project is separated by one-half mile from the southernmost boundary (Philadelphia Street) of the designated historic portion of Euclid Avenue. The Project does not propose to alter or affect character-defining feature of the historic district; and
  - c. Will not be incompatible with the exterior character-defining features of other improvements within the historic district because, although the parcels within the Project site have Euclid Avenue frontage and are subject to requirements of the EA Overlay district, the site is separated from the closest boundary of an historic district by a distance of approximately one-half mile. The Project's exterior features and other improvements will be regulated under a Planned Unit Development that includes criteria to ensure that site and building design is appropriate generally to the site's relationship, location, and the overall compatibility with the Euclid Avenue corridor; and
  - d. Will not adversely affect or detract from the character of the historic district because, while the Project is located within the EA Overlay district, it is physically separated from the nearest historic district boundary by a distance of one-half mile to the north. Further, there are no modifications proposed as part of this Project that would alter the predominant character of the 60-foot-wide median within Euclid Avenue. Through enhanced architectural elements and design complementary to the existing residential and commercial neighboring development, and through compliance with the proposed PUD and Ontario Development Code, the proposed Project will not detract from the character of Euclid Avenue.

SECTION 4: Based upon the findings and conclusions set forth in Sections 1 through 3 above, the HPSC hereby recommends approval of the Application to the Historic Preservation Commission.

SECTION 5: The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void or annul this approval. The City of Ontario shall promptly notify the applicant of any such claim, action or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 6: The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

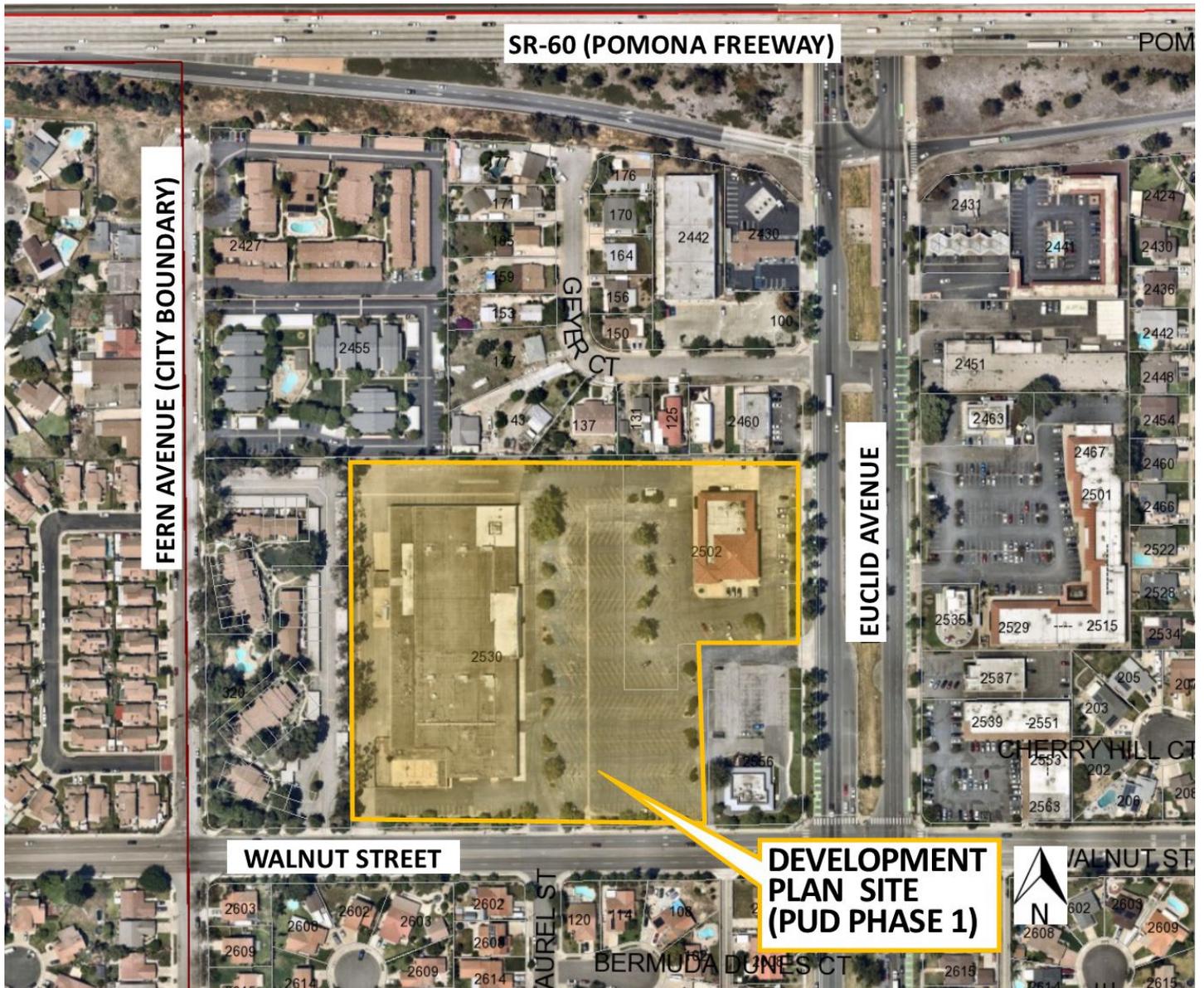
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APPROVED AND ADOPTED this 9th day of August 2023.

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Historic Preservation Subcommittee

**Exhibit A: Project Location Map**



***Exhibit B: Site Photographs***



***View of K-Mart Building, Looking West***



***View of Multi-Tenant Retail Building, Looking North***

**Exhibit B: Site Photographs (continued)**



**View of Multi-Tenant Retail Building, Looking Northwest**



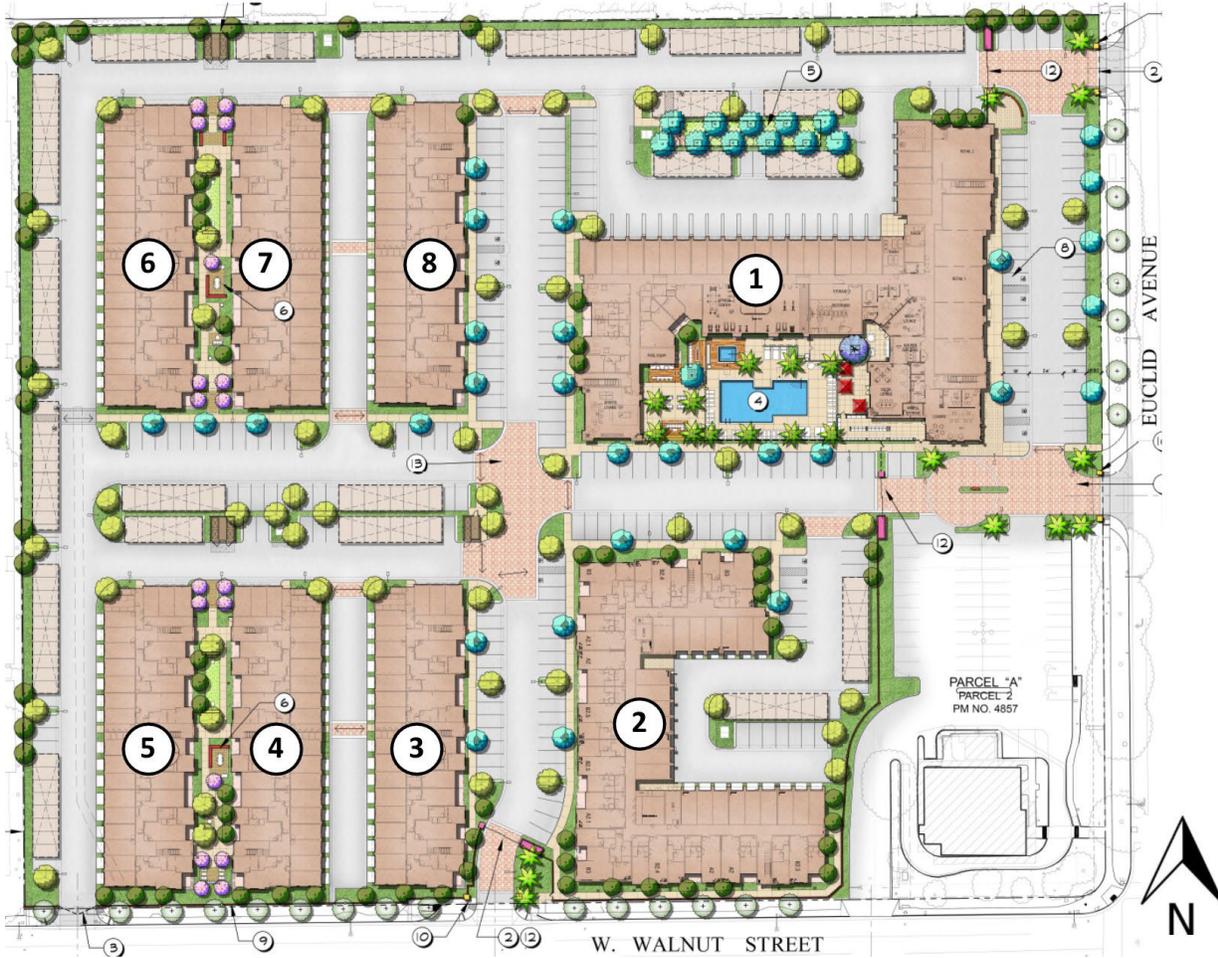
**View of Carl's Jr. Fast Food Drive-Thru, Looking South**

***Exhibit B: Site Photographs (continued)***



***View of Carl's Jr. Fast Food Drive-Thru, Looking West***

**Exhibit C: Site Plan**



***Exhibit D: Conceptual Renderings***



***View from Main Entry off Euclid Avenue, Looking Northwest (Building 1)***



***View from Entry off Walnut Street, Looking Northeast (Buildings 2 and 3)***

***Exhibit D: Conceptual Renderings (continued)***



***View from Walnut Street, Looking Northwest (Building 3)***