



### **Table of Contents**

<b>SECT</b>	TION 1 - SPECIFIC PLAN OVERVIEW	
1.1	Governing Documents	1-4
1.2	Specific Plan Components	1-4
SECT	TION 2 - INTRODUCTION	
2.1	Specific Plan Proposal	2-2
2.2	Purpose and Objectives	
2.3	Authority and Requirements	2-4
2.4	Development Approval Components	
2.5	CEQA Compliance	2-7
2.6	Relationship to the General Plan and Zoning	2-7
SECT	TION 3 - EXISTING CONDITIONS	
3.1	Onsite Land Use Characteristics	3-1
3.2	Surrounding Land Uses	3-1
3.3	Topography	3-5
3.4	Hydrology	3-5
3.5	Geology and Soils	
3.6	Seismicity	3-6
3.7	Biological Resources	3-6
3.8	Cultural Resources	3-6
3.9	Existing Circulation and Access	3-7
3.10	Existing Infrastructure and Utilities	
SECT	ΓΙΟΝ 4 - LAND USE	
4.1	Introduction	4-1
4.2	Proposed Land Uses	4-6
SECT	TION 5 - INFRASTRUCTURE AND SERVICES	
5.1	Circulation	5-1
5.2	Domestic and Recycled Water Master Plan	5-6
5.3	Sewer Master Plan	5-8
5.4	Drainage	5-8

SECT	ΓΙΟΝ 5 - INFRASTRUCTURE AND SERVICES (Cont'd)	
5.5	Schools	5-12
5.6	Public Utilities	5-14
5.7	Grading Concept	5-15
5.8	Phasing	5-18
SECT	ΓΙΟΝ 6 - DEVELOPMENT REGULATIONS	
6.1	Introduction	6-1
6.2	Definition of Terms	6-1
6.3	Applicability	6-1
6.4	Administration	6-2
6.5	Methods and Interpretation	6-2
6.6	General Site Development Criteria	6-2
6.7	Implementation	6-3
6.8	Development Plan Review	6-4
6.9	Subdivision Maps	6-4
6.10	Specific Plan Modifications and Amendments	
6.11	Appeals	6-5
6.12	Developer Reimbursements	6-6
6.13	Project Financing	6-6
6.14	Maintenance and Responsibilities	6-7
6.15	Residential Development Standards	6-10
6.16	Commercial Development Standards	6-14
6.17	Landscape Standards	6-21
6.18	Signage	6-24
6.19	Lighting	6-25
6.20	Bus Shelters	6-25
6.21	Mailboxes	6-26
6.22	Trash Receptacles and Enclosures	6-26
SECT	ΓΙΟΝ 7 - DESIGN GUIDELINES	
7.1	Introduction	7-1
7.2	Architectural Context	7-2
7.3	Architectural Principles for Specific Plan	7-3
7.4	Design Objectives	
7.5	Architectural Styles	
7.6	Massing Principles	
7.7	Materials and Details	7-15

#### **APPENDICES**

Appendix A: Climate Action Plan Measures

Appendix B: Quantified GHG Emissions Reductions

Appendix C: Plant Palette

#### LIST OF EXHIBITS

1-1	Regional Location	1-2
1-2	Project Vicinity	1-3
3-1	Existing and Proposed General Plan Designations	3-2
3-2	Existing and Proposed Zoning Designations	3-3
3-3	Existing Land Uses	3-4
4-1	Specific Plan Land Use Concept	4-2
4-2	Residential Site Plan	4-3
4-3	Commercial Site Plan	4-4
4-4	Interim Commercial Site Plan	4-5
4-5	Elevations – Pad 1	4-8
4-6	Elevations – Pad 3	4-9
4-7	Elevations – Pad 5	4-10
4-8	Residential Recreation Area	4-12
4-9	Commercial Phasing Plan	4-15
5-1	Proposed Milliken Avenue Cross Sections	5-2
5-2	Proposed Riverside Drive Cross Sections	5-3
5-3	Proposed 'A' and 'B' Street Cross Sections	5-4
5-4	Water Plan	5-7
5-5	Recycled Water Plan	5-9
5-6	Sewer Plan	5-10
5-7	Storm Drain Plan	5-11
5-8	NPDES Systems Plan	5-13
5-9	Grading Plan	5-17
7-1	Perimeter Wall and Pilaster	7-18
7-2	Interior Fence	7-19
7-3	Trash Enclosure	7-22
7-4	Proposed Lighting Styles	7-23
7-5	Project Identification	7-26
7-6	Corner Monumentation	7-27
7-7	Streetscape – Milliken Avenue	7-29
7-8	Streetscape – Riverside Drive	7-30

#### LIST OF EXHIBITS (Cont'd)

7-9	'A' Street Streetscape		
7-10	Future 'B' Street Streetscape		
7-11	Major Entry – Milliken Avenue	7-33	
7-12	Minor Entry – Milliken Avenue	7-34	
7-13	Major Entry – Riverside Drive		
7-14	Minor Entry – Riverside Drive		
7-15	Residential Entry		
7-16	Pedestrian Linkages	7-39	
7-17	Decorative Trellis		
7-18	Central Focal Point	7-41	
LICT	OF TARLEC		
LIST	OF TABLES		
4-1	Land Use Summary	4-6	
4-2	Katelaris Commercial Property – Interim and Final Buildout	4-7	
6-1	Maintenance Responsibilities		
6-2	Residential Development Standards	6-12	
6-3	Residential Open Space Requirements	6-13	
6-4	Commercial Permitted and Conditionally Permitted Uses		
6-5	Commercial Development Standards	6-20	

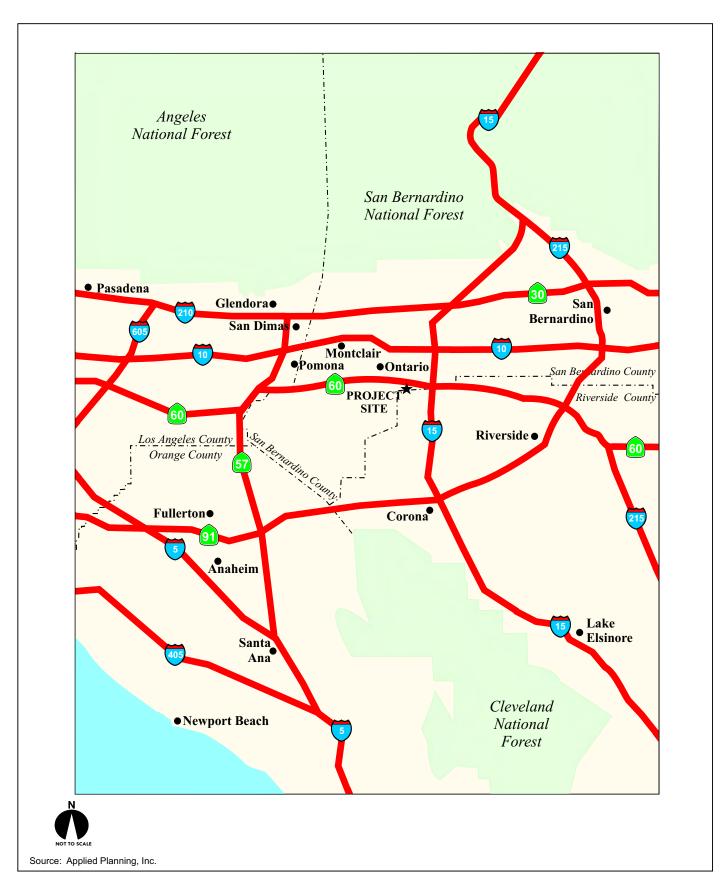
# **Section 1 Specific Plan Overview**

## Section 1 Specific Plan Overview

The Tuscana Village Specific Plan (Specific Plan, Project) encompasses approximately 20 acres, located in the City of Ontario, in San Bernardino County. The site is located approximately one-quarter mile south of the State Route 60 (SR-60)/Milliken Avenue interchange, at the northeastern corner of the intersection of Milliken Avenue and Riverside Drive. Please refer to Figure 1-1, "Regional Location" and Figure 1-2, "Project Vicinity."

The Specific Plan proposes the construction of a pedestrian-oriented urban village, mixed use development, which would provide commercial and residential uses. It is the intent of the Specific Plan to implement urban design concepts that will highlight the heritage of the adjacent vineyard uses and the presence of the neighboring San Antonio Winery facilities, located immediately north of the site.

As envisioned, final buildout of the Specific Plan would allow for development of up to 210,830 square feet of commercial uses, and up to 200 residential units. In response to the current market conditions, an interim plan has been developed for the commercial uses to be located in the easterly portion of the Specific Plan area. The agricultural-themed interim plan includes educational gardens and farm animals, farm and nursery stores, a restaurant/event hall, olive press house/brewery/wine tasting area, and an outdoor amphitheater. Synergistically, the interim plan is envisioned as a destination for school groups and families, featuring educational and entertainment opportunities, eateries, and market-style shopping venues. Please refer to Section 4, "Land Use," for a more detailed description of proposed (interim and buildout) land uses.









#### 1.1 Governing Documents

Development of the Specific Plan area will be governed by several documents as follows:

- The City of Ontario General Plan, which establishes policies governing land use, circulation, housing, conservation and open space, noise, safety, and public facilities within the Tuscana Village Specific Plan area.
- The Tuscana Village Specific Plan, which includes a Land Use Plan, Infrastructure Plan, Design Guidelines, and Development Regulations.
- The City of Ontario Development Code as applicable to the Project in cases where the Tuscana Village Specific Plan is silent on development standards and regulations.
- The City of Ontario Subdivision Ordinance regulating the subdivision of land within the Project area.
- Covenants, Conditions, and Restrictions (CC&R's) to be established by the developer of the Tuscana Village Specific Plan as a means of ensuring and enforcing quality design and development of the overall community.

#### 1.2 Specific Plan Components

This Specific Plan is organized into the following sections in addition to Section 1, Specific Plan Overview.

#### **Section 2: Introduction**

The Introduction serves to acquaint the reader with:

- The Project setting;
- A general description of the proposed Tuscana Village Specific Plan;
- The goals and policies of the Specific Plan;
- The entitlements to accompany the Specific Plan; and
- The relationship of the Specific Plan to the City of Ontario General Plan.

#### **Section 3: Existing Conditions**

This section describes the setting for the Specific Plan area, outlining the existing physical conditions on and around the Project site.

#### **Section 4: Land Use**

The Land Use section describes the commercial and residential planning areas, as well as the pedestrian linkages and amenities of the planned community.

#### **Section 5: Infrastructure and Public Improvements**

This section provides information on the circulation improvements, the backbone water, sewer, and storm drain system concepts, the grading concept, and a discussion of public utilities and services to serve the Project site.

#### **Section 6: Development Regulations**

The Development Regulations specify the permitted uses and the standards regulating the development of various commercial uses and residential types. The relationship of the Tuscana Village Specific Plan development regulations to the City of Ontario Development Code is also provided. The policies and procedures for the City's review and approval of specific development proposals within the Project site are presented in this section. This section provides the methods and procedures for interpreting and amending the Tuscana Village Specific Plan as necessary.

#### **Section 7: Design Guidelines**

The Tuscana Village Specific Plan Design Guidelines are intended to direct the site planning, landscaping, and architectural quality of the proposed development. Streetscapes, entries, edge treatments, relationship of new land uses with existing land uses, walls and fencing, lighting, signage, and architectural design are some of the features that are addressed in the Design Guidelines.

# **Section 2 Introduction**

### **Section 2 Introduction**

The Tuscana Village Specific Plan is comprised of approximately 20 acres of land located within the City of Ontario. As illustrated in Figure 1-2, presented in the previous section, the site is located approximately one-quarter mile south of the SR-60/Milliken Avenue interchange. The site is bounded by Milliken Avenue on the east, and by Riverside Drive on the south. An existing SCE easement forms the western boundary of the Specific Plan area. A nursery currently operates within the southern portion of the easement, adjacent to Riverside Drive. The nursery is not part of the Tuscana Specific Plan. Single family homes (Creekside) are located westerly of the easement. To the north, between the project site and the freeway, existing uses include a wine shop associated with the San Antonio Winery, as well as a restaurant, church, and a small animal farm are located adjacent to Milliken Avenue.

The Tuscana Village Specific Plan is a comprehensive plan for a mixed use development that acts to recognize the heritage of the wine-related uses in the vicinity. The Specific Plan concept has been designed in a manner that allows the Project's commercial and residential components to be developed in a coordinated fashion. The Plan recognizes that these components may be developed within different timeframes. The Specific Plan provides design features and physical connectivity that will create cohesive design through the final buildout of the Plan.

The Plan also recognizes that the adjacent northern properties will need services and access. The Tuscana Village Specific Plan accommodates these needs by sizing infrastructure, including roadway width, drainage facilities, and water and sewer pipe

sizing, to accommodate future commercial development on parcels to the north, between the Specific Plan area and SR-60. As such, this Plan establishes the regulations and guidelines which will govern the development of the entire Specific Plan area, and support future development in the vicinity.

#### 2.1 Specific Plan Proposal

#### 2.1.1 Project Summary

The Specific Plan proposes the construction of a pedestrian-oriented urban village mixed use development, which would provide commercial and residential uses. Specifically, the Specific Plan would allow for development up to 210,830 square feet of commercial uses, and up to 200 residential units. As mentioned within the preceding introductory section, an interim plan has been developed for the commercial uses located in the easterly portion of the Specific Plan area. The agricultural-themed interim plan includes educational gardens and farm animals, farm and nursery stores, a restaurant/event hall, olive press house/brewery/wine tasting area, and an outdoor amphitheater. Synergistically, the interim plan is envisioned as a destination for school groups and families, featuring educational and entertainment opportunities, eateries, and market-style shopping venues. Please refer to Section 4, "Land Use," for a more detailed description of proposed (interim and buildout) land uses.

#### 2.2 Purpose and Objectives

#### 2.2.1 Purpose

The Tuscana Village Specific Plan comprehensively describes the land uses planned for the site. The adoption of the Specific Plan establishes the zoning for the Project site and defines the development regulations, requirements, and design guidelines governing development of the site. The adopted Specific Plan establishes the procedures and requirements to approve development within the Project site to ensure that the City of Ontario General Plan is implemented.

Tuscana Village Introduction
Specific Plan Page 2-2

The Tuscana Village Specific Plan is designed to address the following guiding planning principles:

- Connectivity among land uses within the Specific Plan area with surrounding public facilities and the existing Ontario community.
- Provide necessary infrastructure improvements to accommodate the eventual development of the neighboring properties to the north.
- Bicycle and pedestrian accessibility and mobility to encourage alternative modes of travel.
- Sustainable development practices addressing energy efficiency.

#### 2.2.2 Objectives

The following objectives are established for the Tuscana Village Specific Plan.

#### Commercial Areas

- Community commercial uses to meet the needs of the community within the Project site, as well as the larger surrounding market area.
- Interim plan uses that are responsive to market conditions and enhance the site's existing agricultural ambiance.
- Provision of pedestrian linkages connecting the residential community with the commercial center.
- Orient commercial buildings in a manner to create an accessible urban edge and sense of arrival.

#### **Residential Areas**

- Residential neighborhoods designed at a human scale and oriented to pedestrian activity.
- Connectivity among residential neighborhoods and recreational areas through bicycle circulation and a network of pedestrian sidewalks.

Tuscana Village
Introduction
Specific Plan
Page 2-3

#### Streets and Pedestrian/Bicycle Mobility

- Streets with landscaped parkways and pedestrian walkways to create a pleasant and safe pedestrian environment.
- Decorative paving at street crossings.
- Pedestrian linkages with landscape elements, such as arbors and trellises.
- A central focal point located at the future intersection of 'A' and 'B' Streets to include decorative paving, enhanced landscaping and lighting, and seating areas.

#### Recreation

- New recreational opportunities for residents, including a community clubhouse, pool and jacuzzi area, and children's outdoor play equipment, as well as other areas for passive recreation, internal to the residential complex.
- Bicycle circulation, integrated into the Project, providing bicycle access throughout the site.
- Interim uses that provide for recreational activities integrated within commercial uses.

#### Sustainable Development

• The Project will be developed in a manner that minimizes impacts to climate change through the incorporation of energy efficiency and sustainability measures. These measures are summarized in Section 4.2.10.

#### 2.3 Authority and Requirements

#### 2.3.1 Authority

State of California Government Code, Title 7, Division 1, Chapter 3, Article 8, Section 65450 through 65457 grants authority to cities to adopt Specific Plans for purposes of implementing the goals and policies of their General Plans.

The Government Code specifies that specific plans may be adopted either by resolution or by ordinance and that the specific plan is required to be consistent with the General Plan. Adoption of the Tuscana Village Specific Plan by the City of Ontario will establish the

Tuscana Village Introduction
Specific Plan Page 2-4

zoning regulations for development of the Project site. The requirements of the Tuscana Village Specific Plan shall take precedence over the City of Ontario Development Code and, in instances where the Tuscana Village Specific Plan is silent, the City of Ontario Development Code shall prevail.

#### 2.3.2 Requirements of the Specific Plan

California Government Code Section 65451 sets forth the minimum requirements and review procedures for specific plans as follows:

- a) A Specific Plan shall include text and diagrams which specify all of the following in detail:
  - 1) The distribution, location, and extent of the uses of land, including open space, within the area covered by the plan.
  - 2) The proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan.
  - 3) Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable.
  - 4) A program of implementation measures including regulations, programs, public works projects, and financing measures necessary to carry out paragraphs 1, 2, and 3 above.
- b) The Specific Plan shall include a statement of the relationship of the Specific Plan to the General Plan.

Tuscana Village
Introduction
Specific Plan
Page 2-5

The Specific Plan's relationship to the Ontario General Plan is discussed subsequently in Section 2.6. The Tuscana Village Specific Plan meets the requirements of the State of California Government Code.

#### 2.4 Development Approval Components

The components of the development approval process for Tuscana Village are discussed below.

#### **General Plan Amendment**

A General Plan Amendment will be adopted for the Project site concurrent with the approval of the Tuscana Village Specific Plan. Currently, the site is included within an area designated for Mixed Use (Area 12) in the Ontario General Plan. The land use assumptions used for Area 12 include retail and office uses (1.0 FAR). Under the proposed General Plan Amendment, the designation of Mixed Use would remain in place; however, the land use assumptions would be modified to recognize the residential component (Medium Density 11.1-25 du/ac).

Tentative parcel maps and tentative tract maps may be approved by the City of Ontario for the various components within Tuscana Village. These maps will separate existing parcels and show the approximate location of lot lines, streets, and proposed grading. Following approval by the City of the tentative maps, final maps will be prepared. The final maps become legal documents that are recorded and define legal parcels and lots that can be sold for development. Parcel maps may be approved by the City of Ontario for development proposed within the commercial and residential portions of Tuscana Village.

#### **Development Plan Review**

Following, or concurrent with, the approval of the Tuscana Village Specific Plan, all development proposals for individual areas within the Specific Plan will be subject to the Development Plan Review process pursuant to the City's Development Code.

Tuscana Village Introduction
Specific Plan Page 2-6

#### 2.5 CEQA Compliance

Proper environmental documentation will be prepared by the City of Ontario for the Tuscana Village Specific Plan, in accordance with the California Environmental Quality Act (CEQA), to address impacts associated with the Specific Plan and subdivision maps.

#### 2.6 Relationship to the General Plan and Zoning

As previously mentioned, a General Plan Amendment will be adopted for the Project site prior to the approval of the Tuscana Village Specific Plan. Currently, the site is included within an area designated for Mixed Use (Area 12) in the Ontario General Plan. The land use assumptions used for Area 12 include retail and office (1.0 FAR). Under the proposed General Plan Amendment, the designation of Mixed Use would remain the same; however, the land use assumptions would be modified to recognize the residential component (Medium Density 11.1-25 du/ac). Figure 3-1, presented in Section 3.0, "Existing Conditions," presents the existing and proposed General Plan land use designations of the site.

The Project site is currently zoned R1, or "One-Family Residential (1 to 5 du/ac)." Upon approval of the Project, the zoning designation will be changed to SP, or "Specific Plan." The Tuscana Village Specific Plan will provide the zoning regulation and development criteria for the site. Figure 3-2, presented in Section 3.0, "Existing Conditions," illustrates the existing and proposed zoning designations of the site.

The Tuscana Village Specific Plan is designed to meet the requirements of the State of California Government Code and the City of Ontario General Plan. Adoption by the City of Ontario of the Tuscana Village Specific Plan will establish the zoning regulations for the development of the Project site. The requirements of the Specific Plan shall take precedence over the City of Ontario Development Code. In instances where the Specific Plan is silent, the City of Ontario Development Code shall prevail.

Tuscana Village Introduction
Specific Plan Page 2-7

# **Section 3 Existing Conditions**

## **Section 3 Existing Conditions**

This section describes the existing physical conditions within and surrounding the Project site.

#### 3.1 Onsite Land Use Characteristics

The Tuscana Specific Plan site is located within an area designated in the Ontario General Plan as Mixed Use (Area 12). The land use assumptions used for Area 12 include retail and office (1.0 FAR). Under the proposed General Plan Amendment, the designation of Mixed Use would remain in place; however, the land use assumptions would be modified to recognize the residential component (Medium Density 11.1-25 du/ac). Figure 3-1 presents the existing and proposed General Plan land use designations of the site.

The Project site is currently zoned R1, One-Family Residential (1 to 5 du/ac). Upon approval of the Project, the zoning designation will be changed to Specific Plan. The Tuscana Village Specific Plan will provide the zoning regulation and development criteria for the site. Figure 3-2 presents the existing and proposed zoning designations of the site.

#### 3.2 Surrounding Land Uses

As presented in Figure 3-2, land uses adjacent to Project site include:

• North: A wine shop associated with the San Antonio Winery, as well as a restaurant, church, and small animal farm, are located adjacent to Milliken Avenue. The remainder of the site is either planted with grapevines or vacant. The General Plan designation for these properties is Mixed Use (Area 12), and the zoning includes OS, Open Space; R1, One Family Residential (1 to 5 du/ac); and C3, Commercial Service.

<sup>&</sup>lt;sup>1</sup> Please refer to the City of Ontario General Plan Land Use Section, Figure LU-1, "Land Use Plan," available online at <a href="http://www.ontarioplan.org/index.cfm/27925/34034">http://www.ontarioplan.org/index.cfm/27925/34034</a>.

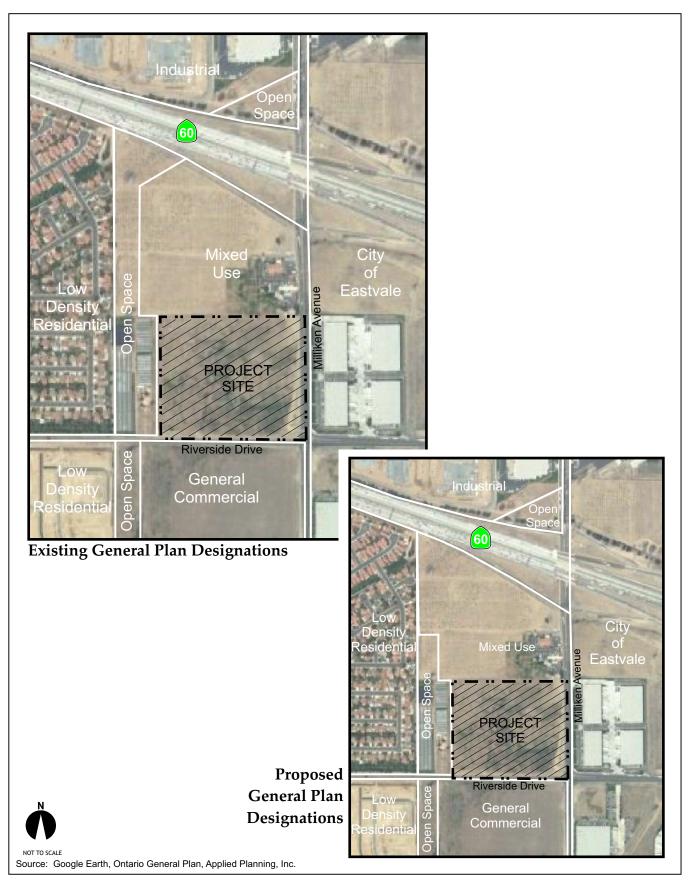
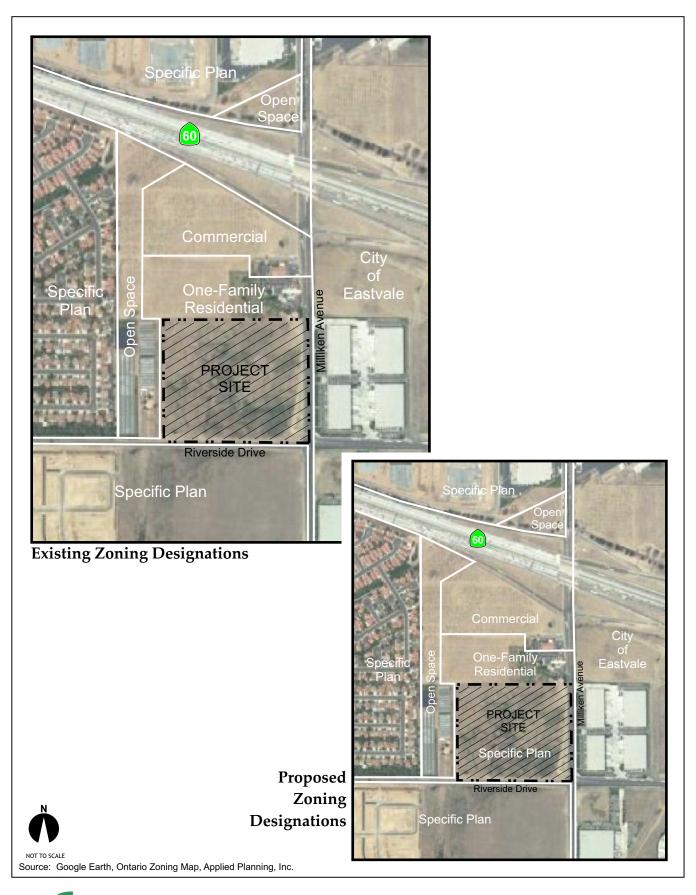




Figure 3-1 Existing and Proposed General Plan Designations









- East: Industrial uses, in the City of Eastvale.
- South: Vacant, approved Specific Plan uses. These properties have General Plan designations of General Commercial, Low Density Residential, and Green Belt. They are zoned Specific Plan (Edenglen).
- West: A small nursery, residential uses. Properties have General Plan land use designations of Non-Recreational Open Space and Planned Residential, and a zoning designation of Specific Plan (Creekside).

#### 3.3 Topography

The Project Site is located on gently sloping undeveloped terrain, sloping naturally from the northeast corner towards the southwest corner at about 1 percent.

#### 3.4 Hydrology

There are currently no improvements on the Project site. Normal rainfall to the area is, therefore, able to percolate through on-site soils and does not result in high volumes of surface runoff as typically associated with urban areas. During periods of heavy rainfall, when ground surfaces are saturated, surface runoff is collected in the existing drainage ditches and retention basins located within the Project site. The existing storm drain system surrounding the site is generally unimproved and consists primarily of open earthen swales along area roadways or curbed roadway surfaces.

The Project site is not located in a mapped flood hazard area. Specifically, the site is not located in a 100- or 500-year floodplain or in a dam inundation area.

#### 3.5 Geology and Soils

The Specific Plan area is underlain by young eolian deposits (Qye), which are wind-deposited Holocene sediments consisting of silt and fine- to medium-grained sand, which are present across the eastern half of the City. These are generally about 10 feet thick, and are underlain by alluvial fan deposits. On-site soils are relatively fine-grained and sandy.

A portion of the site has been used to dump manure, and has a high organic content. The Project site is not located in an area mapped as having liquefaction susceptibility.

#### 3.6 Seismicity

The City of Ontario General Plan EIR identifies numerous earthquake faults within a 15-mile radius of the Project site. Major mapped faults include, but are not limited to, the Chino-Central Avenue, Whittier, Elsinore, Cucamonga, and San Jacinto Faults. However, no faults have been identified within the Project site, nor is the Project site located within an Alquist-Priolo Earthquake Fault Zone.

In accordance with the Uniform Building Code (UBC), the Tuscana Village Specific Plan area is located within Seismic Zone No. 4. UBC procedures have been designed to ensure that all subsequent development occurs in a safe manner relative to those known hazards. Additional seismicity information will be provided as part of the environmental document to be prepared for the Project.

#### 3.7 Biological Resources

The Project site is mostly devoid of native vegetation. Ruderal vegetation, such as Russian thistle (*Salsola tragus*) and non-native annual grasses dominate the site. No sensitive plant or wildlife species have been identified as occurring within or adjacent to the Project area.

The site is located within an area mapped as "Delhi Sands Flower-Loving Fly Ontario Recovery Unit." The Delhi sands flower-loving fly (DSF) is listed as an endangered species by the U.S. Fish and Wildlife Service and is protected under the Endangered Species Act of 1973. Focused surveys were conducted on-site for 2004-2008 flight periods. No Delhi sands flower-loving flies were observed during these surveys.

#### 3.8 Cultural Resources

Based on historical 1938 aerial photography, it appears the site was predominately planted with vineyard plantings. Agriculture use was discontinued within the site between 1953 and 1968. There are currently no structures on site, and there is no record of historic

structures on the site that would represent unique and/or significant structures worthy of further action pursuant to CEQA.

To the north of the Specific Plan area, grapevines are still grown and harvested by the Galleano Winery. The Galleano Winery operates the historic Cantu-Galleano Ranch, located in Mira Loma, which is listed on both the California Register of Historical Resources and National Register of Historic Places. These listings represent the Winery's significance as a rare historic resource, representing an important period in the region's agricultural history. However, the vineyard to the north of the Specific Plan area is merely associated with the Ranch, and bears no historical significance. Further, the vineyard and its operations are not anticipated to be affected by development of the Tuscana Specific Plan.

#### 3.9 Existing Circulation and Access

Milliken Avenue and Riverside Drive abut the Project site on the north and east respectively, and are currently improved. Milliken Avenue is a five-lane roadway, extending south from SR-60 to Riverside Drive. Riverside Drive is improved with 30 feet of pavement and two travel lanes.

#### 3.10 Existing Infrastructure and Utilities

#### 3.10.1 Water

Existing 12-inch and 18-inch water lines are located in Riverside Drive, and 18-inch and 42-inch water lines are located in Milliken Avenue. Additionally, there is an existing 8-inch recycled water line in Riverside Drive coming from the west that stops at the westerly edge of the Specific Plan area. The domestic and recycled water system is discussed in more detail in Section 5, "Infrastructure and Services."

#### 3.10.2 Sewer

An existing 8-inch sewer line is located in Riverside Drive, coming from the west and stopping approximately 100 feet west of the Specific Plan's westerly boundary. The sewer system is discussed in more detail in Section 5, "Infrastructure and Services."

#### 3.10.3 Drainage

Presently there is an existing 48-inch storm drain in Riverside Drive extending to the easterly edge of the SCE Easement. This storm drain ultimately connects to the County Line Channel. The storm drain system is discussed in more detail in Section 5, "Infrastructure and Services."

#### 3.10.4 Electricity

Southern California Edison (SCE) currently provides electricity to the Project site.

#### 3.10.5 Natural Gas

The Southern California Gas Company (SCG) provides natural gas services within the Project area.

#### 3.10.6 Communication Systems

Verizon provides telephone service within the Project area.

#### 3.10.7 Solid Waste

The City of Ontario Public Works Agency currently, by request, provides solid waste collection and disposal to the Project site.

### Section 4 Land Use

#### **Section 4**

#### Land Use

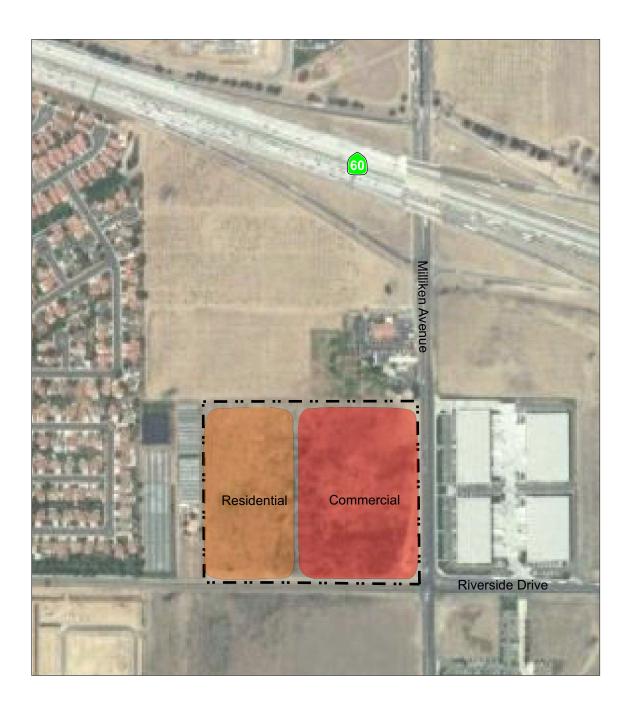
#### 4.1 Introduction

The Specific Plan proposes the construction of a pedestrian-oriented urban village mixed use development, which would provide commercial and residential uses, consistent with the development regulations and design guidelines contained within this Specific Plan. The Specific Plan area will be developed with residential uses (western portion) and commercial uses (eastern portion).

Please refer to Figure 4-1 for an overview of land uses proposed by the Specific Plan. Detailed site plans for the proposed residential and commercial properties are included as Figures 4-2 and 4-3, respectively.

In response to the current market conditions, an interim plan has been created for the Specific Plan's commercial area. The interim plan, presented as Figure 4-4, proposes to use this portion of the property for agricultural/educational purposes. The concept is to create an educational garden (row crops) and house farm animals for local school tours. A dense olive grove will surround this area along the north. Additionally, these uses will provide a source of produce for the farm store and plant specimens for the nursery sales area also proposed as part of the interim plan.

The farm store, as well as a restaurant/event hall, and olive press house/brewery/wine tasting area are also proposed on the northeast corner of the site. While these buildings will remain as part of the long-range buildout of the site, these uses create the cornerstone of the agricultural theme created by the interim plan. These uses include adjacent patios that open to a proposed outdoor amphitheater. Music and other performances will enhance the outdoor experience. Synergistically, the interim plan is envisioned as a destination for school groups and families, featuring educational opportunities, eateries, and market-style shopping venues.





Source: Google Earth, Applied Planning, Inc.







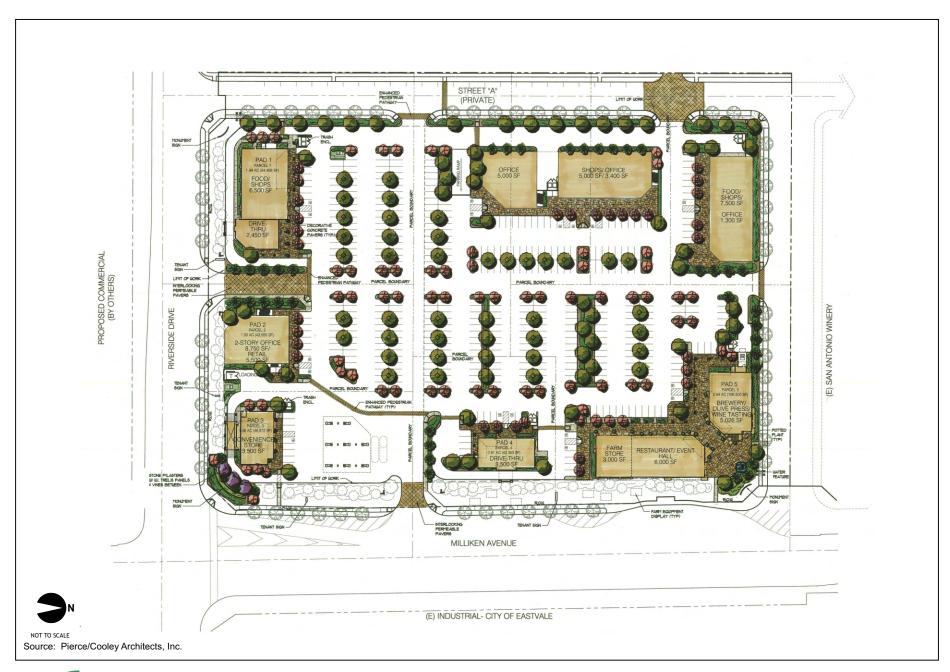




Figure 4-3 Commercial Site Plan

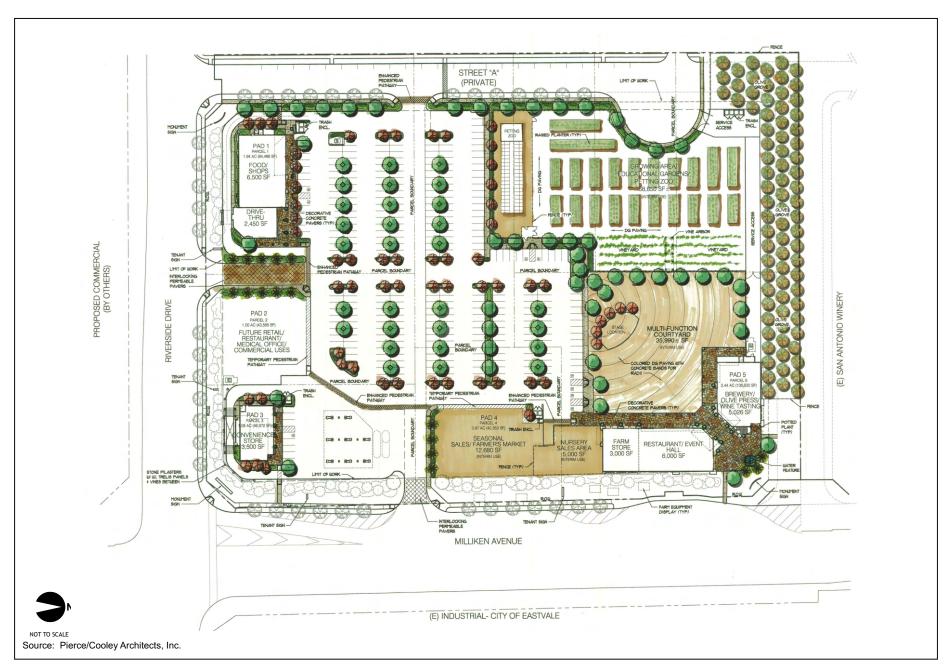




Figure 4-4 Interim Commercial Site Plan

#### 4.2 Proposed Land Uses

Table 4-1, "Land Use Summary," provides a tabulation of all proposed land uses and allowable densities.

Table 4-1
Tuscana Village Specific Plan Land Use Summary

Landina	<b>^</b>	Gross Buildable	D	C	Tabl
Land Use Type	Acreage	Area (GBA)	Residential	Commercial	Total
Residential	7.9	344,124	200 units	-	200 units
Commercial	12.1	522,076	-	210,830	210,830 s.f.
Total	20.0	871,200 s.f.	200 units	210,830 s.f.	210,830 s.f./
10(a)	20.0	6/1,200 S.1.	200 units	210,030 \$.1.	200 units

The following paragraphs describe these land uses in greater detail.

#### 4.2.1 Commercial Uses

The Tuscana Village Specific Plan establishes development regulations and design guidelines to permit development of up to 210,830 square feet of commercial uses to be located within the easterly portion of the Project site. As described above, interim as well as ultimate land uses plans have been designed for this area. Table 4-2 provides a comparison of interim plan/final build out uses for the Commercial component of the Tuscana Village Specific Plan.

Future Specific Plan tenants are anticipated to be a mix of office, medical, shops, restaurants, a coffee house, a gas station, and a drive-through carwash. Preliminary elevations of these uses are presented as Figures 4-5 through 4-7.

Tuscana Village

Land Use

Specific Plan

Page 4-6

Table 4-2
Commercial Property - Interim and Final Build Out Land Uses<sup>1</sup>

	Interim Plan	Final Build Out		
Pad A/1				
	In-line Shops/Eateries (6,000 sf)	Interim Use to Remain.		
	Coffee Drive Thru (2,250 sf)	Interim Use to Remain.		
Pad B/2				
	2	Commercial, retail, medical, office		
		(up to 30,000 sf)		
Pad C/3				
	Gas Station (12 fueling points)			
	Convenience Store (3,500 sf)	Interim Use to Remain.		
	Carwash Tunnel (900 sf)			
Pad D/4				
	Seasonal Sales/ Farmer's Market Area	Drive Thru (2.500 cf)		
	$(12,680 \text{ sf})^3$	Drive-Thru (3,500 sf)		
	Nursery Sales Area (5,000 sf) <sup>2</sup>			
Pad E/5				
Pad 6 Pad 7	Farm Store (3,000 sf) Restaurant/Event Hall (6,000 sf) Office (2,000 sf) Brewery/Olive Press/Wine Tasting (5,026 sf) Outdoor Amphitheater (16,000 sf)  Educational Gardens/Petting Zoo (76,600 sf)	Farm Store (5,000 sf) Restaurant/Event Hall (8,000 sf) Office (12,000 sf) Brewery/Olive Press/Wine Tasting (10,000 sf)  Office (8,250 sf) Commercial, Retail, Medical, Office (up to 121,430 sf)		
Totals	28 676 sf (Building Square Footage)	· •		
Totals	28,676 sf (Building Square Footage)	210,830 sf (Building Square Footage)		

<sup>1</sup> The total buildable square footage of 210,830 square feet may be reallocated between the various pads depending on future market conditions.

<sup>2</sup> This pad will be graded and left vacant, consistent with City requirements, pending final buildout of the site.

 $<sup>\,3\,\,</sup>$  Open sales area. Ground cover to be employed as approved by the City.





NORTH ELEVATION

WEST ELEVATION





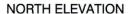
SOUTH ELEVATION (RIVERSIDE DRIVE)

**EAST ELEVATION** 

Source: Pierce/Cooley Architects, Inc.







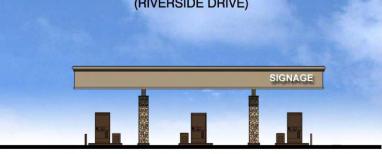




WEST ELEVATION



**SOUTH ELEVATION** (RIVERSIDE DRIVE)



CONVENIENCE STORE/ CAR WASH

**EAST ELEVATION** (MILLIKEN AVENUE)

**FUELING CANOPY** 

Source: Pierce/Cooley Architects, Inc.





EAST ELEVATION (MILLIKEN AVENUE)



NORTH ELEVATION



WEST ELEVATION



SOUTH ELEVATION

Source: Pierce/Cooley Architects, Inc.



#### 4.2.2 Residential Uses

Residential development will encompass approximately eight (8) acres within the Specific Plan area, providing for up to 200 dwelling units, in the southwestern portion of the site. Residential products will include 1, 2, and 3 bedroom townhomes, ranging from 780 to 1,335 square feet. The community will be oriented toward open space amenities and designed to promote walkability and interaction among residents.

#### 4.2.3 Community Amenities

Courtyards, plazas, and pedestrian linkages will be provided throughout the site. These linkages will be enhanced through the use of decorative paving, landscaping, and trellises/arbors.

Amenities planned within the residential portion of the Specific Plan include a community clubhouse, exercise room, putting green, pool and jacuzzi area, outdoor fireplace, and children's outdoor play equipment. Please refer to Figure 4-8, "Residential Recreation Area." The location of these facilities is shown in preceding Figure 4-2.

#### 4.2.5 Landscaping

Themed landscaping will be provided along streets and pedestrian linkages, at Project entries, and at major intersections within the site. Please refer to Section 7, "Design Guidelines" for more details regarding the landscape palette of the Specific Plan area.

#### 4.2.6 Lighting

Lighting along pedestrian walkways within the Specific Plan area will include a mixture of post lighting and bollards. Parking lot lighting shall provide adequate illumination for safety. Service area lighting shall be positioned out of public view.

Lighting within the residential portion of the Specific Plan shall be appropriately themed. Lighting used on walls and walkways, including ambient lighting, shall focus light downward to minimize glare. All lighting fixtures shall be compatible with the architectural theme of the Specific Plan area. Please refer to please refer to Section 7, "Design Guidelines."





#### 4.2.7 Signage

Signage for the Specific Plan uses will be provided at major and minor entries. Project monumentation will also be provided at the corner of Milliken Avenue and Riverside Drive. All monumentation shall be consistent with City of Ontario Traffic and Transportation Guidelines for Monument Placement. Please refer to please refer to Section 7, "Design Guidelines."

#### 4.2.8 Architectural Design

As previously mentioned, it is the intent of the Specific Plan to implement urban design concepts that will highlight and preserve the agricultural and wine-making heritage of the community. To this end, the Specific Plan will implement an overall Tuscan theme throughout the site through the use of architecture, landscaping, and materials. Refer to Section 7 for details regarding the architectural design of the Specific Plan area.

#### 4.2.9 Phasing

Based on market demands, the development of individual parcels may be phased over time. Peripheral landscaping, temporary screening treatments, and soil erosion practices will be reviewed and approved during the City's approval process for subsequent development proposals. The initial phase of development will include up to 200 residential units and interim commercial uses, fronting along both Riverside Drive and Milliken Avenue.

Internal to the Specific Plan's commercial area, interim plan development will occur in four sub-phases (Phases 1A – 1D). The drive-through use located on Riverside Drive is expected to be developed first (Phase IA). Street improvements, including street widening, curb, gutter, driveway aprons, and sidewalks from each street's centerline to the right-of-way along the site's Milliken Avenue and Riverside Drive frontages will be included within this phase. Landscaping will also be installed, at a minimum, to the building and parking setbacks along both Milliken Avenue and Riverside Drive. "A" Street will be improved as part of Phase 1A. A property owners association will be established prior to occupancy of any structure within Phase IA. The purpose of the association will be, at minimum, the maintenance of all required landscaping and signage.

Phase 1B will include the construction of the gas station/car wash to be located on the southeastern corner of the site. Phase 1C will include the interim olive grove, amphitheater, educational gardens/petting zoo and commercial uses fronting on Milliken Avenue. Finally, Phase 1D will involve the development of retail, restaurant, and/or commercial pad along the site's Riverside Drive frontage. Sub-phasing of the Specific Plan's commercial area is illustrated in Figure 4-9.

The public streets serving the Specific Plan area will be improved as development occurs. As previously mentioned, 'A' Street will be improved during the initial phase of the Specific Plan to serve the Katelaris residential and commercial parcels. Initially, 'A' Street will terminate at a cul-de-sac located near the Specific Plan's northern boundary.

#### 4.2.10.1 General

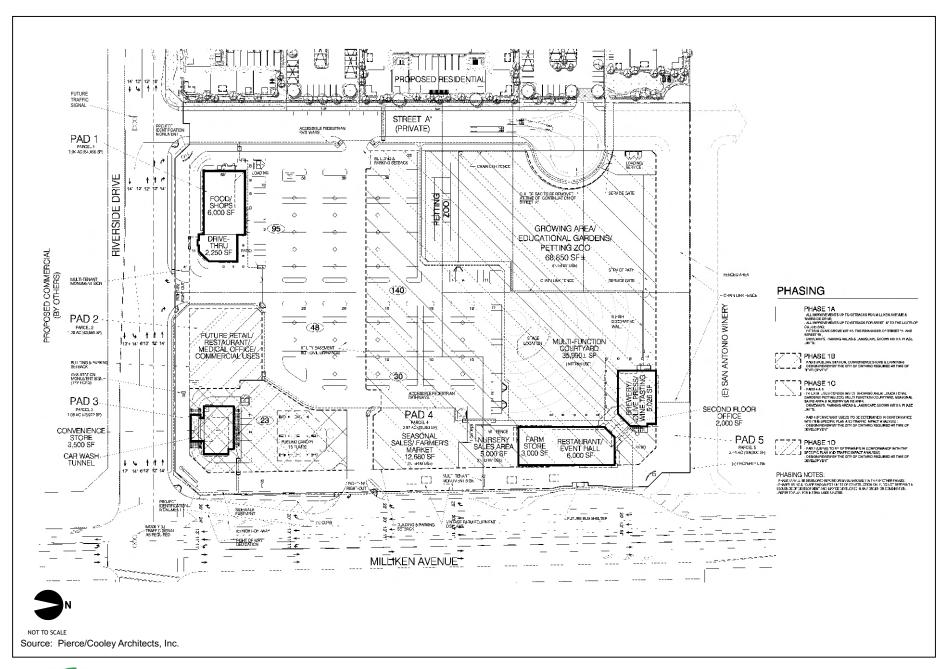
Energy efficiency/sustainability attributes to be incorporated in the Project are summarized below, and include Project-specific measures as well as overall design and planning attributes that contribute to energy efficient and sustainable development. Unless otherwise noted, energy efficiency/sustainability measures identified below will be implemented Project-wide and would apply to all proposed commercial and residential development.

#### 4.2.10 Energy Efficiency/Sustainability

#### 4.2.10.2 Project Design and Operational Energy Efficiency/Sustainability Measures

The following design features and operational measures will be in the Project, with correlating notations and language incorporated in all Project plans, specifications and contract documents:

To reduce solid waste generation associated with Project construction activities, a
plan to reduce waste by recycling and/or salvaging nonhazardous construction and
demolition debris shall be submitted and approved by the City of Ontario prior to
the issuance of construction permits.





- The Project shall connect with and utilize reclaimed (recycled) water, provided it is available from the IEUA's reclaimed water system, for the irrigation of Project landscaping.
- All new landscaping irrigation systems installed by the Project shall be automated, high efficiency systems to reduce water use, including bubbler irrigation, low -angle and/or low -flow spray heads, moisture sensors, or the equivalent. Please refer also to Section 6.18.2, "Landscape Principles."
- The Project shall provide safe and convenient access for pedestrians and bicyclists to, across, and along the Project site's circulation system.
- The Project shall provide vehicle access to properly wired outdoor receptacles to accommodate zero emission vehicles (ZEV) and/or plug -in electric hybrids (PHEV) or the equivalent.
- The Project's commercial/retail components shall provide priority parking for electric vehicles and vehicles using alternative fuels.
- The Project shall provide vehicle access to properly wired outdoor receptacles to accommodate zero emission vehicles (ZEV) and/or plug -in electric hybrids (PHEV) or the equivalent.
- The Project shall provide outdoor electrical outlets on buildings to support the use, where practical, of electric lawn and garden equipment, and other tools that would otherwise be run with small gas engines or portable generators.
- The Project shall, where feasible, incorporate passive solar design features, such as daylighting, and passive solar heating.

- Buildings shall surpass incumbent California Title 24 Energy Efficiency performance standards by a minimum of 20 percent for water heating and space heating and cooling. Verification of increased energy efficiencies shall be documented in Title 24 Compliance Reports provided by the Applicant, and reviewed and approved by the City prior to the issuance of the first building permit. Any combination of the following design features may be used to fulfill this mitigation measure provided that the total increase in efficiency meets or exceeds 20 percent:
  - o Site buildings to take advantage of shade, prevailing winds, landscaping, and sun screening, to reduce energy required for cooling;
  - o Increase in insulation such that heat transfer and thermal bridging is minimized;
  - o Limit air leakage through the structure or within the heating and cooling distribution system to minimize energy consumption;
  - o Incorporate dual -paned or other energy efficient windows;
  - o Incorporate energy efficient space heating and cooling equipment;
  - o Interior and exterior energy efficient lighting which exceeds the California Title 24 Energy Efficiency performance standards shall be installed, as deemed acceptable by the City of Ontario;
  - o Automatic devices to turn off lights when they are not needed shall be implemented in all non -residential development;
  - o To the extent that they are compatible with landscaping guidelines established by the Tuscana Village Specific Plan and the City of Ontario, shade producing trees, particularly those that shade buildings and paved

surfaces such as streets and parking lots and buildings shall be planted at the Project site;

- o Paint and surface color palette for the Project shall emphasize light and off-white colors which will reflect heat away from the buildings;
- o Cool roofs and pavement shall be utilized, where appropriate, in all of the Project's nonresidential development;
- o All buildings shall be designed to accommodate renewable energy sources, such as photovoltaic solar electricity systems, appropriate to their architectural design.
- Commercial uses shall provide on-site, secure and weatherproof bicycle storage/parking consistent with City of Ontario requirements.
- Commercial uses shall provide safe and convenient pedestrian and bicycle
  connections to surrounding areas, consistent with provisions of the Ontario
  Development Code. Location and configurations of proposed pedestrian and bicycle
  connections are subject to review and approval by the City. Prior to Final Site Plan
  approval, pedestrian and bicycle connections shall be indicated on the Project Site
  Plan.
- Commercial shall provide preferential parking for carpools and vanpool. Locations
  and configurations of proposed preferential parking for carpools and vanpools are
  subject to review and approval by the City. Prior to Final Site Plan approval,
  preferential parking for carpools and vanpools shall be delineated on the Project Site
  Plan.

Specific energy efficiency/sustainability measures to be incorporated in each Project element will be based on final building and site plan designs.

## 4.2.10.3 Consistency with the City of Ontario Climate Action Plan, Project GHG Emissions Reduction Measures

The City of Ontario has prepared a Draft Climate Action Plan (CAP). One of the intended goals of the CAP is to limit and reduce GHG emissions consistent with emission reduction goals established under AB 32, The California Global Warming Solutions Act of 2006. Under AB32, the near-term (2020) goal is to reduce GHG emissions to 1990 levels; with a long-term (2050) goal to reduce GHG emissions to 80 percent of 1990 levels. To these ends, the City of Ontario CAP inventories current greenhouse gas (GHG) emissions by source and quantity, estimates future GHG emissions based on a "business as usual" scenario, and proposes GHG emissions reductions measures which would achieve target GHG emissions levels identified under AB 32. GHG emissions reduction measures proposed within the CAP and generally applicable to the Project are summarized at Specific Plan Appendix A. Appendix B to the Specific Plan presents an inventory GHG emissions reduction measures incorporated in the Project together with anticipated GHG emissions reductions attributable to each. Energy efficiency/sustainability attributes of the proposed Tuscana Specific Plan Project support GHG emission reduction measures identified, or anticipated under the CAP in its current draft form.

It is also noted that the measures identified herein are considered interim until such time the City of Ontario has formally adopted its Climate Action Plan. Subsequent to adoption of the CAP, all applications for development within the Specific Plan shall respond to and reflect applicable CAP requirements.

## **Section 5 Infrastructure and Services**

### **Section 5**

## Infrastructure and Services

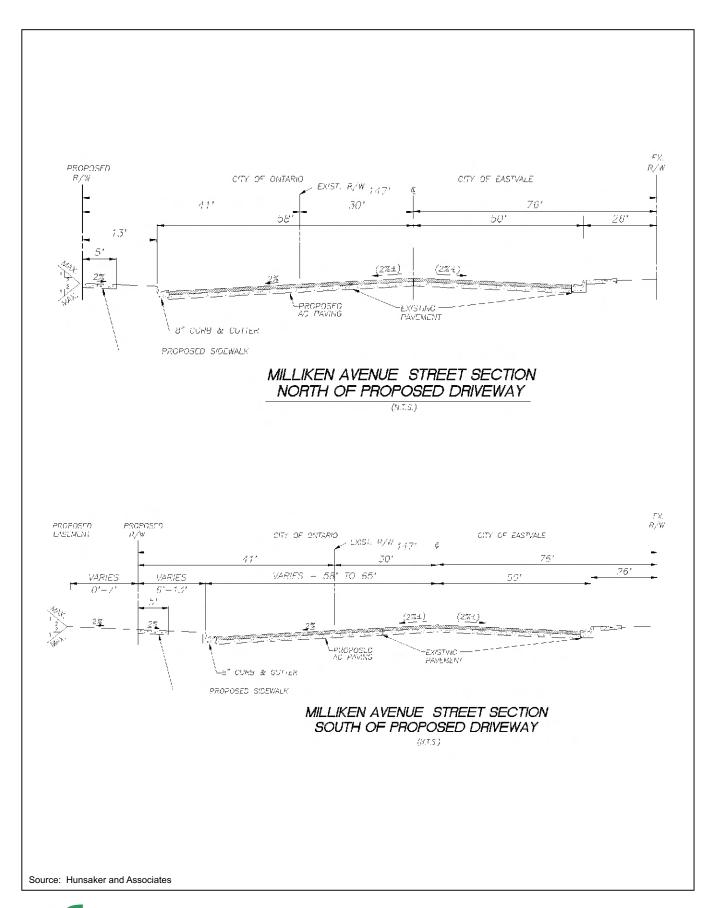
The infrastructure, utilities, and public services to be provided as part of the development of the Tuscana Village Specific Plan are discussed in this section. It should be noted that the Specific Plan's roadway and utility improvements have been sized to accommodate the future development of the area designated by the City's General Plan as Mixed Use Area 12, which also includes the adjacent properties to the north between the Specific Plan site and SR-60. The timing for installation of streets and utilities and the provision of public services to serve the remainder of Planning Area 12 will be determined as part of the City's approval of tentative maps or development plans.

#### 5.1 Circulation

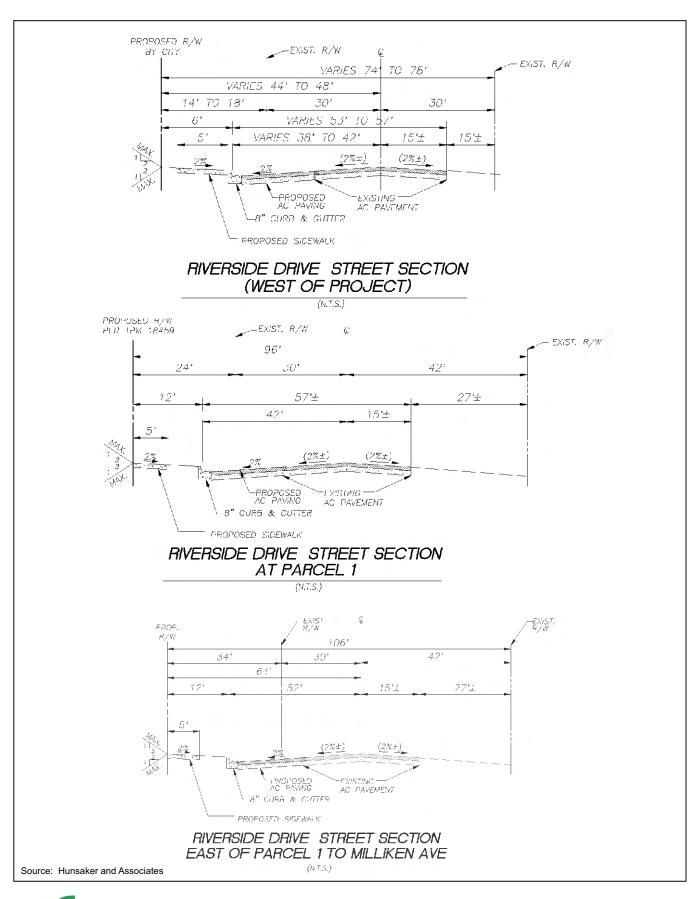
In addition to providing safe and efficient movement of vehicular traffic through the Project, the circulation plan also provides a safe environment for pedestrian movement and bicycle traffic reducing the reliance on the automobile as a means of travel. In addition, transit stops and bus turnouts will be provided as required by Omnitrans and the City.

#### 5.1.1 Streets

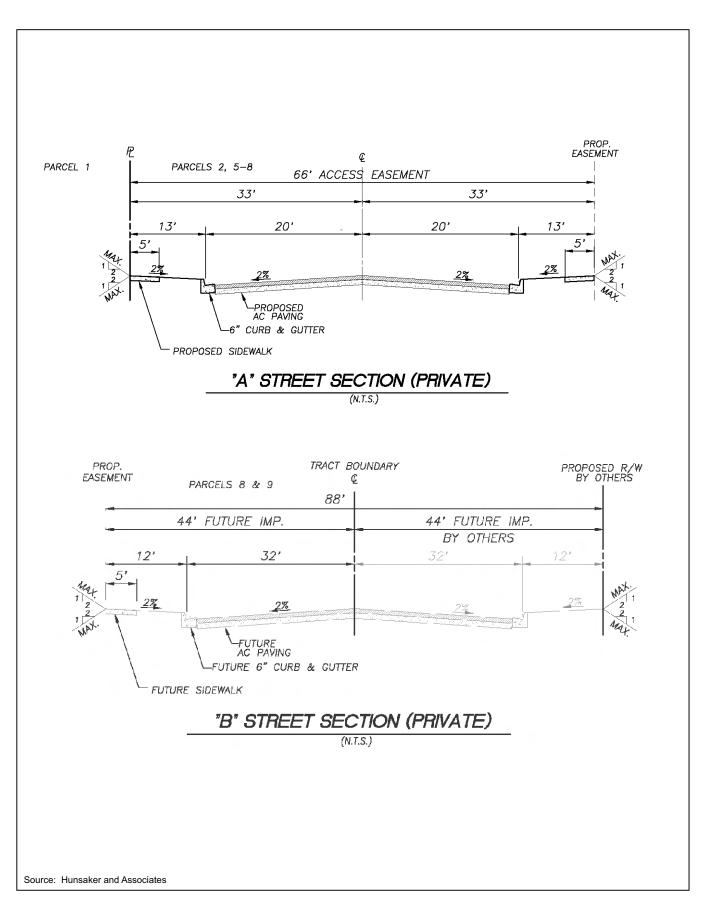
The Specific Plan area is bounded by Milliken Avenue on the east and Riverside Drive to the south, which will provide access to and from the Project site. Within the Project site, neighborhood streets of varying design will provide access and circulation through the community. These streets are discussed in the following paragraphs and proposed cross sections are illustrated as Figures 5-1 through 5-3.













#### Milliken Avenue

Milliken Avenue borders the Project site on the east. Milliken Avenue is a designated 8-Lane Divided Arterial. Adjacent to the Project site, the western street section will be 71 feet of right of way, including 58 feet of pavement and a 13-foot parkway. One-half of a future 14-foot median is also included in the half section. The median will be landscaped with Coast Live Oak (*Quercus agrifolia*) trees and shrub masses to match the parkways, or as specific by the City. Irrigation will be low flow or drip to conserve water. The narrow fingers/left hand turn lanes will be filled with river rock cobble, or as specific by the City.

#### Riverside Drive

Riverside Drive is a designated 6-Lane Standard Arterial and forms the southern boundary of the Project site. Riverside Drive, just west of Milliken Avenue, has an ultimate right-of-way width of 128 feet with 104 feet of paved area, and a 12-foot parkway which includes a 5-foot sidewalk.

Adjacent to the residential development, Riverside Drive will be a 108-foot right of way, with 84 feet of paved area and a 12-foot parkway with 5-foot sidewalk.

#### 'A' Street

'A' Street will provide major entry from Riverside Drive. It is a north/south street, located in the central portion of the Specific Plan. This roadway also serves to separate the residential and commercial portions of the Katelaris property. 'A' Street will be designed as a 66-foot section, with a total 40-foot wide paved area curb-to-curb. On each side of the travel area will be an 8-foot wide landscaped parkway adjacent to the curb, followed by a 5-foot wide sidewalk. 'A' Street will be improved as part of the initial phase of the Specific Plan, and will terminate in a cul-de-sac south of the Specific Plan's northern property line.

#### 'B' Street

'B' Street is a public street that will ultimately provide major entry from Riverside Drive to the Specific Plan area and parcels to the north. It is an east/west street, located at the northern boundary of the Specific Plan. 'B' Street will be designed as an 88-foot section, including 64 feet of paved area, a 12-foot landscaped parkway adjacent to the curb which includes a 5-foot sidewalk. 'B' Street will be improved when the remainder of General Plan

Mixed Use Area 12 is developed; and shall align with the existing driveway located on the east side of Milliken Avenue.

#### Driveway Access

Access to the Project site will be provided by one (1) driveway on Milliken Avenue and two (2) driveways on Riverside Drive. On-site streets are designed to distribute vehicular traffic from the public arterials adjacent to the Project site into and through on-site land uses.

#### 5.1.2 Pedestrian Circulation

Off-street pedestrian circulation linking the Specific Plan's land uses will be available throughout the Tuscana Village by means of an interconnected, paved sidewalk system within the roadway right-of-way, separated from vehicular travel lanes by a minimum 7-foot landscaped parkway.

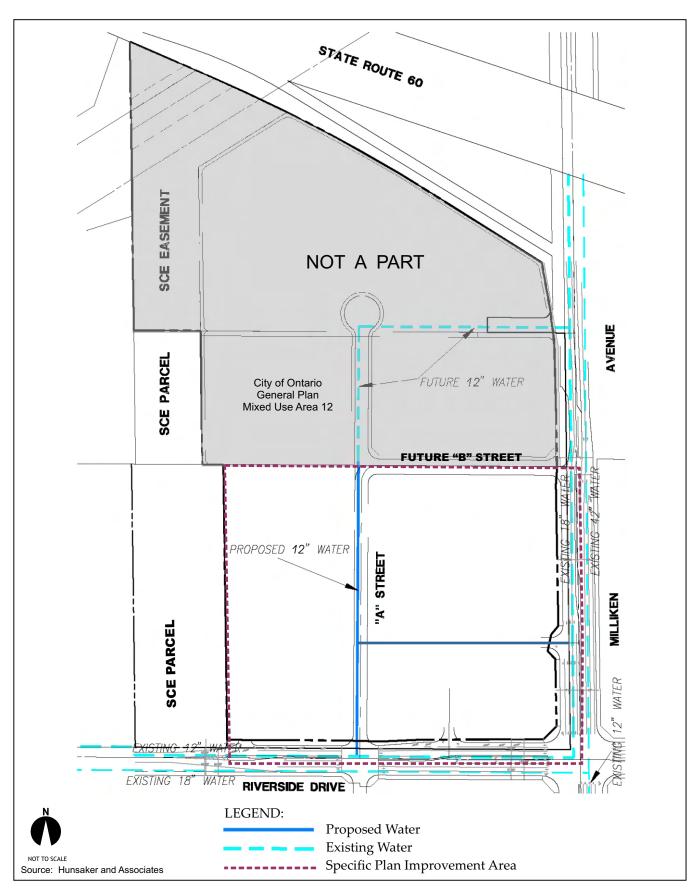
#### 5.2 Domestic and Recycled Water Master Plan

Domestic and recycled water shall be provided to the site consistent with the City's Water Master Plan and Recycled Water Master Plan. The water system will be a public water system.

#### 5.2.1 Domestic Water

Domestic water will be provided by the City of Ontario. The Project site lies within the Phillips Street Pressure Zone, also know as the 1010' Zone. The Specific Plan will connect to existing 1010' Zone water lines in the immediate vicinity, including the existing 12-inch and 18-inch water lines located in Riverside Drive, and an 18-inch line located in Milliken Avenue. These will provide adequate water for the Specific Plan and the remainder of General Plan Mixed Use Area 12.

Within the Project site, a mainline 12-inch line will be installed within 'A' Street from Riverside Drive. A 12-inch stub will be constructed at the terminus of 'A' Street for future development to the north. Additionally, a network of 6-inch and 8-inch water lines will be installed for domestic and fire sprinkler/hydrant uses. The Plan for domestic water for Tuscana Village is illustrated as Figure 5-4, "Water Plan."





#### 5.2.2 Recycled Water System

An existing 8-inch recycled water line is located in Riverside Drive, coming from the west and terminating at the easterly edge of the SCE Easement. As part of the Project, this existing line will be extended easterly to the intersection with Milliken Avenue. Additionally, an 8-inch line will be installed within 'A' Street. A stub will be constructed for future development to the north. All interior irrigation systems will feed off this line.

Recycled water will be supplied in the future by Inland Empire Utilities Agency (IEUA) from their facilities at Westwind Park. These lines will be charged with domestic water until such time as recycled water is available from IEUA. The Recycled Water Plan is illustrated as Figure 5-5, "Recycled Water Plan."

#### 5.3 Sewer Master Plan

Sewer service will be provided by the City of Ontario consistent with the City's Sewer Master Plan. The sewer system will be a public system, and has been sized to accommodate Specific Plan uses along with the remainder of the City's General Plan Mixed Use Area 12.

An existing 8-inch sewer line is located within Riverside Drive, coming from the west and terminating at the western edge of the SCE Easement. As part of the Project, this line will be extended along Riverside Drive to the terminus of 'A' Street. The Sewer Master Plan for Tuscana Village is illustrated on Figure 5-6, "Sewer Plan."

#### 5.4 Drainage

Drainage from the Project area is tabled to flow into the County Line Channel in the City Master Plan of Drainage. Presently, there is an existing 48-inch storm drain in Riverside Drive extending to the westerly edge of the Specific Plan boundary that ultimately connects to the Channel.

This line will be extended along Riverside Drive to 'A' Street. A 42-inch line will be installed within 'A' Street, northerly, to the terminus of 'A' Street. The line will be stubbed for future development to the north. The sewer system will be a public system . Please refer to Figure 5-7, "Storm Drain Plan."

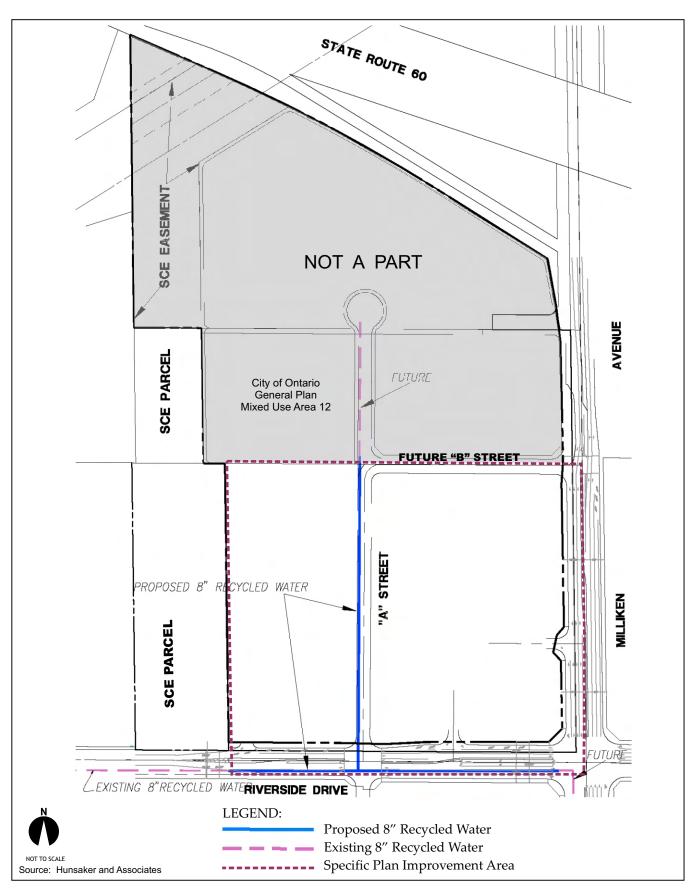




Figure 5-5 Recycled Water Plan

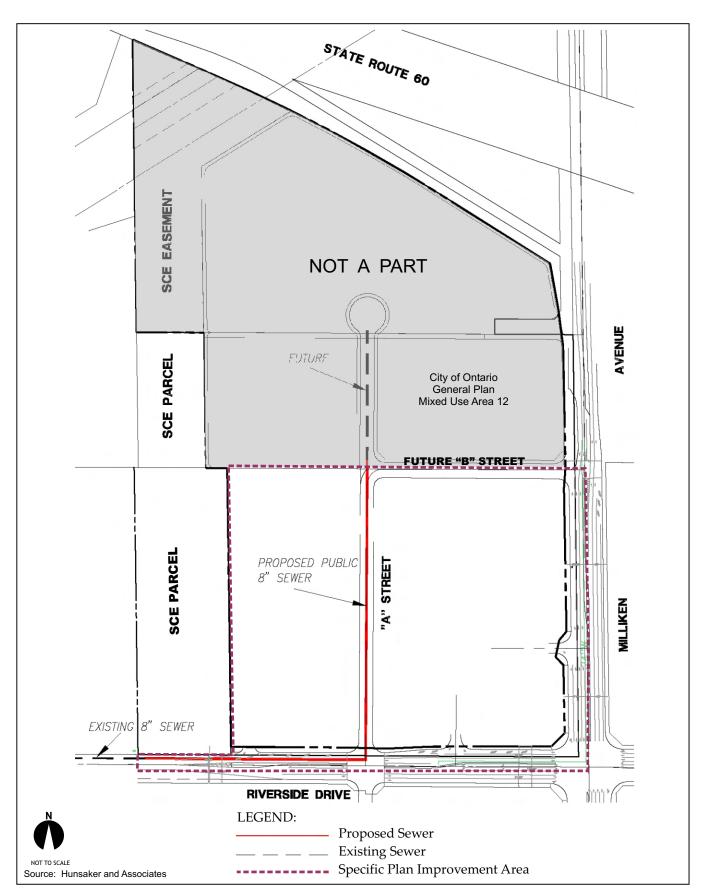
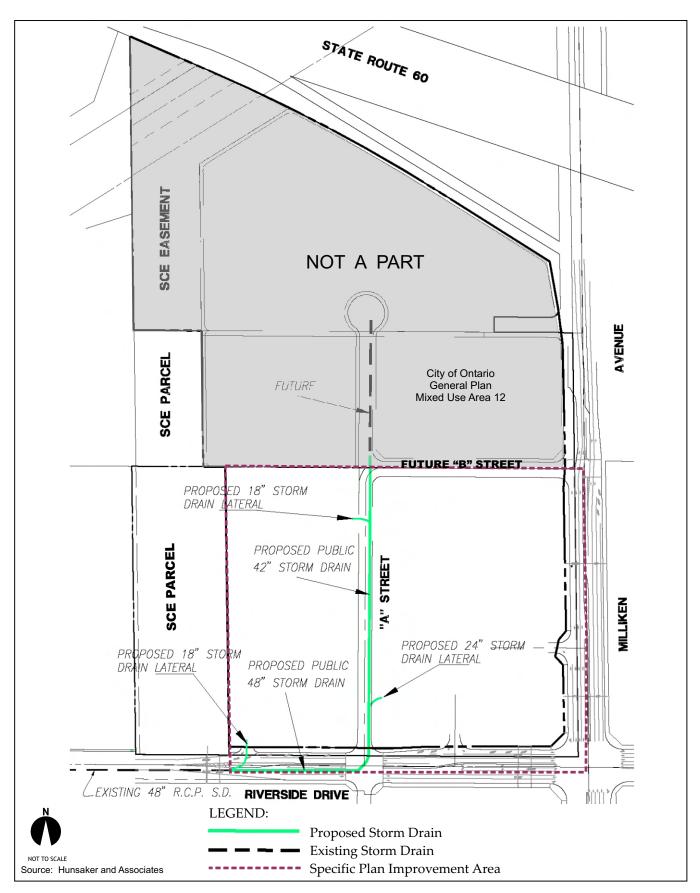




Figure 5-6 Sewer Plan





#### 5.4.1 National Pollution Discharge Elimination System Compliance (NPDES)

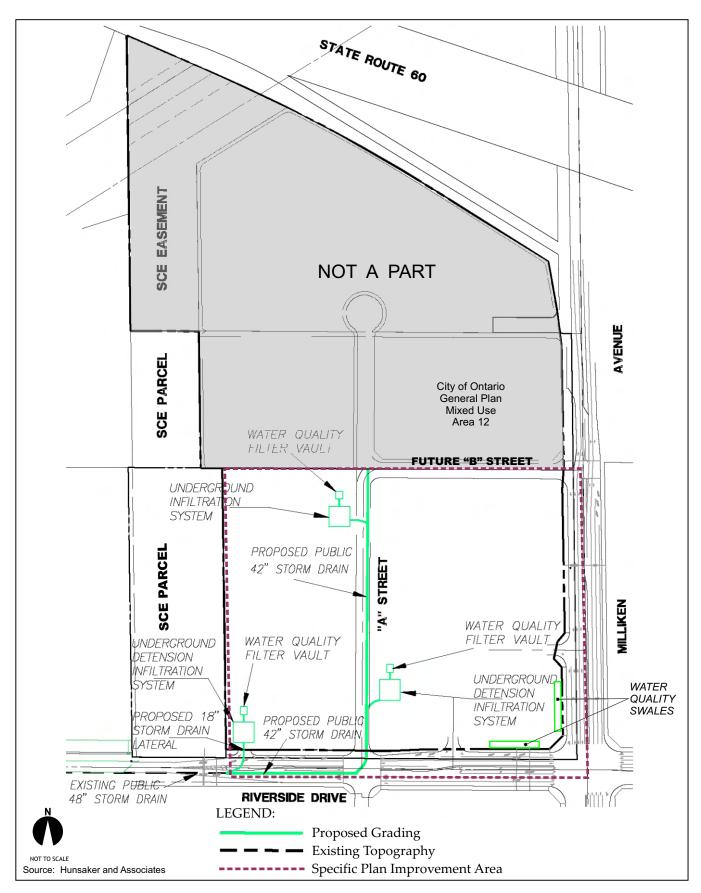
The design of the Project's storm drain system and the Best Management Practices (BMPs) that will be required by the City of Ontario for this development project shall conform to the San Bernardino County NPDES stormwater permit requirements and the SWRCB's Statewide General Permit for Construction Activities.

In order to protect the Waters of the U.S. and to comply with the new development requirements under the current adopted Areawide Urban Runoff NPDES Permit, the City of Ontario shall require a Stormwater Quality Management Plan (SWQMP) for the proposed Project that will include BMPs for the long-term operations associated with the Project. The WQMP shall include BMPs for site design, source-control, and treatment control.

The grading and drainage of the Project has been designed to retain, infilter, and treat surface runoff, in a manner and combination which is practical, to achieve NPDES Permit compliance. As shown in Figure 5-8, an underground detention/infiltration system in combination with water quality filter vaults will be installed. Additionally, water quality swales will be located along Milliken Avenue and Riverside Drive. The swales will be designed by the Civil Engineer and will be planted with bioswale plants, including *Carex divulsa* (Berkely Sage), *Juncus patens* (California gray bush), and *Muhlenbergia capillaris* (pink muhly). This system has been designed to maintain water quality and reduce the increased stormwater run off to 95 percent of the pre-existing condition, for the 85th percentile storm event.

#### 5.5 Schools

The Mountain View School District serves the K-8 school age needs of the proposed development, while the Chaffey Joint Union High School District serves 9-12 school age needs. Specifically, Creek View School (grades K-5) and Grace Yokley Middle School (grades 6-8) are located approximately 0.40 and 1.4 miles to the west, respectively. Colony High School is located 0.45 miles southwesterly of the Project site, to serve the high school students generated by the Project. The Project will be required to pay school fees as mandated by State of California.





#### 5.6 Public Utilities

#### 5.6.1 Telephone

Verizon is the existing telephone service provider to the Project site. The City will provide fiber optics to the homes that will enable telephone, voice mail and cable services, as well as video-on-demand. Proposed on-site facilities will be placed underground.

#### 5.6.2 Natural Gas

The Gas Company will provide natural gas to the Project site. Gas mains will be installed to the site by the Gas Company as necessary.

#### 5.6.3 Electricity

Southern California Edison will provide electricity to the Project site from existing facilities in the vicinity. Proposed new facilities to serve the Project will be owned and operated by Southern California Edison and located underground.

#### 5.6.4 Telecommunications

The City of Ontario will be providing OntarioNet, a fiber-optic telecommunications system capable of providing advanced Internet/data services to all homes and businesses within the site. OntarioNet will provide community related services including traffic management, on-line civic services, meter reading, educational services, and a variety of other community services. OntarioNet and the high-speed data services it provides will allow residents of the Tuscana Village Specific Plan to effectively telecommute to their jobs and in general provide a significant economic benefit to Ontario.

#### 5.6.5 Solid Waste

The City of Ontario provides solid waste collection services for the City and will service the Project site.

#### 5.7 Grading Concept

Construction activities such as clearing, grading, and disturbances to the ground such as stockpiling, or excavation that results in soil disturbances are subject to a General Construction Activity Storm Water NPDES permit.

Under the Statewide General NPDES Permit for Construction Activities, a Stormwater Pollution Prevention Plan (SWPPP) will be required for each development within the Specific Plan area. These plans typically include both structural and non-structural Best Management Practices (BMPs) to reduce water quality impacts. Prior to operation under a grading permit, the Project will be required to demonstrate compliance with NPDES construction activity stormwater permit requirements. The incorporation of these BMPs is intended to reduce the level of contaminants present at the drainage system discharge points to acceptable levels. Source reduction techniques have proven to be the most cost-effective ways of avoiding or reducing water pollution from urban runoff.

BMPs will be selected from the California Stormwater Quality Association's Construction Handbook (CSQA Construction Handbook), which provides guidance on the selection and implementation of BMPs. Use of BMPs from the handbook is consistent with City's Municipal Code (§6-6.505).

The purpose of the CSQA Construction Handbook is to provide guidance suitable for use by a wide range of individuals involved in construction site water pollution control, which include the following: developers, engineers, contractors, tradesmen, subcontractors, and municipal agencies. Each user of the handbook is responsible for working within their capabilities obtained through training and experience, and for seeking the advice and consultation of appropriate experts at all times. The CSQA Construction Handbook identifies the following six BMP categories:

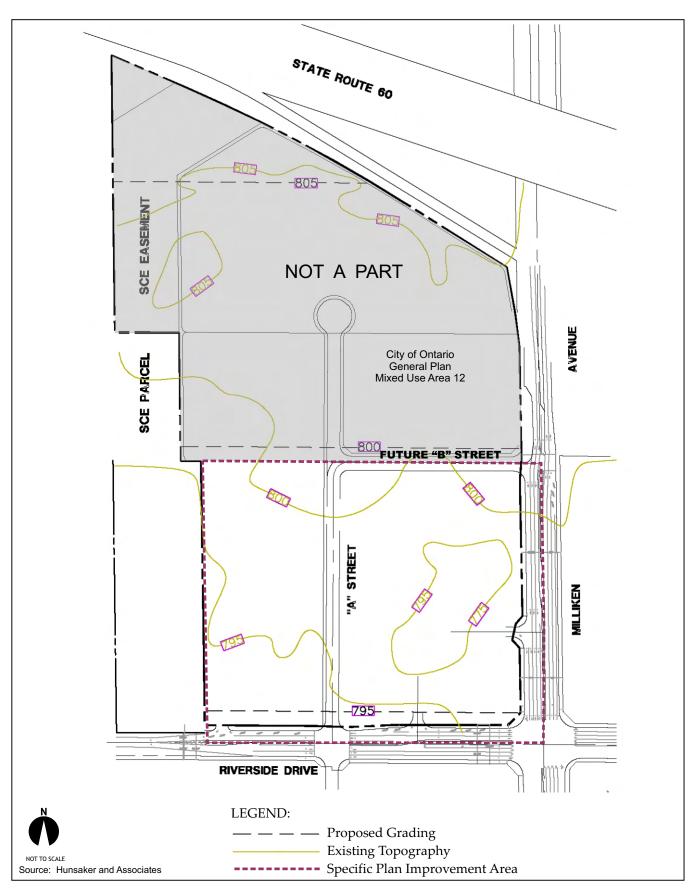
- Erosion Control (EC);
- Sediment Control (SE);
- Wind Erosion Control (WE);

- Tracking Control (TR);
- Non-Stormwater Management (NS); and
- Waste Management and Materials Pollution Control (WM).

BMPs for erosion and sediment control are selected to meet the BMP objectives based on specific site conditions, construction activities, and cost. Various BMPs may be required at different times during the short-term construction period because activities are constantly changing the site conditions. Selection of erosion control BMPs should be based on minimizing disturbed areas, stabilizing disturbed areas, and protecting slopes and channels. Selection of sediment control BMPs should be based on retaining sediment on-site and controlling the site perimeter. Erosion and sediment control BMPs are listed in the EC, SE, WE, and TR categories.

BMPs should be selected based on the contractor activities information collected in a SWPPP. The materials and BMP objectives for contractor activities are practicing good housekeeping and containing materials and waste. BMPs for contractor activities are selected from the TR, NS, and WM categories.

The existing terrain of the Project site slopes naturally from the northeast corner towards the southwest corner at about 1 percent. Grading of the site will conform to this natural gradient as close as possible. The southeast corner of the site was used as a borrow site, and may require fill import. The conceptual grading plan for the Tuscana Village is illustrated in Figure 5-9, "Grading Plan."





#### 5.8 Phasing

Backbone infrastructure to serve all areas of Tuscana Village shall be installed by the developer(s) in accordance with the City's respective adopted Master Plans. Infill service mains will be installed/constructed in phases as development proceeds and conditioned by the City Engineer's office to support individual phases of development, which may require installation of offsite infrastructure improvements beyond a given phase boundary.

Street improvements, including street widening, curb, gutter, driveway aprons, and sidewalks from each street's centerline to the right-of-way along the site's Milliken Avenue and Riverside Drive frontages will be included within the initial phase of development. Landscaping will also be installed, at a minimum, to the building and parking setbacks along both Milliken Avenue and Riverside Drive. The improvement of 'A' Street will also occur as part of this phase.

The streets serving the Specific Plan area will be improved as development occurs. As previously mentioned, 'A' Street will be improved during the initial phase of the Specific Plan to serve the Specific Plan's residential and commercial parcels. 'A' Street will terminate at a cul-de-sac located south of the Specific Plan's northerly property line. 'B' Street will be constructed in the future, when the remainder of General Plan Mixed Use Area 12 is developed.

#### Commercial Area

Infrastructure required to serve the commercial development area will be installed by the developer. The infrastructure will be sized to accommodate future development within the Specific Plan area. The cost related to this upgraded sizing is addressed at Section 6.12 of this Specific Plan. The timing for installation of infrastructure and utilities and the provision of public services for this area will be determined as part of the City's approval of tentative maps or development plans.

#### Residential Area

Grading and installation of infrastructure to serve the residential portion of the Tuscana Village is anticipated to be completed as a single phase. The timing for installation of infrastructure and utilities and the provision of public services for the residential development will be determined as part of the City's approval of tentative maps or development plans.

# **Section 6 Development Regulations**

### **Section 6**

## **Development Regulations**

#### 6.1 Introduction

The provisions contained herein will regulate design and development within the Tuscana Village Specific Plan. These regulations provide for the development of all land use categories, with development regulations established for commercial uses, residential uses, and landscaping.

#### 6.2 Definition of Terms

The meaning and construction of words, phrases, titles, and terms shall be the same as provided in the City of Ontario Development Code, unless otherwise specifically provided herein. The definition of architectural and design terms shall be that same as those provided in the City of Ontario Glossary of Design Terms which follows the City of Ontario Development Code.

#### 6.3 Applicability

The development regulations contained herein provide specific standards for land use development and general landscaping development standards within the Tuscana Village Specific Plan area. Application of these regulations is intended to encourage the most appropriate use of the land, ensure the highest quality of development, and protect the public health, safety, and general welfare. Whenever the provisions and development standards contained herein conflict with those contained in the City of Ontario Development Code, the provisions of the Specific Plan shall take precedence. Where the Specific Plan is silent, the City of Ontario Development Code shall apply. These regulations shall reinforce specific site planning, architectural design, and landscape design guidelines contained in Section 7, "Design Guidelines" of the Specific Plan.

#### 6.4 Administration

The Tuscana Village Specific Plan, upon adoption, will serve as the implementation tool for the General Plan as well as the zoning for the Project site. The Specific Plan Development Regulations address general provisions, permitted uses, and development standards for the Project site.

#### 6.5 Methods and Interpretation

Development within the Tuscana Village Specific Plan shall be implemented through the approval by the City of Ontario of parcel maps, tract maps, and development permits. The administration process described herein provides the mechanisms for review and approval of development projects within the Project site, consistent with the Specific Plan objectives.

#### 6.6 General Site Development Criteria

The following general site development criteria shall apply to all land development proposed within the Specific Plan area.

- 1. Gross Acres Except as otherwise indicated, gross acres for all development areas are measured to the centerline of streets.
- 2. Grading Development within the Specific Plan area shall utilize grading techniques as approved by the City of Ontario. Grading concepts shall respond to the design guidelines included in the Specific Plan which guide the development of land use toward the goal of providing for a livable community, with streets and entries designed for walking and resident interaction.
- 3. Building Modification Additions and alterations permitted by the Specific Plan shall be consistent with the approved architectural style and be constructed of the same materials as articulated within the Specific Plan.
- 4. Utilities All new public utility power lines shall be subsurface throughout the Specific Plan area. All new and existing utility distribution lines of 34.5 kv and below shall be undergrounded as part of the development of the Specific Plan.
- 5. Technology All businesses and residences shall accommodate modern telecommunications technology for computer internet access, phone, fax, and television.

- Cable, telephone, electrical transformers, and gas and water meters shall be clustered and screened to the extent feasible.
- 6. Maximum Number of Dwelling Units The Tuscana Village Specific Plan permits a maximum of 200 residential dwelling units to be developed within the Specific Plan area.
- 7. Screening Transformers, gas and water meters, switch gear and other ground mounted mechanical equipment shall be screened with landscaping.
- 8. Open Space Requirements Residential development shall include provision of private and common open space areas according to the minimum requirements contained in Table 6-3, "Residential Open Space Requirements."

#### 6.7 Implementation

- a. Development proposals within the Project site shall be subject to the implementation procedures established herein and as established in the City's Development Code. Whenever the provisions and development standards contained herein conflict with those contained in the City of Ontario Development Code, the provisions of this Specific Plan shall take precedence.
- b. Severability If any portion of these regulations is declared to be invalid or ineffective in whole or in part, such decision shall not affect the validity of the remaining portions thereof. The legislative body hereby declares that they would have enacted these regulations and each portion thereof irrespective of the fact that any one or more portions be declared invalid or ineffective.
- c. Unless otherwise provided, any ambiguity concerning the content or application of the Tuscana Village Specific Plan shall be resolved by the Planning Director or his/her designee, hereinafter referred to as Director, in a manner consistent with the goals, policies, purpose and intent established in the Specific Plan.
- d. Any major deviation from the design guidelines within the Tuscana Village Specific Plan shall require a Specific Plan Amendment. The Director shall determine whether a proposed change constitutes a major deviation.

# 6.8 Development Plan Review

All development projects within the Specific Plan shall be subject to the Development Plan Review Process as established in the City's Development Code. Adoption of the Specific Plan by the City includes adoption of the design guidelines contained within the Specific Plan, providing direction for the design of development projects within the Project site. Where the Specific Plan design guidelines are silent, the applicable design guidelines contained within the City's Development Code shall apply. The design guidelines are intended to be flexible in nature while establishing basic evaluation criteria for the review of developer projects during design review by the City.

Pursuant to these provisions, the Development Plan process constitutes a design review of project architecture, site plans, and landscape plans. All development project applications shall include a landscape and irrigation plan describing plant materials and their growth habits, plant size and spacing, methods of irrigation and landscaping maintenance, site plans, architectural elevations, floor plans, grading plans, and other requirements as specified by the City. Development Plans are approved with conditions of approval.

# 6.9 Subdivision Maps

Approval and recordation of the Tuscana Village final subdivision maps will create legal lots for development. All Tentative Maps will be reviewed and approved pursuant to applicable provisions of the City of Ontario Subdivision Ordinance and consistent with the applicable provisions contained within the Specific Plan.

# 6.10 Specific Plan Modifications and Amendments

#### 6.10.1 Minor Modifications

The following constitute minor modifications to the Tuscana Village Specific Plan, not requiring a Specific Plan Amendment, and/or update of the Specific Plan, and are subject to review and approval by the Zoning Administrator. The Zoning Administrator shall have the discretion to refer any such request for modification to the Planning Commission or the City Council.

- a) Change in utility and/or public service provider.
- b) A net change to the number of units within the residential area, provided the total number of units for the entire Specific Plan area does not exceed 200 units.
- c) Adjustment of a residential planning area boundary provided the total acreage of the affected area does not increase or decrease by more than 15 percent the total acreage stated in the approved Specific Plan.
- d) Minor changes to landscape materials, wall materials, wall alignment, entry design, and streetscape design which are consistent with the conceptual design set forth in the design guidelines contained within the Specific Plan.
- e) Minor changes to the design guidelines, which are intended to be conceptual in nature only, and are intended to be flexible in implementation.
- f) Other modifications of a similar nature to those listed above, which are deemed minor by the Zoning Administrator, which are in keeping with the purpose and intent of the approved Specific Plan and which are in conformance with the General Plan.
- g) Changes in street alignments and dimensions per the direction of and approval by the City Engineer.

# 6.10.2 Specific Plan Amendments

Amendments to the Tuscana Village Specific Plan may be requested by an applicant or by the City at any time pursuant to Section 65453(a) of the Government Code. Amendments shall be processed pursuant to the provisions of the Government Code and the City of Ontario Development Code for Specific Plan Amendments. In the event the proposed amendment requires supplemental environmental analysis pursuant to the California Environmental Quality Act (CEQA), the applicant(s) will be responsible for preparing the necessary CEQA documentation.

# 6.11 Appeals

Appeals from any determination of the City (Planning Director, Zoning Administrator or the Planning Commission), may be made by any applicant(s) or other aggrieved party filing an application, on forms provided by the City of Ontario, and accompanied by the appropriate filing fee, where applicable, within ten (10) days following the final date of action for which an appeal is made. Appeals shall be processed consistent with the provisions of the City of Ontario Development Code.

## 6.12 Developer Reimbursements

In recognition that certain backbone infrastructure improvements will be needed during the initial phase of development and that these improvements will benefit future development of the remainder of General Plan Mixed Use Area 12, the Specific Plan includes a reimbursement component for the developer(s) of the Tuscana Village Specific Plan. For example, 'A' Street has been sized to accommodate the additional traffic that will be generated from the future development of the northern properties.

Approval of the Specific Plan will be accompanied by a Development Agreement. The Development Agreement will identify certain future responsibilities of both the developer and the City of Ontario. Of particular note, the Development Agreement will detail a reimbursement process that will assure that the cost of infrastructure upgrades intended to support the future development of the remainder of General Plan Mixed Use Area 12 are reimbursed to the developer of the Tuscana Village Specific Plan. The Development Agreement will identify the specific methods to determine the costs of these improvements, and a fair and equitable means for reimbursement of these costs. The Development Agreement will be assignable to future owners or heirs.

# 6.13 Project Financing

The financing of construction, operation and maintenance of public improvements and facilities, and public services will include funding through a combination of financing mechanisms. Final determination as to the facilities to be constructed and as to maintenance responsibilities, whether publicly or privately maintained, will be made prior to recordation of the final maps. In order for the Project to be fiscally self-sufficient, the following financing options can be considered for implementation.

#### Facilities and Services

- Private capital investment for the construction of facilities.
- Community Facilities District (CFD) established pursuant to the Mello-Roos
  Community Facilities District Act of 1982, or other special district, to provide
  funding for the construction of a variety of public facilities and the provision
  of public services.

#### Operation and Maintenance

- By individual private property owner.
- By private property owners or home owners association.
- By Community Facilities District (CFD) established pursuant to the Mello-Roos Community Facilities District Act of 1982, or other special district. City Council approval is a prerequisite for the implementation of any and all special district financing mechanisms. The use of the Mello-Ross Community Facilities District Act of 1982 (Act) to finance public facilities and services will be at the City's sole discretion. Moreover, the use of the Act must be consistent with the City's adopted goals and policies concerning the use of the act.

# 6.14 Maintenance and Responsibilities

The public and private improvements constructed within the Tuscana Village will be maintained through a combination of public and private entities as presented in Table 6-1.

Table 6-1

Maintenance Responsibilities

	City and/or Special District	Private Homeowners Association (HOA) or sub-association	Private (Homeowner or Commercial Property Owners)	Utility Entity
Public Roadways	X			
Private Streets <sup>1</sup>		X	Χ	
Parkways of Public Roadways		x	х	
Parkways of Private		X	Х	

Table 6-1

Maintenance Responsibilities

	City and/or Special District	Private Homeowners Association (HOA) or sub-association	Private (Homeowner or Commercial Property Owners)	Utility Entity
Interior Streets				
Median (public ROW)		X	Х	
Traffic Signals	Χ			
Traffic Control Signs	X		Χ	
Driveways and				
Parking Areas Serving			Χ	
Commercial Uses				
Pedestrian Linkages		Χ	Χ	
On- and Off-site water,				
sewer, and storm drain	Χ			
improvements				
Amenity			Χ	
Residential Front Yard				
Landscaping		X		
Residential Common				
Area Landscaping		X		
Community Theme				
Wall and Entry				
Monuments (graffiti		X	Χ	
removal on the street				
side face only)				
Community Theme				
Wall, Entry				
Monuments, and				
Freeway-Oriented		X	X	
Sign (structural				
integrity and face				
repairs)				
Electricity				Χ
Natural Gas				Χ
Communication				Χ
Systems				Λ
NPDES Facilities (on-		X	Χ	
site)/ WQMP <sup>2</sup>		Λ	Л	
NPDES Facilities on				
private property/		X	Χ	
Interim Detention		, A	Λ	
Basin				

 $<sup>^{1}</sup>$  Any Specific Plan decorative element removed by the City for maintenance purposes shall be replaced by the respective business/homeowners association.

 $<sup>^{\</sup>rm 2}$  Only those facilities in public roads and/or easements.

#### 6.14.1 Public Maintenance

- 1. All drives and on-site circulation within the commercial development areas will be private and maintained by a property owners association (POA).
- 2. Landscape improvements within the public right-of-way of arterial, primary and secondary entry streets, community and neighborhood entries and public street lights within the Project site shall be maintained through a landscape and lighting district or other special maintenance district established by the City. Parkway improvements within the right-of-way of residential areas along interior streets, parks and other common open space areas shall be maintained by a Homeowners Association. Parkway improvements along interior streets and driveways within the commercial areas shall be maintained a property owners association (POA).
- 3. All on-site water, sewer, and storm drains within public utility easements dedicated to the City shall be constructed by the developer and, upon acceptance, shall be maintained by the City.
- 4. Public infrastructure improvements such as water, sewer and storm drain facilities will be maintained by the City. In the event permanent onsite basins are developed within the Tuscana Village as an alternative to City Basins, storm water pollution treatment detention basins or other water treatment facilities will be maintained by the HOA.
- 5. Operation and Maintenance (O&M) requirements for all NPDES stormwater runoff source control and treatment control Best Management Practices (BMPs) shall be identified in the approved Water Quality Management Plan for the project. An O&M Plan shall be created to ensure ongoing long-term maintenance of all structural and non-structure BMP's.

#### 6.14.2 Homeowner Association

A Master Homeowner Association may be established for the maintenance of common area landscape improvements within the residential portion of the Specific Plan. Private improvements to be maintained by the homeowner association include:

- Courts, parkways and landscaping within the residential areas.
- Walkways and common areas.
- Recreational facilities.
- All internal open spaces, parks, and common areas.

## 6.15 Residential Development Standards

a. General

This category includes the development of multifamily residential dwelling units.

#### b. Permitted Uses

- 1. Multifamily buildings and associated parking garages or carports.
- 2. Public or private parks, recreational buildings, greenbelts, pocket parks, and open space.
- 3. Accessory uses to include the following:
  - a. Home occupations in accordance with the City of Ontario Zoning Code.
  - b. Swimming pools, spas, tennis courts, sports courts, and other similar outdoor recreational amenities developed as part of a master planned common use recreational facility.
  - c. Patios and patio covers.
  - d. Mailboxes.
  - e. Recreation buildings.
  - f. Permanent Leasing Offices.
  - g. Maintenance storage buildings.

- h. Signage in accordance with the provisions outlined in the Design Guidelines.
- Temporary sales offices, and sales trailers, temporary construction offices and facilities, real estate signs, signage indicating future development and directional signage in accordance with the City of Ontario Development Code.
- j. Small family child care facilities/day care facilities, up to 8 children in accordance with the City of Ontario Development Code.
- k. Temporary uses in accordance with the provisions of the City of Ontario Development Code.
- 1. Free standing satellite dishes and/or antennas in accordance with of the City of Ontario Development Code.

### c. Carports

No carport is allowed within a front or street side yard area. Carports may be located within the rear or interior side yard area, provided it is screened from view by a solid 6-foot high fence or wall with appropriate gate. Carports shall not be permitted in lieu of a two-car garage required pursuant to the provisions of Article 30 (Off-Street Parking and Loading) requirements of this chapter.

In addition to items a through *c*, presented above, Table 6-2 contains development standards that shall apply to all residential development within the Tuscana Village Specific Plan.

Table 6-2 Residential Development Standards

Tetal Mariana Nambar at Heita	200	
Total Maximum Number of Units	200	
Minimum Setbacks <sup>1</sup>		
To Riverside Drive	23'	
To Private Street	10'	
To Private Drive/Sidewalk	8'	
Living Space	5'	
Stairs	0'	
Minimum Building Separation		
Front/Front	35'	
Side/Side	20'	
Rear/Rear	25'	
Front of garage to front of garage	30'	
Lot Coverage		
Maximum Coverage	50%	
Maximum Building Height		
Main Structure	35'	
Accessory Structure	30'	
Architectural projections and focal elements such as towers, cupolas, and other appurtenances	35'	

Table 6-2 Residential Development Standards

Parking <sup>2</sup>	
Minimum Resident Parking Required	
1 Bedroom	1.75 spaces per unit, including 1 space in a garage
	or carport
2 Bedroom	2 spaces per unit, including 1 space in a garage or
	carport
3 Bedroom	2.5 spaces per unit, including 2 in a garage or
	carport
Minimum Guest Parking Required <sup>3</sup>	1 space for each 4 units under 50 on the building
	lot. 1 space for every 5 units between 51-100 units
	on the building lot. 1 space per 6 units over 100
	units.

- 1. All setbacks (building and parking) are measured from the property line unless otherwise noted.
- 2. All parking spaces within an enclosed garage shall have a minimum 20' x 20' clear inside dimension for double spaces and 10' x 10' for single spaces.
- 3. Private on-street parking may be counted toward guest requirements.

In addition, all open space within the residential development shall be provided consistent with the requirements presented in Table 6-3.

Table 6-3 Residential Open Space Requirements

Minimum private open space area per dwelling	Ground floor units: 125 s.f., with a dimension of 10'.	
	Second floor units: 70 s.f. with a dimension of 8'.	
Minimum common open space area per dwelling	250 s.f.	
Minimum common open space dimension	15'	

# 6.16 Commercial Development Standards

#### a. General

This section sets forth the development regulations for development of commercial land uses within the Tuscana Village Specific Plan.

# b. Permitted and Conditionally Permitted Uses

Table 6-4 presents the uses that are permitted, or conditionally permitted, within the commercial area of the Tuscana Village Specific Plan.

Table 6-4
Commercial Permitted and Conditionally Permitted Uses

Use	Permitted (P)/ Conditionally Permitted (C)	
MEDICAL		
Doctor Office	Р	
Dentist Office	Р	
Medical Laboratory	Р	
Veterinarian Offices and Animal Clinic	Р	
Animal Hospitals and Shelters	Р	
Pharmacies and Drug Stores without Drive thru Facilities	Р	
Pharmacies and Drug Stores with Drive thru Facilities	С	
NON-PROFIT/SERVICE ORGANIZATIONS 501 (C) (3)		
Campaign Offices	Р	
Charitable, Philanthropic, Service and other Non-Profit Organization Offices	Р	

Table 6-4 Commercial Permitted and Conditionally Permitted Uses

Use	Permitted (P)/ Conditionally Permitted (C)	
ALCOHOL		
Distillation of Spirits, Brewery, Beer and Wine Sales, Alcoholic Beverage Sales Accessory to a Primary Use, Wine Stores with an Accessory Wine Tasting Bar or Room	С	
AUTOMOBILE RELATED SERVICES		
Gas Station (consistent with the City of Ontario Development Code)	Р	
Automotive service stations (consistent with the requirements of the City of Ontario Development Code)	С	
Full service and fully automated accessory car wash facilities (consistent with the requirements of the City of Ontario Development Code)	Р	
EATING DRINKING PLACES AND FOOD SERVICES		
Catering Establishments	Р	
Olive Press	Р	
Restaurants: Fast Food, Sit Down, Take Out with drive through (consistent with the requirements of the City of Ontario Development Code)	P	
ENTERTAINMENT AND RECREATION		
Live Entertainment including theatrical productions or live performances by musicians or other artists within an entirely enclosed building and associated with a dinner house or restaurant; or live music or performance acts within a designated outdoor ampitheater area and managed by the property owner.	С	
Movie Theater Indoor	С	
Health Club/Gymnasium	С	
Indoor Sports and Recreational Facilities (golf, handball, racquet ball, etc)	С	
Outdoor Seating and Dining Areas	Р	
Event Hall	Р	

Table 6-4 Commercial Permitted and Conditionally Permitted Uses

Use	Permitted (P)/ Conditionally Permitted (C)
HOSPITALITY AND LODGING	
Hotels and Motels	С
RETAIL	
Antique Stores	Р
Art Galleries and Art Supply Store	Р
Arts and Crafts Store	Р
Beauty Supply Store	Р
Book Stores and Newstands	Р
Hardware Store	Р
Florists	Р
Furniture Stores	Р
Camera and Photographic Supply Store	Р
Cigar and other Tobacco Products Store (smoking/hookah is prohibited)	Р
Clothing and Accessory Stores	Р
Computer and Home Electronic Stores	Р
General Merchandise Stores	Р
Hobby, Toy and Game Store	Р
Home Appliance Store	С
Jewelry Store	Р
Luggage and Leather Goods	Р
Music and Video Stores	Р

Table 6-4 Commercial Permitted and Conditionally Permitted Uses

Use	Permitted (P)/ Conditionally Permitted (C)
Office Supply, Stationery and Gift Stores	P
Pet Supply Store	P
Plant Nursery and Associated Sales Area	Р
Seasonal Sales: Sales of merchandise related to specific times of the year, season, and/or holiday.	P
Shoe Store	P
Sporting Goods Store	P
Variety Store	Р
FOOD AND BEVERAGE STORES	•
Bakery, Confectionery, and Ice Cream Stores	Р
Convenience Market	P
Specialty Food Stores	Р
Coffee Shops	P
Delicatessens	P
Grocery, Fruit, and Vegetable Store	Р
Liquor Stores (sale of packaged alcoholic beverages)	С
Supermarket	P
Health Food Stores	Р
Fruit, Vegetable, and Organic Food Stands	P
Meat/Butcher Shop	Р
Cheese Shop (including on-site cheese making)	Р

Table 6-4 Commercial Permitted and Conditionally Permitted Uses

Commercial Leminous and Contained Leminous Cotto			
Use	Permitted (P)/ Conditionally Permitted (C)		
SERVICES			
Business Services, including business offices	Р		
Advertising Agency	Р		
Photocopying and Duplicating Services	Р		
Child Care Center	С		
Commercial Radio and Television Antennas or Transmitters, Wireless Communication Providers	С		
Dance Studios	Р		
Self Service Laundry	Р		
Day Spas (either stand alone or in conjunction with a beauty salon)	Р		
Pet Grooming	Р		
Photographic supplies and processing	Р		
Financial Services			
Banks and Loan Companies	Р		
Money Transmitting	Р		
Other Financial Services	Р		
Personal Services			
Barber Shop & Beauty/Nail Salon	Р		
Laundry - Commercial	С		
Tailor	Р		
Travel Agency	Р		

Table 6-4
Commercial Permitted and Conditionally Permitted Uses

Use	Permitted (P)/ Conditionally Permitted (C)	
Repair Services		
Computer, Home Electronics, and Small Home Appliances (when ancillary to another use)	Р	
Jewelry and Watches/Clocks	Р	
Lawnmower and Garden Equipment	Р	
Locksmith/Key Shop	Р	
Shoe Repair	Р	
OTHER		
Temporary agricultural uses, such as production of fruit, vegetables and other row crops and the keeping of farm animals (typical of a petting zoo) associated with educational tours.	Р	
Any other uses the Director determines permitted or the Planning Commission determines to be conditionally permitted due to its compatibility with the nature of the shopping center or similarity to		

Any other uses the Director determines permitted or the Planning Commission determines to be conditionally permitted due to its compatibility with the nature of the shopping center or similarity to other listed permitted or conditionally permitted uses.

Table 6-5 contains development standards that shall apply to all commercial development within the Tuscana Village Specific Plan.

Table 6-5 Commercial Development Standards

Maximum Development Floor Area Ratio	0.40	
Minimum Building Setbacks 1,2		
From Milliken	35′	
From Riverside Drive	23'	
From Other Streets	10'	
From Planning Area Boundary Lines	10'	
Parking and Drive Aisle Setbacks		
From Milliken	35′	
From Riverside Drive	23′	
From Other Streets	10'	
From Planning Area Boundary Lines	10'	
Minimum Landscape Coverage	15 percent	
Maximum Building Height³		
Commercial Structure	35′	
Office Structure (including office buildings with first floor commercial uses)	55′	
Architectural Projections and Focal Elements such as Towers, Cupolas, and other Appurtenances	65′	
Walls, Fences, and Hedges	Walls: Six (6) feet along commercial area boundaries unless increased height is required pursuant to an acoustical study approved by the City of Ontario. Hedges: Three (3) feet within line of sight areas at intersections and other points of vehicle interface. All hedges shall comply with the City of Ontario Standards for Corner Sight Distance.	
Parking	Per City of Ontario Development Code	

Table 6-5
Commercial Development Standards

Screening	All loading areas shall be screened from adjacent public streets, residential and open space uses through the use of landscaping and/or decorative walls or fencing. All storage, including cartons, containers, materials or trash shall be shielded from view within a building or area enclosed by a solid fence or wall not less than six (6) feet in height.
	All ground level and roof mounted equipment, including but not limited to, mechanical equipment, satellite dishes, tanks, ducts, and towers, and all equipment appurtenant thereto, shall be screened on all sides from public view from the street, adjoining properties, and neighboring residential units, by landscaping, a parapet wall, enclosure, or other architectural element.
Lighting	All interior and exterior lighting shall be directed away from residential uses.

- 1 All setback areas shall be landscaped.
- All setbacks are measured to habitable area, not architectural appurtenance or projection. An architectural projection is defined as an element that articulates the building elevation such as eaves, window and door pop-out surrounds, bay windows, pot shelves, chimneys, enhanced window sills, shutter details, window trim, balconies, pedestrian colonnades and other similar elements. Such elements may project a maximum of 3 feet into setback areas.
- 3 Building height is defined as the vertical distance to the top of the highest wall or roof ridge of the building as measured from the finished pad grade.

# 6.17 Landscape Concepts

#### 6.17.1 General Provisions

1. All landscaping for streetscapes and community monumentation shall conform to Section 7, "Design Guidelines," of the Specific Plan and regulations as set forth herein and shall be subject to review and approval by the City of Ontario at the time of Development Plan Review. The form and content of landscape plans for streets, parks, and other common areas shall conform to the requirements of the City's Development Plan application requirements.

- 2. The Landscape Streetscape improvements for the Tuscana Village Specific Plan shall establish a landscape theme reminiscent of the regional landscape character of the surrounding area.
- 3. Installation of landscaping and automatic irrigation within the common areas of all residential areas will be provided by the developer and maintained in a healthy condition at all times. The developer shall be responsible for the installation of full landscape improvements. Areas not used for hardscape shall be planted. All landscape plans shall be reviewed and approved by the City at the time of Development Plan review.
- 4. All manufactured and cut/fill slopes exceeding three (3) feet in height shall be planted with an effective mixture of ground cover, shrubs, and trees installed by the developer. Such slopes shall also be irrigated with efficient irrigation equipment and treated with an appropriate erosion control method.
- 5. Installation of landscaping and automatic irrigation within commercial areas will be provided by the developer.

# 6.17.2 Landscape Principles

- 1. Landscape design and irrigation systems shall be water efficient to conserve water and provide environmental benefits.
- 2. Landscaping shall be drought tolerant and maximize water efficiency.
- 3. Provide a mix of evergreen and deciduous shade trees to create pleasant, walkable outdoor spaces and reduce heat gain on paving and buildings.
- 4. Create gateways with plant material that identify the various internal destinations within the Specific Plan.
- 5. Use landscaping in focal points, seating areas, and screening in appropriate areas.
- 6. Landscape areas shall be designed to provide opportunities for storm water infiltration and retention to recharge groundwater and improve water quality.
- 7. Turf area shall be designed for active play.
- 8. Use low water groundcovers and shrubs instead of turf wherever possible.
- 9. Canopy shade trees shall be used in public and private spaces , as well as parking lots, to reduce the heat island effect and improve air quality.

- 10. Design adequate landscape space to provide screening for trash enclosures and utilities such as transformers and backflow devices.
- 11. Automatic irrigation systems are to be water efficient, appropriate for the landscape hydrozones, and provide 100 percent coverage.
- 12. Decorative hardscape materials shall enhance the architecture and outdoor experience.

# 6.17.3 Landscape Standards

- 1. Landscaping within the Tuscana Village Specific Plan area shall be provided in accordance with the Design Guidelines utilizing plant materials specified on the Plant Palette included in Section 7," Design Guidelines" established for the Specific Plan.
- 2. Boundary landscaping will be required adjacent to the Specific Plan areas. Landscaping shall generally be placed along all private streets within the Specific Plan area.
- 3. Landscaping and automatic irrigation systems within the public rights of way of the Tuscana Village Specific Plan area shall be installed by the developer.
- 4. Freestanding perimeter walls and view fencing shall be provided within, and at the perimeter of the Specific Plan area as specified in the Wall and Fence Master Plan contained within. Section 7, "Design Guidelines," of the Specific Plan. Such walls and fences will be constructed concurrently with the construction of improvements required for development of the planning areas of the Specific Plan.
- 5. Walls and Fencing Perimeter Walls and fencing shall be constructed of a design consistent with the "Wall Details" exhibits located within Section 7, "Design Guidelines," of the Specific Plan. If perimeter walls are constructed they shall not exceed six (6) feet in height from finish grade. If required for sound attenuation, perimeter walls may exceed six (6) feet in height, subject to the recommendations of an acoustical study and approval by the Planning Department. Perimeter walls shall be constructed of either decorative masonry or other permanent, durable, low maintenance material. Thematic perimeter fencing shall be constructed of all durable materials, which may include materials with a wood-like appearance, glass panels

- or tubular steel subject to approval by the Planning Department. In no instance shall wooden fencing be permitted along perimeters.
- 6. All perimeter wall and fence materials throughout the Specific Plan area shall be of uniform manufacture with colors specified for the overall design theme.
- 7. The developer will provide site inspection of all construction and installation of open space areas in accordance with City of Ontario requirements.
- 8. Non-toxic, non-invasive vegetation shall be utilized adjacent to all public streets and open space areas.

#### 6.18 Signage

A Master Sign Program shall be submitted by the developer(s) of each land use component for the Tuscana Village and approved by the City of Ontario, pursuant to the City's Development Code, to address residential project entries, residential neighborhood identification signs, commercial center identification, tenant signage, and way finding signs within the Specific Plan area. No Project signs shall be permitted in the public right-of-way. All other signs shall be subject to the approval of a sign permit pursuant to the City's Development Code. Refer also to Signage Design Guidelines contained within Section 7, "Design Guidelines."

## 6.18.1 Master Sign Program Contents

All sign programs shall address, at a minimum, the following:

- a) Permitted signs
- b) Prohibited signs
- c) The hierarchy of signage.
- d) Definition of types of signs.
- e) Locations and dimensions for monument signs, neighborhood identification signs, and public facilities signs.
- f) Locations and dimensions of directional signage.
- g) Provisions for size, location, and duration of display of temporary signs.
- h) Permitted sign types, styles, construction materials, colors, and lettering styles.

- i) Requirements for a sign permit application.
- j) Procedures for obtaining approval of a sign permit.
- k) Procedures for amendments to the sign program.

# 6.19 Lighting

#### **6.19.1 Street Lights along Streets**

Streetlights along streets within the Specific Plan area shall be LED. Design of fixtures shall be approved by the City as part of the City's Development Plan Review. Please also refer to Section 7, "Design Guidelines."

# 6.19.2 Motorcourt Lighting in Residential Planning Areas

Motorcourt lighting fixtures shall be on sensors for automatic nighttime lighting. Style and specifications for motorcourt lights shall be approved by the City as part of the City's Development Plan Review.

# 6.19.3 Parking Lot Lighting in Commercial Developments

Parking lot lighting fixtures shall be on sensors for automatic nighttime lighting. Style and specifications for parking lot lights shall be approved by the City as part of the City's Development Plan Review.

# 6.19.4 Lighting within Paseos and Recreational Areas

Lighting within paseos and recreational areas shall be approved by the City as part of the City's Development Plan Review of these facilities.

#### 6.20 Bus Shelters

Bus shelters shall be constructed on the Riverside Drive frontage and the Milliken Avenue frontage. Locations shall be as approved by the City Engineer. The shelters shall be compatible with the architectural character established at the Project entries to the Tuscana Village Specific Plan.

#### 6.21 Mailboxes

Within all residential planning areas and commercial developments, mailboxes shall be clustered and installed in locations and in a design approved by the City as part of the City Development Plan Review for each individual neighborhood or development.

# **6.22** Trash Receptacles and Enclosures

#### 6.22.1 Residential Areas

Trash receptacles within the residential planning area shall be constructed of a design consistent with Figure 7-3, located within Section 7, "Design Guidelines." Trash enclosures shall be located, sized and constructed in accordance with City of Ontario requirements and subject to Design Review Board approval.

#### 6.22.2 Commercial Areas

Trash receptacles for commercial area shall be fully enclosed to screen trash bins from view and shall be located, sized, and constructed in accordance with City of Ontario requirements.

# Section 7 Design Guidelines

# Section 7 Design Guidelines

#### 7.1 Introduction

Early in the history of Ontario and the San Gabriel Valley, the agricultural industry was a major business in the region, producing fruits and vegetables for the surrounding areas. One of the crops that were suitable in the mild Southern California climate was grape production. The grape growers grew many varieties of grapes and a growing wine industry began to flourish. Several large parcels of land were put into grape productions with several winery establishments contributing to the local, largely agrarian economy.

Today, Ontario spans nearly 28,000 square miles, with a population of over 165,000, one of Southern California's fastest growing cities. Ontario's sun-belt mild weather and 312 days of sunshine, allows people to enjoy the many parks as well as the nearby mountains, beaches, and deserts. The economy of Ontario is very diverse and urban. Although the agricultural fields, orchard and packing houses have since given way to new landmarks such as Ontario Mills, Ontario Convention Center and Ontario International Airport, a few

local wineries have been maintained within the City limits. Wine aficionados still enjoy sampling California's finest at Galleano Winery, Joseph Filippi Winery, and the San Antonio Winery.



#### 7.2 Architectural Context

Western European architectural styles including a variety of styles from Italy, including Italianate and Tuscany vernaculars are characteristic of the traditional wineries of Europe. These European styles, along with other architectural styles and forms from the east coast, were incorporated into the farm houses and other buildings in the area. These regional styles evolved from new interpretations of these historic architecture styles adopting the same character, forms and details.

Architectural styles were reinvented utilizing available indigenous building materials. Plan design and elements such as window sizes and proportions were modified to address local climatic conditions which were warmer and drier. The sunny Southern California climate allowed year round use of outdoor spaces and inspired covered entries and balconies and the incorporation of courtyard building forms. The architectural theme for the Tuscana Village Specific Plan is reflective of the architectural styles found in the historic wineries throughout California, including Italianate and Tuscany styles. These styles are generally characterized by simple building massing and forms and courtyard building configurations enhanced by rich architectural details, recessed windows, stone and ironwork accents and rustic wood window shutters. Roof forms are simple with a low pitch and extended overhangs featuring heavy wooden exposed rafters.

All of the proposed commercial and residential buildings should reflect one of these architectural styles and be detailed with elements that represent the authentic character of that particular style. Together the styles should be designed to create a community character that will be complementary to the other uses within the Specific Plan area and sustainable over time. The business park portion of the Specific Plan may be anticipated to be developed with a more conventional architectural approach utilizing more contemporary forms and materials indicative of office type development. It is not intended that the selected historic styles will be required in the business park area. Instead these land use areas may be designed in a "Transitional Style" and may utilize similar materials and colors in order to be compatible with the commercial and residential areas.

Tuscana Village Design Guidelines
Specific Plan Page 7-2

The Tuscana Village Design Guidelines are to be used as a tool to ensure the character and design quality anticipated for the Community. The Guidelines express objectives and approaches rather than formulas and standards, allowing certain architectural creativity and flexibility. The images and sketches illustrated in the Guidelines are intended to be conceptual in nature and are to be used as general visual aids in understanding the basic architectural design intent. They are not meant to depict specific floor plans or architectural elevations.

These Guidelines are organized into the following sections:

- Architectural Principles
- Design Objectives
- Architectural Styles
- Massing
- Materials & Detailing
- Landscape Design

# 7.3 Architectural Principles for Specific Plan

Architectural design should provide for high quality design and construction.

- Commercial design should consider the overall Community and incorporate appropriate scale and proportion to all buildings.
- Residential design should consider the total context of the site with the incorporation of appropriate scale and proportions of building massing and details.
- The articulation of all sides of the building should be implemented to create visual variety.

The Community should be sustained over time.

- Architectural styles should reflect Southern California interpretations of historic architecture.
- Structures should incorporate genuine architectural details and decorative features.
   Architectural design should relate to human scale.

Tuscana Village Design Guidelines
Specific Plan Page 7-3

- The location of doors and windows should consider indoor/outdoor relationships.
- Building massing over one story should incorporate a variety of form and material.
- Building form and articulation should reinforce entries, common areas and walkways.

Building design should be sensitive to climatic conditions and context.

- Building elevations should consider sun orientation by including shaded and sheltered areas.
- Residential structures should be compatible with, and responsive to, the environmental setting.
- Building designs should incorporate spaces that encourage outdoor use to take advantage of temperate climatic conditions.

Architectural design should incorporate materials and techniques that are cost effective.

- The use of building materials should reflect the implementation of efficient construction methods.
- Building elevations should include compatible window and doors sizes that create a consistent design theme.
- Construction techniques should incorporate the use of standard components and dimensions.

# 7.4 Design Objectives

# 7.4.1 Commercial Design Objectives

Interpret architectural styles that are authentic and reflect the historical character of the region.

• Utilize materials and colors that reinforce the overall design theme.





- Reinforce the visual importance of building entries and gathering areas.
- Provide an overall character that is compatible with the residential areas within the Specific Plan.

# 7.4.2 Residential Design Objectives

Interpret architectural styles that are authentic and reflect the historical character of the region.

- Utilize materials and colors that reinforce the overall design theme.
- Emphasize courtyard building forms that relate strongly to the street and contribute to the livability of that realm.
- Minimize the visual impact of garage doors along the street.



# 7.5 Architectural Styles

The architectural character within the commercial and residential (multi-family) portions of the Specific Plan shall consist of complementary traditional architectural styles. The materials and colors of these styles shall complement the overall design.

Acceptable architectural styles within the Tuscana Village Specific Plan include:

- Italianate;
- Tuscany; and
- Transitional.

The styles selected share similar design attributes and have been selected in response to the following considerations:

- They have a historic relevance.
- They are compatible and complementary.
- They are generally accepted by the market.
- They can be constructed using current building materials and methods.

#### 7.5.1 Italianate

# History and Character

As a classical architectural style of the nineteenth century that synthesized the Italian architecture of the 16th Century with the aesthetics of the Picturesque movement. Ironically, England, not Italy was the location of the early Italianate buildings popularized by John Nash as early as 1804. Italianate architecture has been a major influence throughout the United States as far back as the mid 19th century, and has been incorporated into many civic



Page 7-6

buildings and other prominent buildings in the western states including Southern California. Later, this style began to be used in other buildings of lesser importance because of its pleasing proportions and rich detailing.



Building forms were predominantly plaster with quarried stone accents and flat roofs with balustrade parapets or low sloping clay tile roofs reflecting the architecture styles of Central and Southern Italy.

# Massing:

- Simple massing with varied roof forms.
- Multi-story rectangular building forms.
- Tower elements are common.



## General Design and Materials:

- Stucco finished walls and columns.
- Large, simple roof planes.
- Round masonry columns with decorative accents.
- Heavy stucco chimneys without ornamentation.
- Balustrades or metal railing.
- Deep recessed openings.
- Covered patios /porches.

# Roof Materials and Forms:

- Low-pitched roofs.
- Built up stucco eave details, cornices or corbel supports.
- Decorative stucco accents.
- Hip roofs forms or simple gables.
- Shallow sloped, concrete 'S' tile roofs (to simulate clay tiles).
- Balustrade parapets concealing roof-scapes.

#### **Detail Elements:**

- Barrel/S-Tile profiles.
- Varied stucco finish.
- Use of Quoins.
- Arched openings.
- Formalized windows patterns.







- Pedimented windows and doors.
- Vertical proportioned windows.
- Balconies with wrought iron railing.

## 7.5.2 Tuscany

# History and Character

The Tuscan style is one of the most notable of the classical architectural orders and is considered one of the older, primitive Italian architectural forms that likely predate the Greek Doric and Ionic styles. Characterized by simple design, most notably in the design of unfluted columns without decorative



ornamentation on the capital and base moldings, the definition of this style has been expanded to include the architectural vernaculars of the northern wine regions of Italy.

Tuscan-inspired buildings began appearing at the turn of the 20th Century in Southern California as an interpretation of the Picturesque movement in art where the architecture was less formalized and more responsive to the natural environs. Building forms of predominantly stucco and stone with tile roofs reflecting the architecture styles of Northern Italy took root in informal plan arrangements and massing.

# Massing:

- Simple massing with assembled forms and varied roof forms.
- Rectangular building forms.
- Courtyard buildings are common.

## General Design and Materials:

- Stucco finished walls and columns.
- Large, simple roof planes.



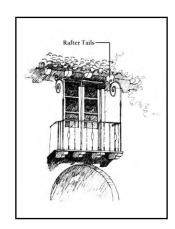
- Extended roof overhangs.
- Simple wood posts or square columns.
- Decorative, but not ornate, stucco chimneys.
- Wrought iron, metal railings and details.
- Shutters as occasional accent.
- Deep recessed openings.
- Covered patios/porches.

# Roof Materials and Forms:

- Low-pitched roofs.
- Stucco eave details or wood rafter tails.
- Gable end roof vents with decorative stucco accents.
- Gables and hip roofs appropriate.
- Clay or concrete curved tile roofs.

#### Detail Elements:

- Barrel/S-Tile profiles.
- Varied stucco finish.
- Shallow pitch roof.
- Exposed rafter tails.
- Arched openings.
- Recessed windows.
- Wrought iron accents.
- Vertical proportioned windows.







#### 7.5.3 Transitional

#### History and Character

Modern construction methods of the 20th century created an evolution of "new" architectural styles on an international basis. These styles were not strictly based on historical or period architectural styles although they may have drawn on certain design elements that may have a historical reference. Many of these styles were reinterpretations of classical styles or forms while others were modernizations of a variety of styles that began to appear in the early American cities.



Paralleling the minimalist interpretations of the International movement which stressed the functional aspect of building design, and contemporary designs that tended to use more simplicity and repetitive geometric forms, transitional building designs utilized minimal ornamentation and created individual building character through the architectural mass and framework and the use of sustainable materials and geometrically arranged widow and fenestration.

# Massing:

- Simple massing with assembled forms and varied roof forms.
- Use of geometric building forms.
- Inset balconies and upper level setbacks enhance the simple massing and provide individual architectural character.



# General Design and Materials:

- Stucco finished walls and columns or metal framework.
- Building materials reinforce structural framework.
- Natural materials for siding or accents encouraged.
- Large, simple roof planes.
- Extended roof overhangs.
- Masonry posts or columns with simple column accents.
- Glass or simple metal railings.

# Roof Materials and Forms:

- Low-pitched roofs, barrel roofs or flat roofs with screening parapets.
- Gables and hip roofs appropriate.
- Shallow sloped, concrete 'S' tile roofs appropriate.
- Metal roofs allowed reinforcing building character
- Stucco eave details or corbelled rafter tails.

#### Detail Elements:

- Varied stucco finish.
- Flat or shallow pitch roof.
- Exposed corbels or rafter tails.
- Arched openings.
- Mitered corner windows allowable.
- Recessed windows encouraged.
- Metal accent-work evident in overhangs, shade structures and railing.

# 7.6 Massing Principles

This section provides suggestions for creating buildings, developments, neighborhoods and street scenes that have interesting and aesthetically pleasing building forms that are proportionate to a human-scale and inviting to the pedestrian.



#### 7.6.1 General Elements

The general elements of building massing include:

- Front Articulation.
- Rear Articulation.
- Roof Form.
- Balconies and Projections.
- Building Offsets/Variable Setbacks.



# *Objectives:*

- Courtyard building forms are encouraged in all residential buildings.
- Incorporate single-story elements at focal elements such as entries, porches, patios etc., whenever feasible.
- Avoid large flat two-story walls
- Vary the face of building walls relative to building setbacks along the street.
- Minimize visual impact of garages and covered parking areas.

#### 7.6.2 Front Articulation

#### Intent:

The front elevation of a building is an important element in creating a quality community. Close attention will be placed on the elevations and how they address the public. Emphasis on location and entry designs, living areas and garages will provide an attractive street appeal. Emphasis on a variety of building massing will create a diverse street scene.

#### Guidelines:

- Building massing should reflect the architectural style.
- Building details such as doors and windows should be in proportion to the overall massing.
- Front elevations for two and three-story buildings should incorporate a single-story

element, if feasible.

- Recessed multi-story elements should create human-scale buildings.
- Massing elements should project enough to avoid elevations that appear to be "tacked on."



#### 7.6.3 Rear and Side Articulation

#### Intent:

Special attention shall be given to the design of those building elevations adjacent to or in close proximity of major roadways, open spaces, or intersections. Whether viewed from distant or close range, massing requirements shall be implemented to ensure positive community character in these conditions. Generally, repetitious elements such as continuous building planes and continuous gable forms are to be avoided.

#### Guidelines:

- Architectural massing and articulation should be consistent with the style of the building.
- Plans shall incorporate projections and/or offsets that extend from the main wall plane.
- Vertical and horizontal plane breaks are encouraged.
- Buildings directly adjacent to arterial roadways, collector roads, intersections, and open spaces should be given particular attention in their rear articulation, contributing positively to these edges.

#### 7.6.4 Accessory Structures

#### Intent:

Accessory structures such as storage or maintenance buildings, detached garages/carports, kiosks, recreation buildings and community buildings should be designed to reinforce the architectural style of the primary buildings.

#### Guidelines:

- Detached structures, associated with a development or neighborhood shall be designed to match the style, detail and massing criteria of the primary buildings.
- Carports or shaded parking features should be designed to reinforce the overall character of the neighborhood. These features should be de-emphasized and should incorporate landscaping to soften and screen the view of parked vehicles.

#### 7.6.5 Roof Form/Pitch

#### Intent:

Roof form is another important design element as it relates to the character of the building, observed from both the external edges and inside the neighborhood.

Variety of roof form along streets creates a positive visual edge. Appropriate massing of roof forms helps to create human scale architecture to the street.

#### Guidelines:

- Roof forms/pitch should reinforce the architectural style of the buildings.
- Roofs shall be composed of simple roof forms.
- Primary roof forms should be gable or hip designs.
- Parapet roof forms are acceptable in commercial building designs in order to screen utilitarian roof elements.
- Flat roof forms are discouraged on residential buildings.
- Roofs shall vary in massing along street scene and open spaces.
- Changes in the primary roof (ridge) orientation are encouraged.

#### 7.6.6 Balconies and Projections

#### Intent:

As part of the overall design of a multi-story building, balconies and projections provide relief and interest at the upper floors. Additionally, these elements create ideal outdoor spaces.

#### Guidelines:

- Balconies and projections shall proportionally complement and be integrated into the overall massing of the building.
- Covered balconies and living area cantilevers should be consistent with the architectural style.
- Balcony railings should be consistent with the architectural style.

#### 7.7 Materials and Details

#### 7.7.1 Introduction

Architectural materials and detailing are central elements to creating quality communities. Appropriate focus should be given to the architectural elements and details.

The general elements comprising the materials and details of a building are:

- Wall Materials/Finishes.
- Doors and Windows.
- Roofing Materials and Details.
- Fascias, Eaves & Rakes.
- Accent Materials.
- Exterior Color.

#### 7.7.2 Wall Materials/Finishes

Walls and fences should be consistent with the architectural style and materials used throughout the Project. Appropriate use of landscaping, change of material, pilasters or posts shall be incorporated to alleviate long expanses of uninterrupted walls or fences. The following attractive, durable materials shall be used.

#### Allowed Materials:

- Stucco.
- Exposed masonry walls (brick, slump block, etc.).
- Exposed wooden rafter tails (may use simulated materials).
- Stone, brick, brick veneers (accent materials).
- Wrought iron.
- Metal or clay accents (may use simulated materials).
- Glass (Business Park Only).

#### Allowed Finishes:

- Stucco finishes appropriate to the architectural style of the home.
- Smooth or sand finishes are encouraged. Heavy or Spanish Lace stucco finishes are prohibited.

#### Guidelines:

- Building materials should reflect the architectural style of the building.
- Masonry elements and accents should reflect building forms and not appear as an applied veneer.
- Accent materials should be wrapped beyond front elevations and should terminate at an inside corner or extended to the location of the lateral fence.

A 6-foot high perimeter split face block wall (Figure 7-1) will be located on the north, south, and west sides of the residential portion of the Specific Plan. In addition, a 6-foot high wrought iron fence (Figure 7-2) will line 'A' Street along the eastern boundary of the residential uses.

#### 7.7.3 Accent Materials

Accent materials promote individuality in each development or neighborhood and ensure diverse character within the Specific Plan area. Accents can be used to reinforce the overall architectural theme.

#### Guidelines:

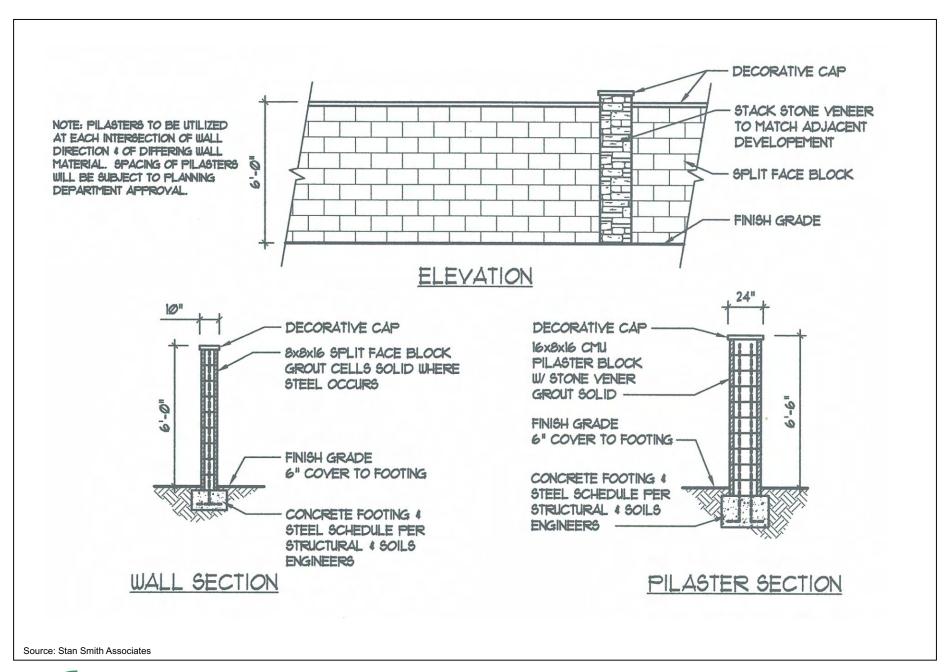
- Accent materials should complement the overall color and style of the building.
- Accent materials shall terminate at inside corners and be wrapped to coincide with an architectural element.
- Architectural trim applied to all elevations should be consistent with front elevation of the building.

#### 7.7.4 Doors and Windows

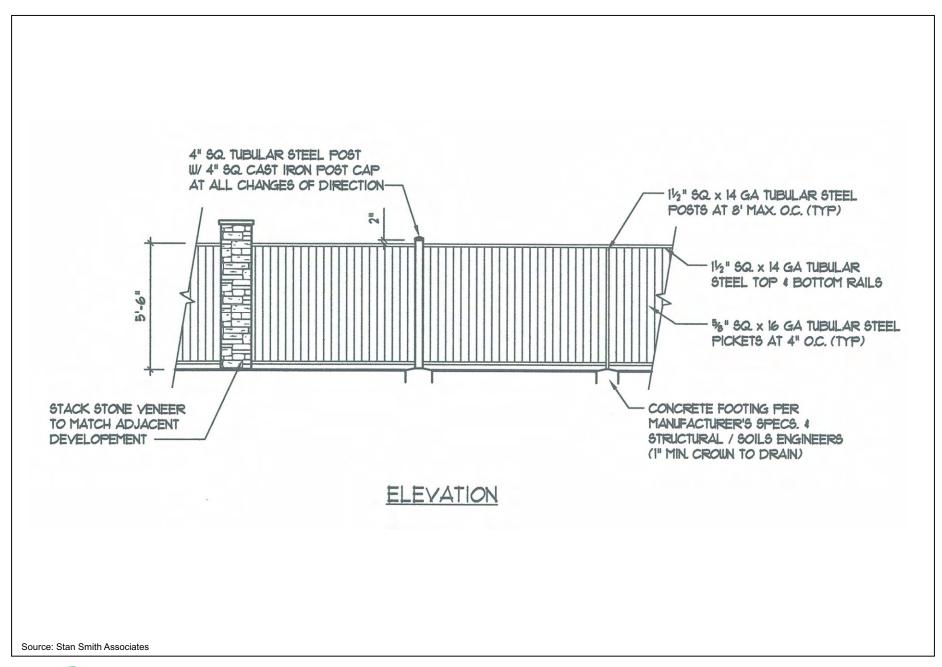
The design and detail of the doors and windows reinforce the architectural style and are key elements in the composition of the exterior elevation of the building.

#### Guidelines:

- Door designs shall be consistent with the architectural style of the development.
- Maximum garage door height shall be 8'.
- Alignment and proportions of windows shall be appropriate to the architectural style of the building.
- All windows (including garage door windows) are to be consistent with the architectural style of the building.
- Divided light windows are encouraged in keeping with the architectural style.
- Highly reflective glazing is not permitted.
- Window details such as shutters, trim surrounds, window boxes and window recesses are encouraged in keeping with the architectural style.









## 7.7.5 Roofing Materials and Details

Roofing materials as well as roof forms, pitch and design details are integral elements that reinforce the intended architectural style of the home. Proposed roofs should be reflective of the architectural style of the building.

#### Guidelines:

- Concrete, clay, flat, or S-tiles are to be used depending on the architectural style.
- Standing seam metal roofs painted in non-reflective neutral colors are allowed in appropriate architectural styles.
- Flat roofs are permitted in the commercial and business park area.
- Flat roofs are permitted on carports in all development areas.
- Eave, fascia and rake proportions are to be appropriate to the architectural style.
- Exposed rafter tails shall be a minimum of 4".
- Wood fascias and rafters shall be painted or stained to reinforce the style of the building.
- Attention shall be given to rake return detail.

#### 7.7.6 Color

#### Intent:

Exterior colors are important to establishing a sense of neighborhood and help reinforce the architectural style of the building. The application of color should reinforce the material that is painted. Colors that are derived from nature are encouraged.

#### Guidelines:

- Color shall contribute to distinguishing the overall architectural style of the building.
- Color and hue variation in adjacent development should be provided to create diversity within the Specific Plan area.
- Roof tile colors should be consistent with the architectural style.
- Colors should reflect the natural hues found in Southern California.

## 7.7.7 Utilitarian Design Elements

#### Intent:

Design elements that are utilitarian in nature should be designed as integral features that support the intended architectural style.

#### Guidelines:

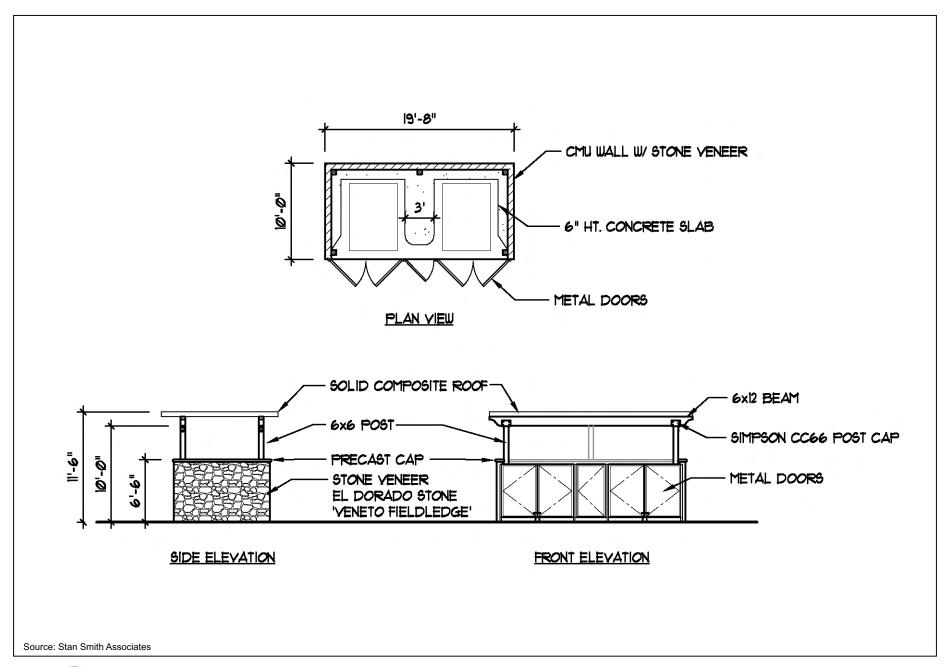
- Exposed gutters and downspouts shall match roof or wall color.
- Faux copper patina is acceptable.
- Unscreened rooftop mechanical equipment is prohibited.
- Air conditioning/heating equipment shall be screened from neighboring views and the street.
- Pool, spa, and water softening equipment shall be screened from neighboring views and the street.
- Meters shall be screened from public view to the extent possible.
- Trash enclosures shall be designed and implemented consistent with Figure 7-3.

# Lighting

All lighting fixtures within the public right of way shall be per City of Ontario standards. Lighting along pedestrian walkways shall not exceed 15 feet in height, and may include a mixture of post lighting and bollards. Examples of approved lighting styles for this use are presented in Figure 7-4. Parking lot lighting shall provide adequate illumination for safety, while not exceeding 25 feet in height. Service area lighting shall be positioned out of public view.

Lighting within the residential portion of the Specific Plan shall be appropriately themed. Lighting used on walls and walkways, including ambient lighting, shall focus light downward to minimize glare.

All final lighting choices shall be submitted for City approval as part of the architectural review package.





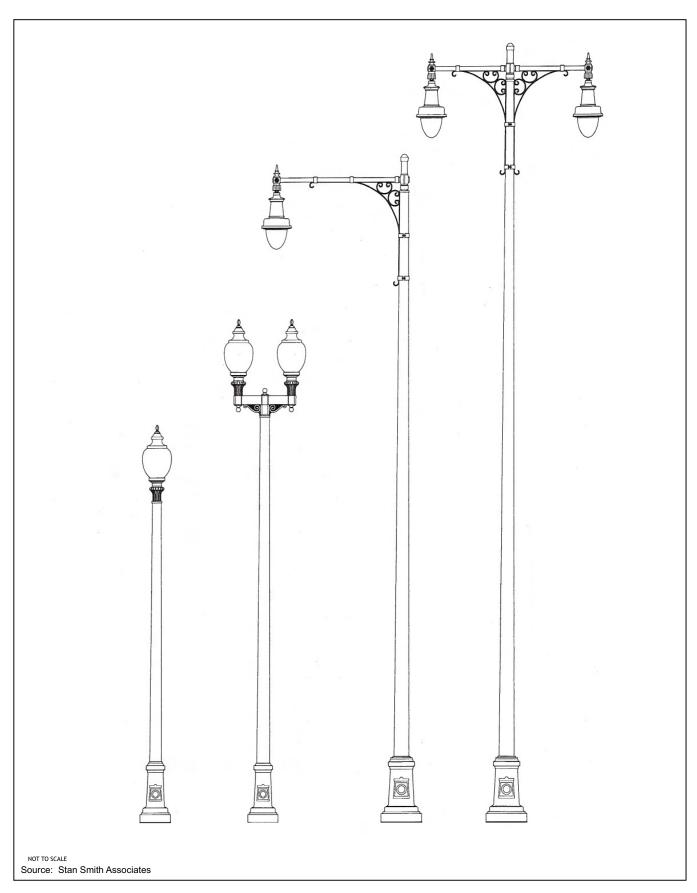




Figure 7-4 Proposed Lighting Styles

## 7.7.8 Signage

The purpose of these sign guidelines is to promote an overall "sense of place" through signage that is architecturally integrated and visually interesting while conforming to applicable code requirements.

#### Sign Program

A Sign Program shall be prepared, subject to review and approval pursuant to the City of Ontario Development Code. A comprehensive Sign Program design package shall be developed for the entire Project that includes, but is not limited to the following signage types:

- Temporary construction signage and fencing;
- Leasing and marketing signage;
- Freeway Identify signs;
- Major and secondary site entries;
- Vehicular way finding signage;
- Parking lot and structure signage;
- Pedestrian way finding signage;
- Festival and seasonal banners;
- Individual building signage;
- Individual business signage;
- Interpretative signage; and
- Restroom signage.

The Sign Program shall identify the following design features for each signage type:

- Location;
- Size;
- Type style and height;
- Materials, colors and finish;
- Method of illumination;
- Mounting height;

- Mounting type; and
- Method of change (tenant signage).

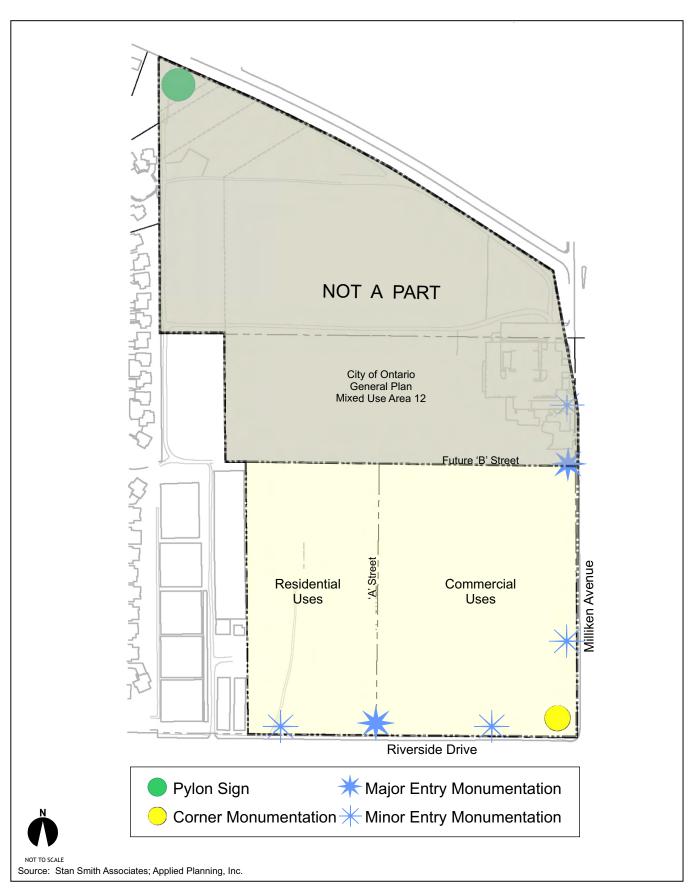
# Sign Design Guidelines

- To identify the Project with elements that convey a distinct character which enhances the collective architectural theme and "story."
- To incorporate an environmental communication system categorized into five groups of sign types: identity, direction, information, regulation, and special amenities.
- To ensure the efficient circulation of vehicle traffic within the site. All traffic regulatory signs shall conform to the California Manual on Uniform Traffic Control Devices and City of Ontario Standards, ensuring that the Police Department can enforce the California Vehicle Code Provisions.
- To clearly identify vehicular entry points and to direct vehicles to designated parking areas.
- To enhance the pedestrian experience through the design of way finding components: directories, directional signage and destination identifiers.
- To establish the tenant sign criteria to serve as the basis of the leaseholder submittal process for the review and approval of tenant sign proposals.
- All signage shall be designed to be durable, minimize maintenance, be energy efficient, and vandal resistant.

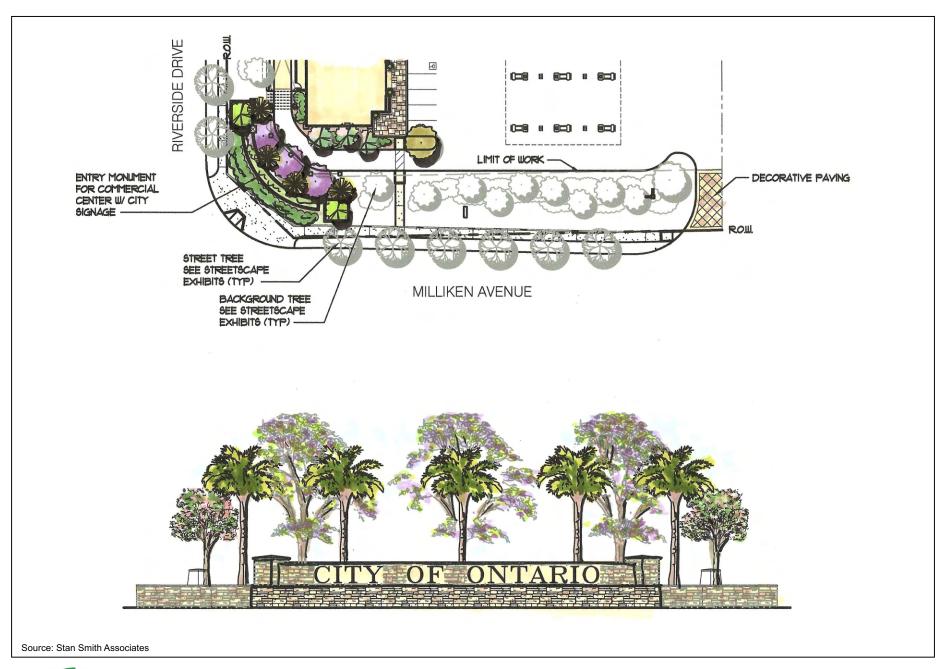
# Non-permitted Sign Construction

The following construction methods are not permitted:

- Letters with exposed fastening and unfinished edges (unless architecturally consistent).
- Paper, cardboard, Styrofoam or untreated cloth.
- Signs employing flashing, flickering, rotating or moving lights (except as approved by owner).
- Can Signs.









#### 7.7.10 Landscape Design

Landscape design serves as the common theme that will create a cohesive integrated development within the Specific Plan area. Additionally, landscaping acts to visually connect the varying land uses of the Specific Plan area. Special attention will be paid to streetscapes, Project entries, and pedestrian linkages/amenities, as discussed below.

#### Streetscapes

The Specific Plan provides for landscaped frontages along both Milliken Avenue and Riverside Drive. Along Milliken Avenue, a 15-foot parkway including and 5-foot sidewalk, followed by a 35-foot landscape setback will be provided. The streetscape along Riverside Drive will include 12-foot parkway and 5-foot sidewalk, followed by a 23-foot landscape setback. Landscaping will include a combination of street trees, background trees, shrubs, and groundcovers. Streetscapes for Milliken Avenue and Riverside Drive are provided as Figures 7-7 and 7-8, respectively.

Internal to the Specific Plan area, 'A' Street will provide an 7-foot landscaped parkway adjacent to 5-foot wide sidewalks while 'B' Street will provide a 7-foot landscaped parkway with a 5-foot sidewalk. These streets will feature decorative paving at crossings. Streetscapes for 'A' Street and 'B' Street are provided as Figures 7-9 and 7-10, respectively.

#### **Entries**

Milliken Avenue will provide one (1) major entry and two (2) minor entries to the Project site. Riverside Drive will provide one (1) major and two (2) minor entries. One of the minor Riverside Drive entries will be a dedicated gated entry to the residential portion of the Specific Plan. Decorative monuments and associated landscaping will be located at each of the entries. Specifically, major entries will feature monuments on both sides of the street, to include pilasters, recessed panels for identification, carriage lights, and large pots. The use of stone, brick, and terra cotta act to further define the Tuscan theme. Minor entries will receive a lesser version of this treatment.

Project entries are illustrated as Figures 7-11 through 7-15.

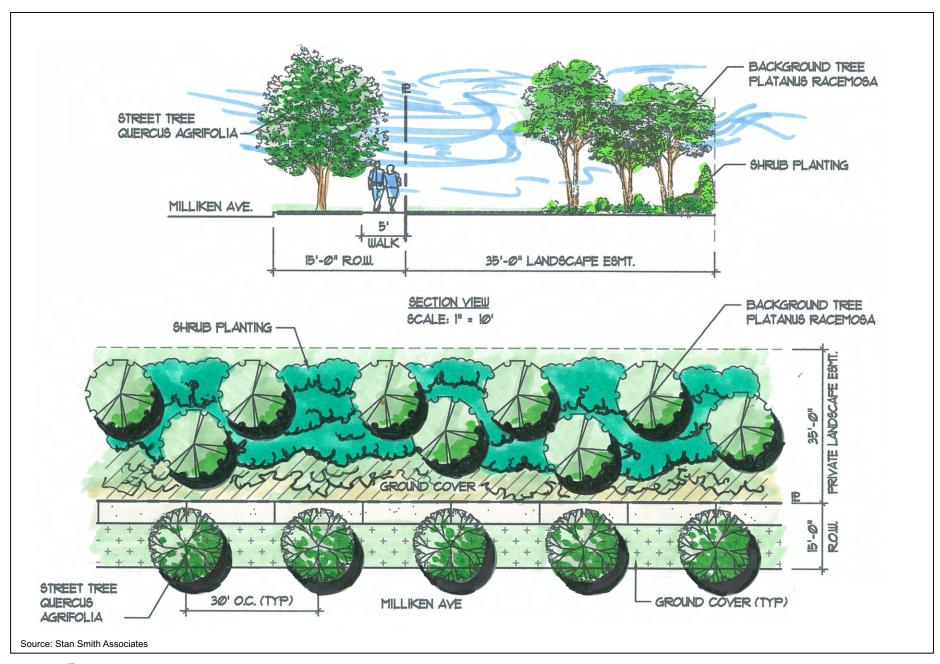




Figure 7-7 Streetscape - Milliken Avenue

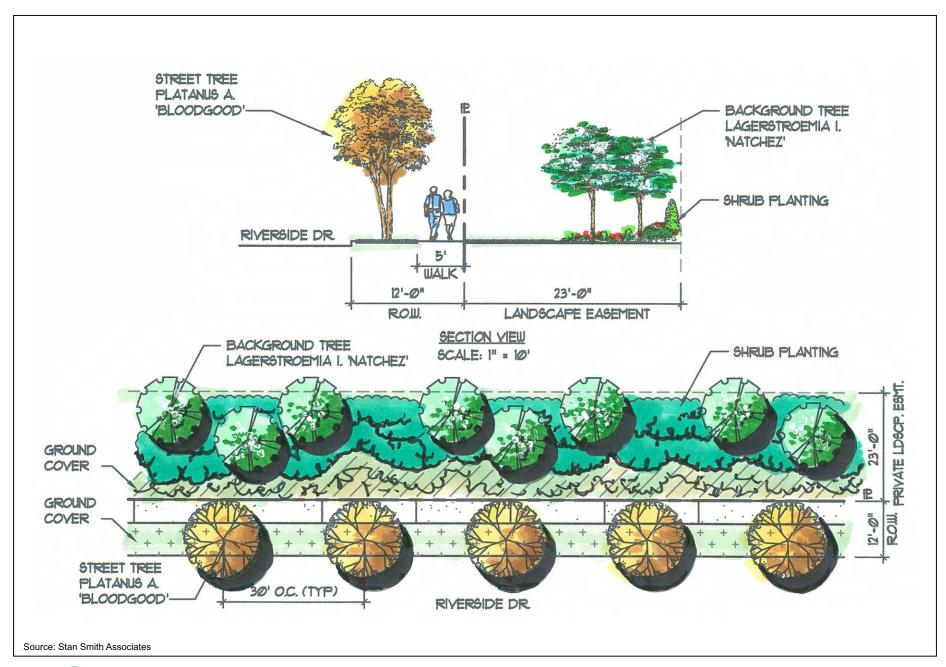
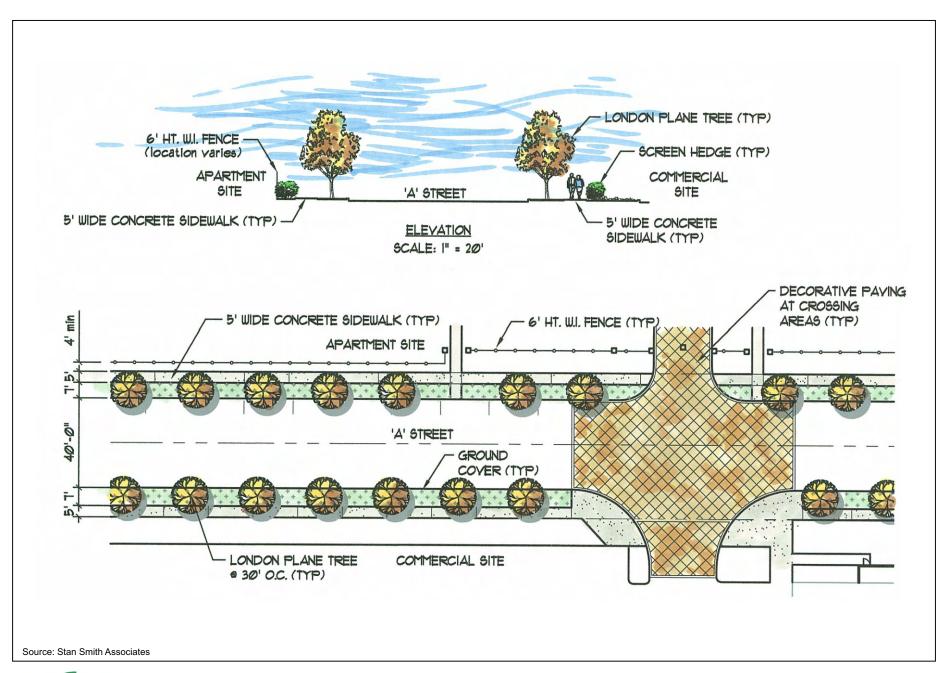
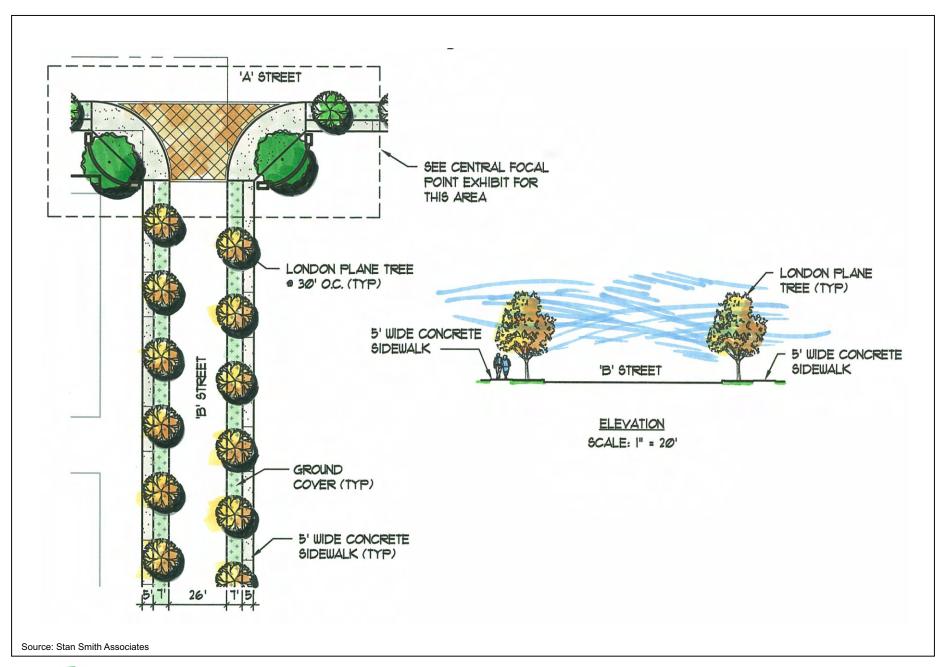




Figure 7-8 Streetscape - Riverside Drive









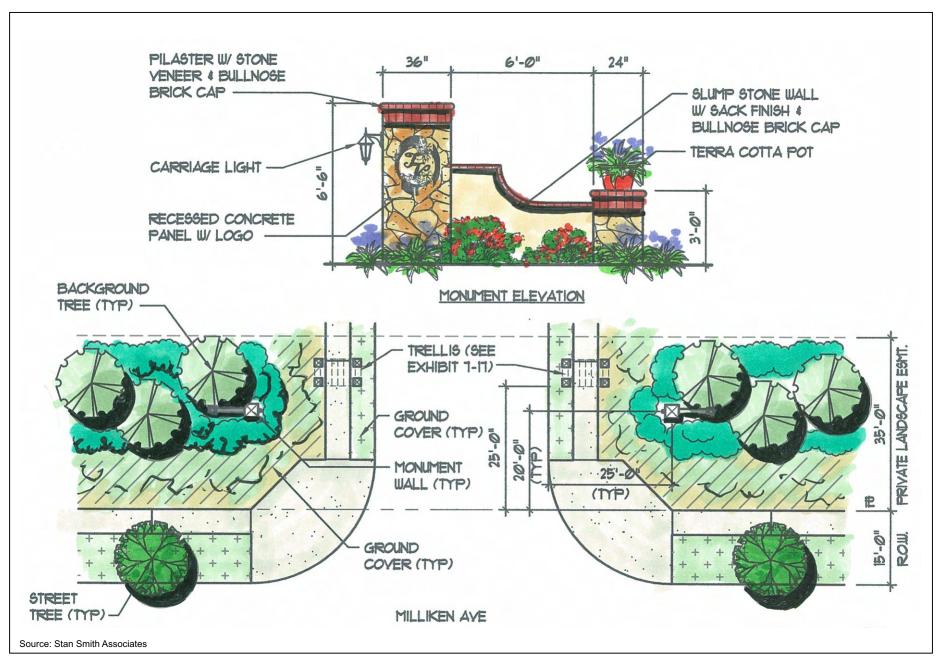




Figure 7-11 Major Entry - Milliken Avenue

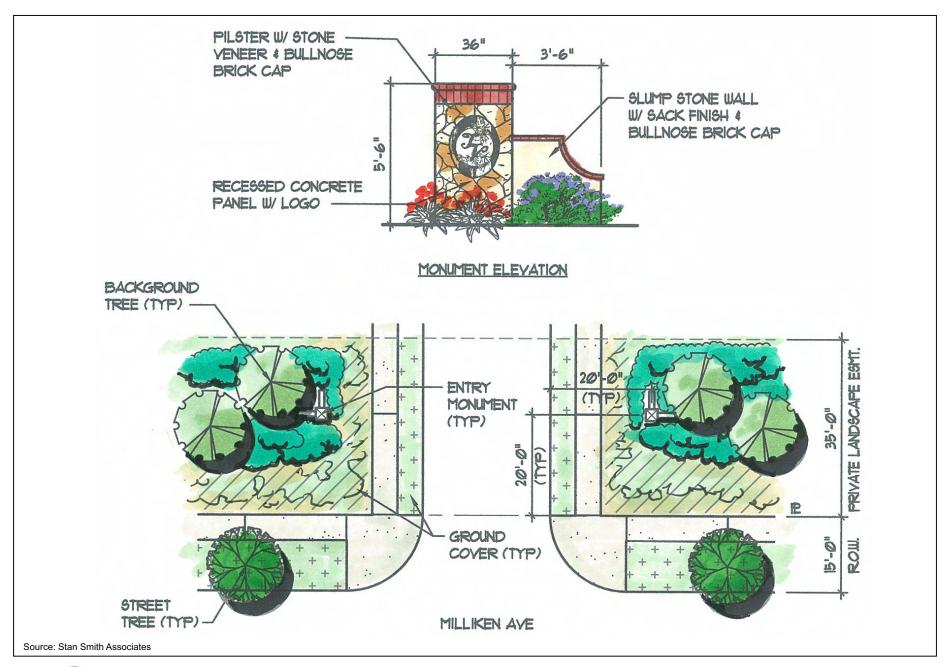




Figure 7-12 Minor Entry - Milliken Avenue

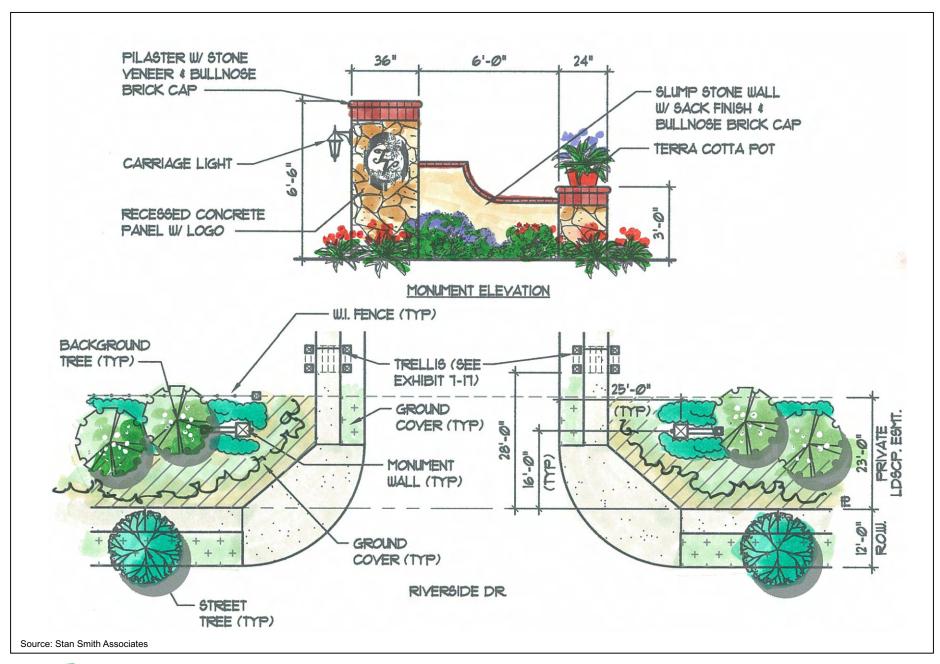




Figure 7-13 Major Entry - Riverside Drive

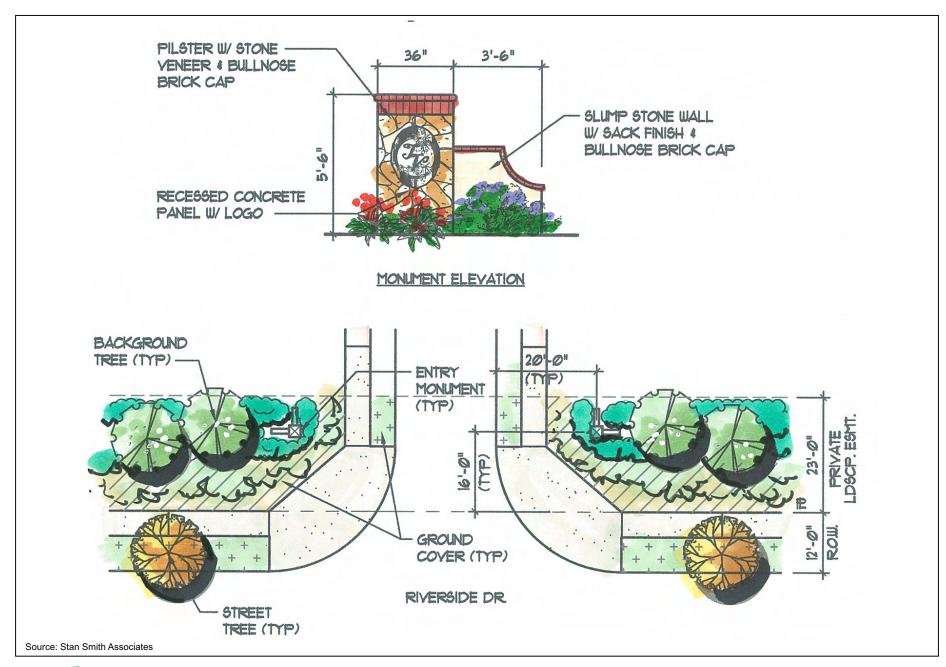
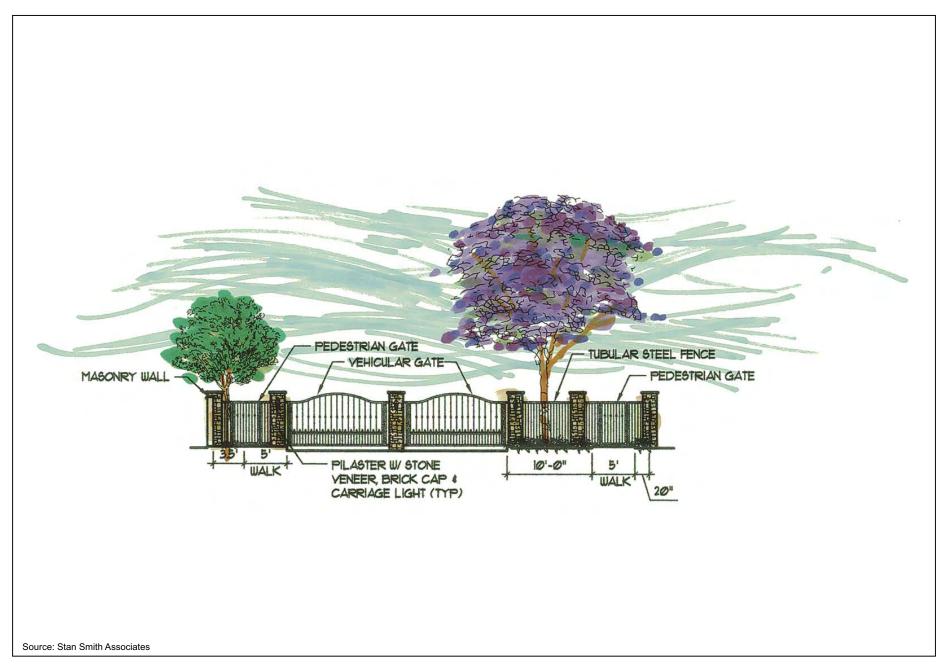




Figure 7-14 Minor Entry - Riverside Drive





## **Pedestrian Linkages**

A mix of deciduous and evergreen trees will create a pedestrian-friendly circulation system. As illustrated in Figure 7-16, the internal pedestrian loop will be extensively landscaped with trellis elements providing gateways at each property line. A typical trellis is provided as Figure 7-17. The northwest corner of the commercial property has been designed to act as a pedestrian "gateway" to the commercial area. This area will feature paving accents and enhanced landscaping.

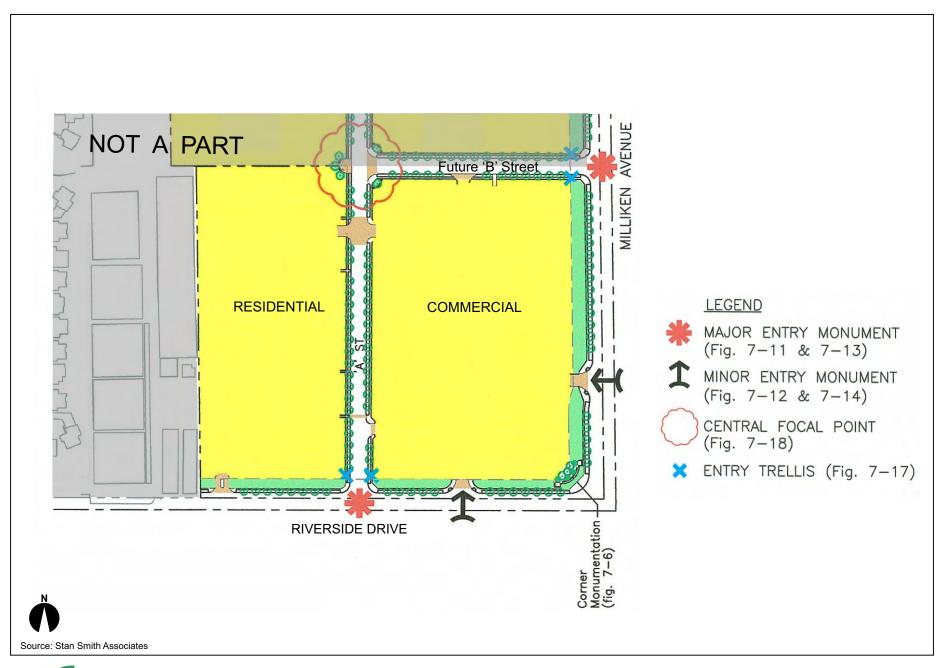
On-site pedestrian linkages also include a Central Focal Point feature that provides connectivity between the various Project land uses. This feature is described below.

#### Central Focal Point

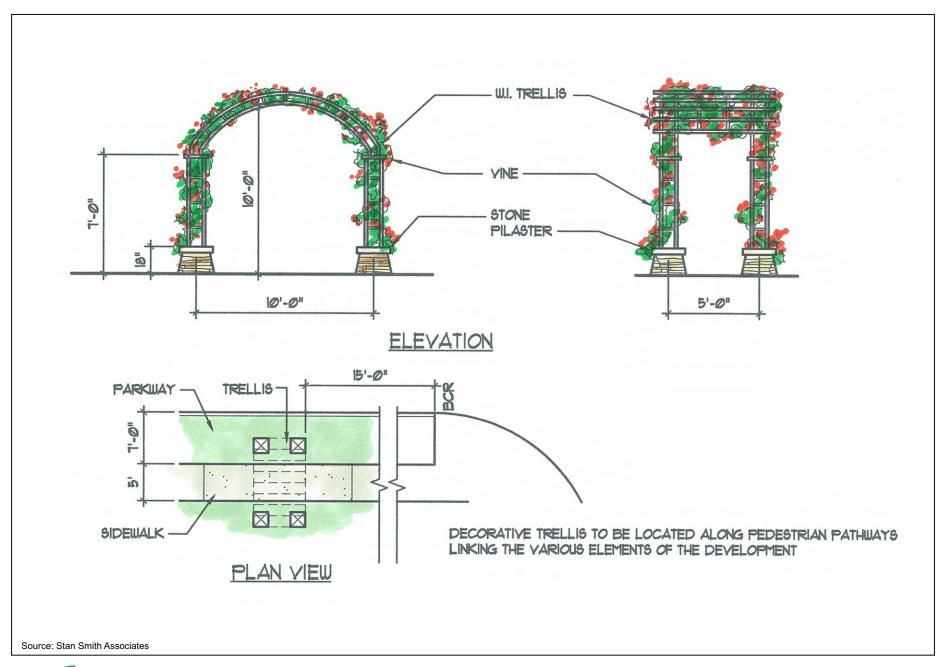
The central focal point is located at the future intersection of 'A' Street and 'B' Street. The central focal point provides a pedestrian-oriented meeting area that is defined by extensive landscaping, seating, and gathering areas. Pedestrian paths from all portions of the Specific Plan converge at this focal point. As such, the central focal point provides an opportunity, through landscape design, to encourage pedestrian movement and synergy among the planned land uses. The central focal point is illustrated as Figure 7-18.

#### **Plant Palette**

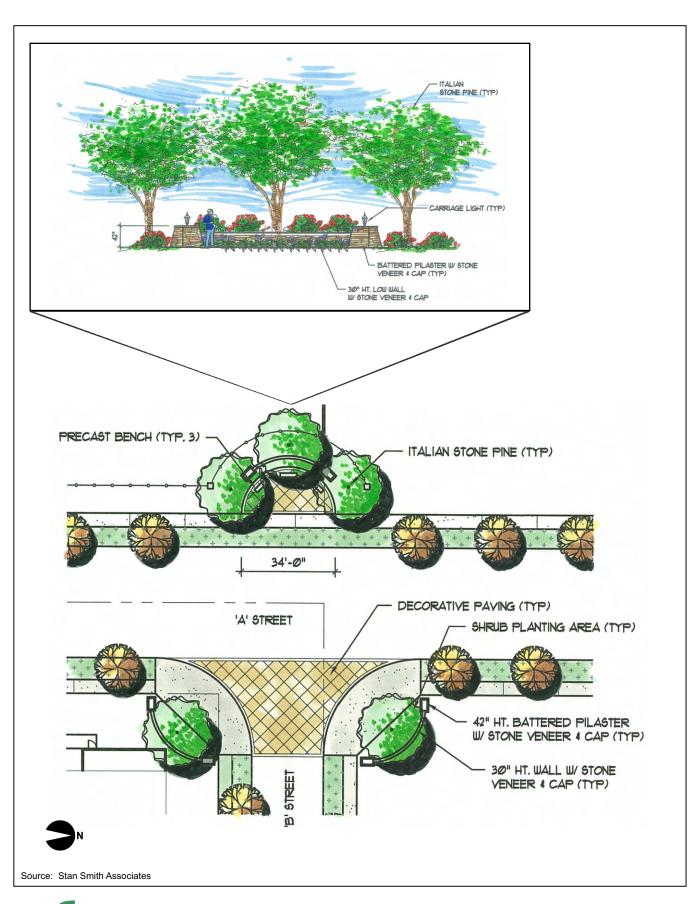
Plant species have been chosen for their drought tolerance, hardiness, and ability to enhance the overall theme of the Project. The Plant Palette includes deciduous and evergreen trees, shrubs, vines, succulents, and ground covers. For added interest, both flowering and non-flowering varieties of each have been included. The Plant Palette is contained within Appendix C to this Specific Plan.













# **Appendix A Climate Action Plan Measures**

# GHG Emissions Reduction Measures (Proposed within the CAP and generally applicable to the Project)

- Require that new development projects in Ontario that require demolition prepare a demolition plan to reduce waste by recycling and/or salvaging a nonhazardous construction and demolition debris.
- Require that new developments design buildings to be energy efficient by siting buildings to take advantage of shade, prevailing winds, landscaping, and sun screening to reduce energy required for cooling.
- Require that cool roofs for non-residential development and cool pavement to be incorporated into the site/building design for new development where appropriate.
- Require all new traffic lights installed be energy efficient traffic signals.
- Require the use of reclaimed water for landscape irrigation in all new development and on public property where such connections are within the service boundaries of the City's reclaimed water system.
- Require all new landscaping irrigation systems installed within the City to be automated, high-efficient irrigation systems to reduce water use and require use of bubbler irrigation; low-angle, low-flow spray heads; or moisture sensors.
- Mitigate climate change by decreasing heat gain from pavement and other hard surfaces associated with infrastructure.
- Reduce heat gain from pavement and other similar hardscaping.
- Provide safe and convenient access for pedestrians and bicyclists to, across, and along major transit priority streets.
- Support and promote the use of low-and zero-emission vehicles, by:
  - Encouraging the necessary infrastructure to facilitate the use of zero- emission vehicles and clean alternative fuels, such as electric vehicle charging facilities and conveniently located alternative fueling stations.
  - Encouraging new construction to include vehicle access to properly wired outdoor receptacles to accommodate ZEV and/or plug in electric hybrids (PHEV).
- Requirements for the use of Energy Star appliances and fixtures in discretionary new development.
- Encourage the performance of energy audits for residential and commercial buildings prior to completion of sale, and that audit results and information about opportunities for energy efficiency improvements be presented to the buyer.
- Require the installation of outdoor electrical outlets on buildings to support the use, where practical, of electric lawn and garden equipment, and other tools that would otherwise be run with small gas engines or portable generators.
- Create and preserve distinct, identifiable neighborhoods whose characteristics support pedestrian travel, especially within, but not limited to, mixed-use and transit-oriented development areas, by:
  - Designing or maintaining neighborhoods where the neighborhood amenities can be reached in approximately five minutes of walking.

# GHG Emissions Reduction Measures (Proposed within the CAP and generally applicable to the Project)

- Encouraging pedestrian-only streets and/or plazas within developments, and destinations that may be reached conveniently by public transportation, walking, or bicycling.
- Providing continuous sidewalks with shade trees and landscape strips to separate pedestrians from traffic.
- Encouraging new development in which primary entrances are pedestrian entrances, with automobile entrances and parking located to the rear.
- Supporting development where automobile access to buildings does not impede pedestrian access, by consolidating driveways between buildings or developing alley access.
- Reduce heat gain from pavement and other similar hardscaping, by:
  - Including low-water landscaping in place of hardscaping around transportation infrastructure and in parking areas.
  - Establishing standards that provide for pervious pavement options.
- Upgrade and maintain the following transit system infrastructure to enhance public use, including:
  - Ensuring transit stops and bus lanes are safe, convenient, clean and efficient.
  - Ensuring transit stops have clearly marked street-level designation, and are accessible.
  - Ensuring transit stops are safe, sheltered, benches are clean, and lighting is adequate.
- Establish standards for new development and redevelopment projects to support bicycle use, including:
  - Providing access for pedestrians and bicyclist to public transportation through construction of dedicated paths, where feasible.
- Requiring new development and redevelopment projects to include bicycle facilities, as appropriate with the new land use, including:
  - Where feasible, promote the construction of weatherproof bicycle facilities and at a minimum, provide bicycle racks or covered, secure parking near the building entrances.
- Require new commercial and retail developments to provide prioritized parking for electric vehicles and vehicles using alternative fuels.
- Support and promote the use of low-and zero-emission vehicles (NEV), by:
  - Encouraging the necessary infrastructure to facilitate the use of zero- emission vehicles and clean alternative fuels, such as electric vehicle charging facilities and conveniently located alternative fueling stations.
  - Encouraging new construction to include vehicle access to properly wired outdoor receptacles to accommodate ZEV and/or plug in electric hybrids (PHEV) vehicles.
- Require that, where feasible, all new buildings be constructed to allow for easy, cost-effective installation of solar energy systems in the future, using such "solar-ready" features as:
  - Optimal roof orientation (between 20 to 55 degrees from the horizontal), with sufficient south-sloped roof surface, where such buildings architecture and construction are designed for sloped roofs.
  - Clear access without obstructions (chimneys, heating and plumbing vents, etc.) on the

# GHG Emissions Reduction Measures (Proposed within the CAP and generally applicable to the Project)

south sloped roof.

- Roof framing that will support the addition of solar panels.
- Installation of electrical conduit to accept solar electric system wiring.
- Installation of plumbing to support a solar hot water system and provision of space for a solar hot water storage tank.
- Install water-efficient landscapes and irrigation, including:
  - Requiring planting drought-tolerant and native species, and covering exposed dirt with moisture-retaining mulch or other materials such as decomposed granite.
  - Requiring the installation of water-efficient irrigation systems and devices, including advanced technology such as moisture-sensing irrigation controls.

# **Appendix B Quantified GHG Emissions Reductions**

CalEEMod Version: CalEEMod.2011.1.1 Date: 4/21/2011

# Tuscana Specific Plan Phase I San Bernardino-South Coast County, Annual

# 1.0 Project Characteristics

# 1.1 Land Usage

Land Uses	Size	Metric
General Office Building	2	1000sqft
Parking Lot	800	Space
Fast Food Restaurant with Drive Thru	2.25	1000sqft
High Turnover (Sit Down Restaurant)	11.03	1000sqft
Apartments Mid Rise	200	Dwelling Unit
Convenience Market With Gas Pumps	12	Pump
Regional Shopping Center	9	1000sqft
Strip Mall	5	1000sqft

# 1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Utility CompanyStatewide Average

Climate Zone 10 Precipitation Freq (Days) 32

#### 1.3 User Entered Comments

Project Characteristics -

Land Use -

Demolition -

Vehicle Trips - Wkday Trip Rates from Project Traffic Study

Woodstoves - No Wood Stoves, only Gas Fireplaces

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

**Energy Mitigation -**

Water Mitigation -

# 2.0 Emissions Summary

## 2.1 Overall Construction

#### **Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr				МТ	/yr					
2011	1.30	8.73	7.24	0.01	0.69	0.49	1.19	0.13	0.49	0.62	0.00	1,128.10	1,128.10	0.10	0.00	1,130.28
2012	5.36	3.08	2.94	0.01	0.24	0.19	0.44	0.01	0.19	0.20	0.00	468.38	468.38	0.04	0.00	469.23
Total	6.66	11.81	10.18	0.02	0.93	0.68	1.63	0.14	0.68	0.82	0.00	1,596.48	1,596.48	0.14	0.00	1,599.51

## **Mitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr				МТ	-/yr					
2011	1.30	8.73	7.24	0.01	0.56	0.49	1.05	0.06	0.49	0.55	0.00	1,128.10	1,128.10	0.10	0.00	1,130.28
2012	5.36	3.08	2.94	0.01	0.24	0.19	0.44	0.01	0.19	0.20	0.00	468.38	468.38	0.04	0.00	469.23
Total	6.66	11.81	10.18	0.02	0.80	0.68	1.49	0.07	0.68	0.75	0.00	1,596.48	1,596.48	0.14	0.00	1,599.51

## 2.2 Overall Operational

## **Unmitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Area	3.25	0.05	4.42	0.00		0.00	0.21		0.00	0.21	21.24	127.44	148.69	0.07	0.00	151.08
Energy	0.04	0.32	0.21	0.00		0.00	0.03		0.00	0.03	0.00	1,144.69	1,144.69	0.03	0.02	1,150.17
Mobile	5.35	14.35	51.05	0.06	6.53	0.50	7.03	0.25	0.50	0.75	0.00	5,897.61	5,897.61	0.34	0.00	5,904.77
Waste						0.00	0.00		0.00	0.00	53.94	0.00	53.94	3.19	0.00	120.89
Water						0.00	0.00		0.00	0.00	0.00	150.81	150.81	0.57	0.02	167.71
Total	8.64	14.72	55.68	0.06	6.53	0.50	7.27	0.25	0.50	0.99	75.18	7,320.55	7,395.74	4.20	0.04	7,494.62

## 2.2 Overall Operational

#### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Area	2.60	0.04	3.17	0.00		0.00	0.03		0.00	0.03	0.00	134.65	134.65	0.01	0.00	135.56
Energy	0.03	0.29	0.19	0.00		0.00	0.02		0.00	0.02	0.00	1,061.35	1,061.35	0.03	0.01	1,066.41
Mobile	5.35	14.35	51.05	0.06	6.53	0.50	7.03	0.25	0.50	0.75	0.00	5,897.61	5,897.61	0.34	0.00	5,904.77
Waste						0.00	0.00	• · · · · · · · · · · · · · ·	0.00	0.00	53.94	0.00	53.94	3.19	0.00	120.89
Water						0.00	0.00	<b>,</b>	0.00	0.00	0.00	142.73	142.73	0.57	0.02	159.59
Total	7.98	14.68	54.41	0.06	6.53	0.50	7.08	0.25	0.50	0.80	53.94	7,236.34	7,290.28	4.14	0.03	7,387.22

## 3.0 Construction Detail

#### **3.1 Mitigation Measures Construction**

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

#### 3.2 Demolition - 2011

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr				MT	/yr					
Off-Road	0.10	0.80	0.46	0.00		0.04	0.04		0.04	0.04	0.00	68.12	68.12	0.01	0.00	68.29
Total	0.10	0.80	0.46	0.00		0.04	0.04		0.04	0.04	0.00	68.12	68.12	0.01	0.00	68.29

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		tons/yr											МТ	/yr		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.59	1.59	0.00	0.00	1.60
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.59	1.59	0.00	0.00	1.60

#### 3.2 Demolition - 2011

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr				MT	/yr					
Off-Road	0.10	0.80	0.46	0.00		0.04	0.04		0.04	0.04	0.00	68.12	68.12	0.01	0.00	68.29
Total	0.10	0.80	0.46	0.00		0.04	0.04		0.04	0.04	0.00	68.12	68.12	0.01	0.00	68.29

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		tons/yr											МТ	/yr		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.59	1.59	0.00	0.00	1.60
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.59	1.59	0.00	0.00	1.60

## 3.3 Site Preparation - 2011

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		tons/yr											МТ	/yr		
Fugitive Dust					0.09	0.00	0.09	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.05	0.45	0.25	0.00		0.02	0.02		0.02	0.02	0.00	36.27	36.27	0.00	0.00	36.36
Total	0.05	0.45	0.25	0.00	0.09	0.02	0.11	0.05	0.02	0.07	0.00	36.27	36.27	0.00	0.00	36.36

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96	0.96	0.00	0.00	0.96
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96	0.96	0.00	0.00	0.96

## 3.3 Site Preparation - 2011

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		tons/yr											МТ	/yr		
Fugitive Dust					0.03	0.00	0.03	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.05	0.45	0.25	0.00		0.02	0.02		0.02	0.02	0.00	36.27	36.27	0.00	0.00	36.36
Total	0.05	0.45	0.25	0.00	0.03	0.02	0.05	0.02	0.02	0.04	0.00	36.27	36.27	0.00	0.00	36.36

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96	0.96	0.00	0.00	0.96
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96	0.96	0.00	0.00	0.96

## 3.4 Grading - 2011

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					0.13	0.00	0.13	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.20	1.66	0.87	0.00		0.08	0.08		0.08	0.08	0.00	147.69	147.69	0.02	0.00	148.03
Total	0.20	1.66	0.87	0.00	0.13	0.08	0.21	0.05	0.08	0.13	0.00	147.69	147.69	0.02	0.00	148.03

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.19	3.19	0.00	0.00	3.19
Total	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.19	3.19	0.00	0.00	3.19

## 3.4 Grading - 2011

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					0.05	0.00	0.05	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.20	1.66	0.87	0.00		0.08	0.08		0.08	0.08	0.00	147.69	147.69	0.02	0.00	148.03
Total	0.20	1.66	0.87	0.00	0.05	0.08	0.13	0.02	0.08	0.10	0.00	147.69	147.69	0.02	0.00	148.03

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.19	3.19	0.00	0.00	3.19
Total	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.19	3.19	0.00	0.00	3.19

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.61	4.02	2.40	0.00		0.28	0.28		0.28	0.28	0.00	366.46	366.46	0.05	0.00	367.50
Total	0.61	4.02	2.40	0.00		0.28	0.28		0.28	0.28	0.00	366.46	366.46	0.05	0.00	367.50

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.13	1.56	0.84	0.00	0.07	0.05	0.12	0.01	0.05	0.06	0.00	195.62	195.62	0.01	0.00	195.74
Worker	0.21	0.24	2.38	0.00	0.40	0.01	0.41	0.02	0.01	0.03	0.00	308.20	308.20	0.02	0.00	308.62
Total	0.34	1.80	3.22	0.00	0.47	0.06	0.53	0.03	0.06	0.09	0.00	503.82	503.82	0.03	0.00	504.36

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.61	4.02	2.40	0.00		0.28	0.28		0.28	0.28	0.00	366.46	366.46	0.05	0.00	367.50
Total	0.61	4.02	2.40	0.00		0.28	0.28		0.28	0.28	0.00	366.46	366.46	0.05	0.00	367.50

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.13	1.56	0.84	0.00	0.07	0.05	0.12	0.01	0.05	0.06	0.00	195.62	195.62	0.01	0.00	195.74
Worker	0.21	0.24	2.38	0.00	0.40	0.01	0.41	0.02	0.01	0.03	0.00	308.20	308.20	0.02	0.00	308.62
Total	0.34	1.80	3.22	0.00	0.47	0.06	0.53	0.03	0.06	0.09	0.00	503.82	503.82	0.03	0.00	504.36

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.28	1.87	1.19	0.00		0.13	0.13		0.13	0.13	0.00	183.23	183.23	0.02	0.00	183.71
Total	0.28	1.87	1.19	0.00		0.13	0.13		0.13	0.13	0.00	183.23	183.23	0.02	0.00	183.71

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.06	0.71	0.39	0.00	0.03	0.02	0.06	0.00	0.02	0.03	0.00	97.89	97.89	0.00	0.00	97.94
Worker	0.09	0.11	1.08	0.00	0.20	0.01	0.21	0.01	0.01	0.01	0.00	150.67	150.67	0.01	0.00	150.86
Total	0.15	0.82	1.47	0.00	0.23	0.03	0.27	0.01	0.03	0.04	0.00	248.56	248.56	0.01	0.00	248.80

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.28	1.87	1.19	0.00		0.13	0.13		0.13	0.13	0.00	183.23	183.23	0.02	0.00	183.71
Total	0.28	1.87	1.19	0.00		0.13	0.13		0.13	0.13	0.00	183.23	183.23	0.02	0.00	183.71

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.06	0.71	0.39	0.00	0.03	0.02	0.06	0.00	0.02	0.03	0.00	97.89	97.89	0.00	0.00	97.94
Worker	0.09	0.11	1.08	0.00	0.20	0.01	0.21	0.01	0.01	0.01	0.00	150.67	150.67	0.01	0.00	150.86
Total	0.15	0.82	1.47	0.00	0.23	0.03	0.27	0.01	0.03	0.04	0.00	248.56	248.56	0.01	0.00	248.80

## 3.6 Paving - 2012

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.06	0.36	0.21	0.00		0.03	0.03		0.03	0.03	0.00	26.46	26.46	0.00	0.00	26.56
Paving	0.01					0.00	0.00	,	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.07	0.36	0.21	0.00		0.03	0.03		0.03	0.03	0.00	26.46	26.46	0.00	0.00	26.56

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.56	1.56	0.00	0.00	1.56
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.56	1.56	0.00	0.00	1.56

## 3.6 Paving - 2012

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.06	0.36	0.21	0.00		0.03	0.03		0.03	0.03	0.00	26.46	26.46	0.00	0.00	26.56
Paving	0.01					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.07	0.36	0.21	0.00		0.03	0.03		0.03	0.03	0.00	26.46	26.46	0.00	0.00	26.56

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.56	1.56	0.00	0.00	1.56
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.56	1.56	0.00	0.00	1.56

# 3.7 Architectural Coating - 2012

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	4.84					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.03	0.02	0.00		0.00	0.00		0.00	0.00	0.00	2.55	2.55	0.00	0.00	2.56
Total	4.85	0.03	0.02	0.00		0.00	0.00		0.00	0.00	0.00	2.55	2.55	0.00	0.00	2.56

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	6.03	6.03	0.00	0.00	6.03
Total	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	6.03	6.03	0.00	0.00	6.03

## 3.7 Architectural Coating - 2012

#### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	4.84					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.03	0.02	0.00		0.00	0.00		0.00	0.00	0.00	2.55	2.55	0.00	0.00	2.56
Total	4.85	0.03	0.02	0.00		0.00	0.00		0.00	0.00	0.00	2.55	2.55	0.00	0.00	2.56

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	6.03	6.03	0.00	0.00	6.03
Total	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	6.03	6.03	0.00	0.00	6.03

#### 4.0 Mobile Detail

## **4.1 Mitigation Measures Mobile**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	5.35	14.35	51.05	0.06	6.53	0.50	7.03	0.25	0.50	0.75	0.00	5,897.61	5,897.61	0.34	0.00	5,904.77
Unmitigated	5.35	14.35	51.05	0.06	6.53	0.50	7.03	0.25	0.50	0.75	0.00	5,897.61	5,897.61	0.34	0.00	5,904.77
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

## **4.2 Trip Summary Information**

	Aver	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,330.00	1,432.00	1214.00	4,423,003	4,423,003
Convenience Market With Gas Pumps	1,834.08	2,453.64	2002.56	1,702,500	1,702,500
Fast Food Restaurant with Drive Thru	1,116.27	1,624.57	1221.12	1,835,274	1,835,274
General Office Building	22.02	4.74	1.96	53,286	53,286
High Turnover (Sit Down Restaurant)	1,402.46	1,746.82	1454.20	2,656,052	2,656,052
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	386.46	449.73	227.16	977,326	977,326
Strip Mall	180.40	180.40	180.40	414,464	414,464
Total	6,271.69	7,891.90	6,301.40	12,061,904	12,061,904

## 4.3 Trip Type Information

		Miles			Trip %	
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Apartments Mid Rise	12.70	7.00	9.50	40.20	19.20	40.60
Convenience Market With Gas Pumps	8.90	13.30	7.40	0.80	80.20	19.00
Fast Food Restaurant with Drive Thru	8.90	13.30	7.40	2.20	78.80	19.00
General Office Building	8.90	13.30	7.40	33.00	48.00	19.00
High Turnover (Sit Down Restaurant)	8.90	13.30	7.40	8.50	72.50	19.00
Parking Lot	8.90	13.30	7.40	0.00	0.00	0.00
Regional Shopping Center	8.90	13.30	7.40	16.30	64.70	19.00
Strip Mall	8.90	13.30	7.40	16.60	64.40	19.00

# 5.0 Energy Detail

## **5.1 Mitigation Measures Energy**

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Electricity Mitigated						0.00	0.00		0.00	0.00	0.00	739.93	739.93	0.02	0.01	743.03
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	782.94	782.94	0.02	0.01	786.22
NaturalGas Mitigated	0.03	0.29	0.19	0.00		0.00	0.02		0.00	0.02	0.00	321.42	321.42	0.01	0.01	323.37
NaturalGas Unmitigated	0.04	0.32	0.21	0.00		0.00	0.03		0.00	0.03	0.00	361.75	361.75	0.01	0.01	363.96
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

## 5.2 Energy by Land Use - NaturalGas

## <u>Unmitigated</u>

	NaturalGas Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU					ton	s/yr							МТ	/yr		
Apartments Mid Rise	3.04998e+006	0.02	0.14	0.06	0.00		0.00	0.01		0.00	0.01	0.00	162.76	162.76	0.00	0.00	163.75
Convenience Market With Gas Pumps	3930.31	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.21	0.21	0.00	0.00	0.21
Fast Food Restaurant with Drive Thru	624398	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00	0.00	33.32	33.32	0.00	0.00	33.52
General Office Building	7300	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.39	0.39	0.00	0.00	0.39
High Turnover (Sit Down Restaurant)		0.02	0.15	0.13	0.00		0.00	0.01		0.00	0.01	0.00	163.34	163.34	0.00	0.00	164.34
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Regional Shopping Center	20880	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	1.11	1.11	0.00	0.00	1.12
Strip Mall	11600	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.62	0.62	0.00	0.00	0.62
Total		0.04	0.32	0.22	0.00		0.00	0.02		0.00	0.02	0.00	361.75	361.75	0.00	0.00	363.95

## 5.2 Energy by Land Use - NaturalGas

## <u>Mitigated</u>

	NaturalGas Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU		tons/yr											МТ	/yr		
Apartments Mid Rise	2.51901e+006	0.01	0.12	0.05	0.00		0.00	0.01		0.00	0.01	0.00	134.42	134.42	0.00	0.00	135.24
Convenience Market With Gas Pumps	3245.9	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.17	0.17	0.00	0.00	0.17
Fast Food Restaurant with Drive Thru	587615	0.00	0.03	0.02	0.00		0.00	0.00		0.00	0.00	0.00	31.36	31.36	0.00	0.00	31.55
General Office Building	5840	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.31	0.31	0.00	0.00	0.31
High Turnover (Sit Down Restaurant)		0.02	0.14	0.12	0.00		0.00	0.01		0.00	0.01	0.00	153.72	153.72	0.00	0.00	154.66
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Regional Shopping Center	17244	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.92	0.92	0.00	0.00	0.93
Strip Mall	9580	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.51	0.51	0.00	0.00	0.51
Total		0.03	0.29	0.19	0.00		0.00	0.02		0.00	0.02	0.00	321.41	321.41	0.00	0.00	323.37

## 5.3 Energy by Land Use - Electricity

## <u>Unmitigated</u>

	Electricity Use	ROG	NOx	СО	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh		ton	s/yr			МТ	Γ/yr	
Apartments Mid Rise	837808					364.25	0.01	0.00	365.78
Convenience Market With Gas Pumps	26529.6					11.53	0.00	0.00	11.58
Fast Food Restaurant with Drive Thru	117900					51.26	0.00	0.00	51.47
General Office Building	21380					9.30	0.00	0.00	9.33
High Turnover (Sit Down Restaurant)						251.28	0.01	0.00	252.33
Parking Lot	0					0.00	0.00	0.00	0.00
Regional Shopping Center	140940					61.28	0.00	0.00	61.53
Strip Mall	78300					34.04	0.00	0.00	34.18
Total						782.94	0.02	0.00	786.20

## 5.3 Energy by Land Use - Electricity

## <u>Mitigated</u>

	Electricity Use	ROG	NOx	СО	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh		ton	s/yr			МТ	Γ/yr	
Apartments Mid Rise	798159					347.01	0.01	0.00	348.47
Convenience Market With Gas Pumps	24632.2					10.71	0.00	0.00	10.75
Fast Food Restaurant with Drive Thru	111092					48.30	0.00	0.00	48.50
General Office Building	19880					8.64	0.00	0.00	8.68
High Turnover (Sit Down Restaurant)						236.77	0.01	0.00	237.76
Parking Lot	0					0.00	0.00	0.00	0.00
Regional Shopping Center	130860					56.89	0.00	0.00	57.13
Strip Mall	72700				, ,	31.61	0.00	0.00	31.74
Total						739.93	0.02	0.00	743.03

## 6.0 Area Detail

## **6.1 Mitigation Measures Area**

Use only Natural Gas Hearths

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	2.60	0.04	3.17	0.00		0.00	0.03		0.00	0.03	0.00	134.65	134.65	0.01	0.00	135.56
Unmitigated	3.25	0.05	4.42	0.00		0.00	0.21		0.00	0.21	21.24	127.44	148.69	0.07	0.00	151.08
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

## 6.2 Area by SubCategory

#### **Unmitigated**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	0.48					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	1.99					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.66	0.02	1.26	0.00		0.00	0.20		0.00	0.20	21.24	122.47	143.71	0.06	0.00	145.99
Landscaping	0.11	0.04	3.17	0.00		0.00	0.02		0.00	0.02	0.00	4.97	4.97	0.01	0.00	5.09
Total	3.24	0.06	4.43	0.00		0.00	0.22		0.00	0.22	21.24	127.44	148.68	0.07	0.00	151.08

# 6.2 Area by SubCategory

#### <u>Mitigated</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							MT	/yr		
Architectural Coating	0.48					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	1.99					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.01	0.00	0.00	0.00		0.00	0.01		0.00	0.01	0.00	129.67	129.67	0.00	0.00	130.46
Landscaping	0.11	0.04	3.17	0.00		0.00	0.02		0.00	0.02	0.00	4.97	4.97	0.01	0.00	5.09
Total	2.59	0.04	3.17	0.00		0.00	0.03		0.00	0.03	0.00	134.64	134.64	0.01	0.00	135.55

#### 7.0 Water Detail

#### 7.1 Mitigation Measures Water

Use Reclaimed Water

Use Water Efficient Irrigation System

	ROG	NOx	СО	SO2	Total CO2	CH4	N2O	CO2e
Category		ton	s/yr			МТ	/yr	
Mitigated					142.73	0.57	0.02	159.59
Unmitigated					150.81	0.57	0.02	167.71
Total	NA	NA	NA	NA	NA	NA	NA	NA

## 7.2 Water by Land Use

## **Unmitigated**

	Indoor/Outdoor Use	ROG	NOx	СО	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		ton	s/yr			МТ	-/yr	
Apartments Mid Rise	13.0308 / 8.21507					113.59	0.40	0.01	125.48
Convenience Market With Gas Pumps	0.125486 / 0.0769109					1.08	0.00	0.00	1.20
Fast Food Restaurant with Drive Thru	0.682951 / 0.0435926					4.08	0.02	0.00	4.70
General Office Building	0.355467 / 0.217867					3.07	0.01	0.00	3.39
High Turnover (Sit Down Restaurant)						20.02	0.10	0.00	23.04
Parking Lot	0/0					0.00	0.00	0.00	0.00
Regional Shopping Center	0.666653 / 0.408594					5.76	0.02	0.00	6.36
Strip Mall	0.370363 / 0.226996					3.20	0.01	0.00	3.53
Total						150.80	0.56	0.01	167.70

## 7.2 Water by Land Use

#### <u>Mitigated</u>

	Indoor/Outdoor Use	ROG	NOx	СО	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		ton	s/yr			МТ	/yr	
Apartments Mid Rise	13.0308 / 6.7537					106.54	0.40	0.01	118.39
Convenience Market With Gas Pumps	0.125486 / 0.0632293					1.02	0.00	0.00	1.13
Fast Food Restaurant with Drive Thru	0.682951 / 0.035838					4.05	0.02	0.00	4.66
General Office Building	0.355467 / 0.179111					2.88	0.01	0.00	3.20
High Turnover (Sit Down Restaurant)						19.84	0.10	0.00	22.85
Parking Lot	0/0					0.00	0.00	0.00	0.00
Regional Shopping Center	0.666653 / 0.335909					5.40	0.02	0.00	6.01
Strip Mall	0.370363 / 0.186616				r	3.00	0.01	0.00	3.34
Total			·			142.73	0.56	0.01	159.58

#### 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

## Category/Year

	ROG	NOx	СО	SO2	Total CO2	CH4	N2O	CO2e
		ton	s/yr			МТ	/yr	
Mitigated					53.94	3.19	0.00	120.89
Unmitigated					53.94	3.19	0.00	120.89
Total	NA	NA	NA	NA	NA	NA	NA	NA

# 8.2 Waste by Land Use

## **Unmitigated**

	Waste Disposed	ROG	NOx	СО	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons		ton	s/yr			МТ	√yr	
Apartments Mid Rise	92					18.68	1.10	0.00	41.85
Fast Food Restaurant with Drive Thru	25.92					5.26	0.31	0.00	11.79
General Office Building	1.86					0.38	0.02	0.00	0.85
High Turnover (Sit Down Restaurant)						26.64	1.57	0.00	59.71
Parking Lot	0					0.00	0.00	0.00	0.00
Regional Shopping Center	9.45					1.92	0.11	0.00	4.30
Strip Mall	5.25					1.07	0.06	0.00	2.39
Total						53.95	3.17	0.00	120.89

## 8.2 Waste by Land Use

## <u>Mitigated</u>

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e			
Land Use	tons		ton	s/yr		MT/yr						
Apartments Mid Rise	92					18.68	1.10	0.00	41.85			
Fast Food Restaurant with Drive Thru	25.92					5.26	0.31	0.00	11.79			
General Office Building	1.86					0.38	0.02	0.00	0.85			
High Turnover (Sit Down Restaurant)						26.64	1.57	0.00	59.71			
Parking Lot	0				• •	0.00	0.00	0.00	0.00			
Regional Shopping Center	9.45					1.92	0.11	0.00	4.30			
Strip Mall	5.25				,	1.07	0.06	0.00	2.39			
Total	·					53.95	3.17	0.00	120.89			

## 9.0 Vegetation

CalEEMod Version: CalEEMod.2011.1.1 Date: 4/22/2011

# Tuscana Specific Plan Phase I & II San Bernardino-South Coast County, Annual

## 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric				
General Office Building	69	1000sqft				
General Office Building	450.51	1000sqft				
General Office Building	242.82	1000sqft				
Parking Lot	800	Space				
Fast Food Restaurant with Drive Thru	5.75	1000sqft				
High Turnover (Sit Down Restaurant)	11.03	1000sqft				
Apartments Mid Rise	200	Dwelling Unit				
Convenience Market With Gas Pumps	12	Pump				
Regional Shopping Center	27	1000sqft				
Regional Shopping Center	90.1	1000sqft				
Regional Shopping Center	48.13	1000sqft				

#### 1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Utility CompanyStatewide Average

#### 1.3 User Entered Comments

Project Characteristics -

Land Use -

Construction Phase - Operations for Project Buildout Only

Demolition -

Vehicle Trips - Wkday Trip Rates from Project Traffic Study

Woodstoves - No Wood Stoves, only Gas Fireplaces

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

**Energy Mitigation -**

Water Mitigation -

## 2.0 Emissions Summary

## 2.2 Overall Operational

## **Unmitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr								MT/yr							
Area	7.60	0.05	4.29	0.00		0.00	0.21		0.00	0.21	21.24	127.44	148.69	0.07	0.00	151.06
Energy	0.06	0.52	0.38	0.00		0.00	0.04		0.00	0.04	0.00	6,006.44	6,006.44	0.18	0.07	6,032.72
Mobile	8.39	30.15	69.40	0.29	28.05	1.41	29.47	0.46	1.23	1.69	0.00	21,697.68	21,697.68	0.54	0.00	21,709.05
Waste						0.00	0.00		0.00	0.00	237.90	0.00	237.90	14.06	0.00	533.14
Water						0.00	0.00		0.00	0.00	0.00	1,420.46	1,420.46	5.11	0.14	1,571.75
Total	16.05	30.72	74.07	0.29	28.05	1.41	29.72	0.46	1.23	1.94	259.14	29,252.02	29,511.17	19.96	0.21	29,997.72

## 2.2 Overall Operational

#### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr								MT/yr							
Area	6.95	0.03	3.03	0.00		0.00	0.03		0.00	0.03	0.00	134.65	134.65	0.01	0.00	135.54
Energy	0.05	0.46	0.33	0.00		0.00	0.04		0.00	0.04	0.00	5,561.00	5,561.00	0.16	0.07	5,585.27
Mobile	8.39	30.15	69.40	0.29	28.05	1.41	29.47	0.46	1.23	1.69	0.00	21,697.68	21,697.68	0.54	0.00	21,709.05
Waste						0.00	0.00	• · · · · · · · · · · · · · ·	0.00	0.00	237.90	0.00	237.90	14.06	0.00	533.14
Water						0.00	0.00	• · · · · · · · · · · · · · ·	0.00	0.00	0.00	1,335.26	1,335.26	5.11	0.14	1,486.19
Total	15.39	30.64	72.76	0.29	28.05	1.41	29.54	0.46	1.23	1.76	237.90	28,728.59	28,966.49	19.88	0.21	29,449.19

#### 3.0 Construction Detail

#### **3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

#### 4.0 Mobile Detail

#### **4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	8.39	30.15	69.40	0.29	28.05	1.41	29.47	0.46	1.23	1.69	0.00	21,697.68	21,697.68	0.54	0.00	21,709.05
Unmitigated	8.39	30.15	69.40	0.29	28.05	1.41	29.47	0.46	1.23	1.69	0.00	21,697.68	21,697.68	0.54	0.00	21,709.05
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

#### **4.2 Trip Summary Information**

	Aver	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,330.00	1,432.00	1214.00	4,423,003	4,423,003
Convenience Market With Gas Pumps	1,834.08	2,453.64	2002.56	1,702,500	1,702,500
Fast Food Restaurant with Drive Thru	2,852.69	4,151.67	3120.64	4,690,144	4,690,144
General Office Building	759.69	163.53	67.62	1,838,355	1,838,355
General Office Building	4,960.12	1,067.71	441.50	12,002,859	12,002,859
General Office Building	2,673.45	575.48	237.96	6,469,411	6,469,411
High Turnover (Sit Down Restaurant)	1,402.46	1,746.82	1454.20	2,656,052	2,656,052
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	1,159.38	1,349.19	681.48	2,931,977	2,931,977
Regional Shopping Center	3,868.89	4,502.30	2274.12	9,784,116	9,784,116

	Avei	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Regional Shopping Center	2,066.70	2,405.06	1214.80	5,226,521	5,226,521
Total	22,907.46	19,847.40	12,708.88	51,724,938	51,724,938

### 4.3 Trip Type Information

		Miles			Trip %	
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Apartments Mid Rise	12.70	7.00	9.50	40.20	19.20	40.60
Convenience Market With Gas Pumps	8.90	13.30	7.40	0.80	80.20	19.00
Fast Food Restaurant with Drive Thru	8.90	13.30	7.40	2.20	78.80	19.00
General Office Building	8.90	13.30	7.40	33.00	48.00	19.00
General Office Building	8.90	13.30	7.40	33.00	48.00	19.00
General Office Building	8.90	13.30	7.40	33.00	48.00	19.00
High Turnover (Sit Down Restaurant)	8.90	13.30	7.40	8.50	72.50	19.00
Parking Lot	8.90	13.30	7.40	0.00	0.00	0.00
Regional Shopping Center	8.90	13.30	7.40	16.30	64.70	19.00
Regional Shopping Center	8.90	13.30	7.40	16.30	64.70	19.00
Regional Shopping Center	8.90	13.30	7.40	16.30	64.70	19.00

### 5.0 Energy Detail

#### **5.1 Mitigation Measures Energy**

Exceed Title 24

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Electricity Mitigated						0.00	0.00		0.00	0.00	0.00	5,056.86	5,056.86	0.15	0.06	5,078.07
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	5,426.03	5,426.03	0.16	0.06	5,448.79
NaturalGas Mitigated	0.05	0.46	0.33	0.00		0.00	0.04		0.00	0.04	0.00	504.14	504.14	0.01	0.01	507.20
NaturalGas Unmitigated	0.06	0.52	0.38	0.00		0.00	0.04		0.00	0.04	0.00	580.40	580.40	0.01	0.01	583.94
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

### 5.2 Energy by Land Use - NaturalGas

#### <u>Unmitigated</u>

	NaturalGas Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU					ton	s/yr							МТ	-/yr		
Apartments Mid Rise	3.04998e+006	0.02	0.14	0.06	0.00		0.00	0.01		0.00	0.01	0.00	162.76	162.76	0.00	0.00	163.75
Convenience Market With Gas Pumps	3930.31	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.21	0.21	0.00	0.00	0.21
Fast Food Restaurant with Drive Thru	1.59568e+006	0.01	0.08	0.07	0.00		0.00	0.01		0.00	0.01	0.00	85.15	85.15	0.00	0.00	85.67
General Office Building	1.64436e+006	0.01	0.08	0.07	0.00		0.00	0.01		0.00	0.01	0.00	87.75	87.75	0.00	0.00	88.28
General Office Building	251850	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	13.44	13.44	0.00	0.00	13.52
General Office Building	886293	0.00	0.04	0.04	0.00		0.00	0.00		0.00	0.00	0.00	47.30	47.30	0.00	0.00	47.58
High Turnover (Sit Down Restaurant)		0.02	0.15	0.13	0.00		0.00	0.01		0.00	0.01	0.00	163.34	163.34	0.00	0.00	164.34
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Regional Shopping Center	111662	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00	0.00	5.96	5.96	0.00	0.00	5.99
Regional Shopping Center	209032	0.00	0.01	0.01	0.00	 	0.00	0.00		0.00	0.00	0.00	11.15	11.15	0.00	0.00	11.22
Regional Shopping Center	62640	0.00	0.00	0.00	0.00	 	0.00	0.00		0.00	0.00	0.00	3.34	3.34	0.00	0.00	3.36
Total		0.06	0.52	0.39	0.00		0.00	0.04		0.00	0.04	0.00	580.40	580.40	0.00	0.00	583.92

### 5.2 Energy by Land Use - NaturalGas

#### <u>Mitigated</u>

	NaturalGas Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU					ton	s/yr							МТ	/yr		
Apartments Mid Rise	2.51901e+006	0.01	0.12	0.05	0.00		0.00	0.01		0.00	0.01	0.00	134.42	134.42	0.00	0.00	135.24
Convenience Market With Gas Pumps	3245.9	0.00	0.00	0.00	0.00		0.00	0.00	: : :	0.00	0.00	0.00	0.17	0.17	0.00	0.00	0.17
Fast Food Restaurant with Drive Thru	1.50168e+006	0.01	0.07	0.06	0.00		0.00	0.01		0.00	0.01	0.00	80.14	80.14	0.00	0.00	80.62
General Office Building	1.31549e+006	0.01	0.06	0.05	0.00		0.00	0.00		0.00	0.00	0.00	70.20	70.20	0.00	0.00	70.63
General Office Building	201480	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	10.75	10.75	0.00	0.00	10.82
General Office Building	709034	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00	0.00	37.84	37.84	0.00	0.00	38.07
High Turnover (Sit Down Restaurant)		0.02	0.14	0.12	0.00		0.00	0.01		0.00	0.01	0.00	153.72	153.72	0.00	0.00	154.66
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Regional Shopping Center	172632	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	9.21	9.21	0.00	0.00	9.27
Regional Shopping Center	51732	0.00	0.00	0.00	0.00	 	0.00	0.00	·	0.00	0.00	0.00	2.76	2.76	0.00	0.00	2.78
Regional Shopping Center	92217.1	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	4.92	4.92	0.00	0.00	4.95
Total		0.05	0.44	0.33	0.00		0.00	0.03		0.00	0.03	0.00	504.13	504.13	0.00	0.00	507.21

### 5.3 Energy by Land Use - Electricity

#### <u>Unmitigated</u>

	Electricity Use	ROG	NOx	СО	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh		ton	s/yr			МТ	-/yr	
Apartments Mid Rise	837808					364.25	0.01	0.00	365.78
Convenience Market With Gas Pumps	26529.6					11.53	0.00	0.00	11.58
Fast Food Restaurant with Drive Thru	301300					130.99	0.00	0.00	131.54
General Office Building	2.59575e+006					1,128.54	0.03	0.01	1,133.27
General Office Building	4.81595e+006					2,093.80	0.06	0.02	2,102.58
General Office Building	737610					320.69	0.01	0.00	322.03
High Turnover (Sit Down Restaurant)						251.28	0.01	0.00	252.33
Parking Lot	0					0.00	0.00	0.00	0.00
Regional Shopping Center	1.41097e+006					613.44	0.02	0.01	616.01
Regional Shopping Center	722020					183.83	0.01	0.00	184.60
Regional Shopping Center	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				i i	327.69	0.01	0.00	329.06
Total						5,426.04	0.16	0.04	5,448.78

#### 5.3 Energy by Land Use - Electricity

#### <u>Mitigated</u>

	Electricity Use	ROG	NOx	СО	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh		ton	s/yr			МТ	/yr	
Apartments Mid Rise	798159					347.01	0.01	0.00	348.47
Convenience Market With Gas Pumps	24632.2					10.71	0.00	0.00	10.75
Fast Food Restaurant with Drive Thru	283901					123.43	0.00	0.00	123.95
General Office Building	2.41363e+006					1,049.36	0.03	0.01	1,053.76
General Office Building	4.47807e+006					1,946.90	0.06	0.02	1,955.07
General Office Building	685860					298.19	0.01	0.00	299.44
High Turnover (Sit Down Restaurant)	544595					236.77	0.01	0.00	237.76
Parking Lot	0					0.00	0.00	0.00	0.00
Regional Shopping Center	1.31005e+006					569.56	0.02	0.01	571.95
Regional Shopping Center	392580		r		,	170.68	0.01	0.00	171.40
Regional Shopping Center	699810					304.25	0.01	0.00	305.53
Total	·	·	·	·		5,056.86	0.16	0.04	5,078.08

#### 6.0 Area Detail

#### **6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use only Natural Gas Hearths

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	6.95	0.03	3.03	0.00		0.00	0.03		0.00	0.03	0.00	134.65	134.65	0.01	0.00	135.54
Unmitigated	7.60	0.05	4.29	0.00		0.00	0.21		0.00	0.21	21.24	127.44	148.69	0.07	0.00	151.06
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

#### 6.2 Area by SubCategory

#### **Unmitigated**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	1.54					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	5.30					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.66	0.02	1.26	0.00		0.00	0.20		0.00	0.20	21.24	122.47	143.71	0.06	0.00	145.99
Landscaping	0.09	0.03	3.03	0.00		0.00	0.02		0.00	0.02	0.00	4.97	4.97	0.00	0.00	5.07
Total	7.59	0.05	4.29	0.00		0.00	0.22		0.00	0.22	21.24	127.44	148.68	0.06	0.00	151.06

#### **Mitigated**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	1.54					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	5.30					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.01	0.00	0.00	0.00		0.00	0.01		0.00	0.01	0.00	129.67	129.67	0.00	0.00	130.46
Landscaping	0.09	0.03	3.03	0.00		0.00	0.02		0.00	0.02	0.00	4.97	4.97	0.00	0.00	5.07
Total	6.94	0.03	3.03	0.00		0.00	0.03		0.00	0.03	0.00	134.64	134.64	0.00	0.00	135.53

#### 7.0 Water Detail

### 7.1 Mitigation Measures Water

Use Reclaimed Water
Use Water Efficient Irrigation System

	ROG	NOx	СО	SO2	Total CO2	CH4	N2O	CO2e		
Category		tons/yr				MT/yr				
Mitigated					1,335.26	5.11	0.14	1,486.19		
Unmitigated					1,420.46	5.11	0.14	1,571.75		
Total	NA	NA	NA	NA	NA	NA	NA	NA		

#### 7.2 Water by Land Use

#### **Unmitigated**

	Indoor/Outdoor Use	ROG	NOx	СО	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		ton	s/yr		MT/yr			
Apartments Mid Rise	13.0308 / 8.21507					113.59	0.40	0.01	125.48
Convenience Market With Gas Pumps	0.125486 / 0.0769109					1.08	0.00	0.00	1.20
Fast Food Restaurant with Drive Thru	1.74532 / 0.111403					10.44	0.05	0.00	12.01
General Office Building	135.492 / 83.0433					1,169.66	4.17	0.12	1,293.21
High Turnover (Sit Down Restaurant)						20.02	0.10	0.00	23.04
Parking Lot	0/0					0.00	0.00	0.00	0.00
Regional Shopping Center	12.239 / 7.50132		1	1		105.66	0.38	0.01	116.82
Total	·	·				1,420.45	5.10	0.14	1,571.76

#### 7.2 Water by Land Use

#### <u>Mitigated</u>

	Indoor/Outdoor Use	ROG	NOx	СО	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		ton	s/yr			МП	/yr	
Apartments Mid Rise	13.0308 / 6.7537					106.54	0.40	0.01	118.39
Convenience Market With Gas Pumps	0.125486 / 0.0632293					1.02	0.00	0.00	1.13
Fast Food Restaurant with Drive Thru	1.74532 / 0.0915859					10.34	0.05	0.00	11.91
General Office Building	135.492 / 68.2708					1,098.31	4.17	0.12	1,221.56
High Turnover (Sit Down Restaurant)						19.84	0.10	0.00	22.85
Parking Lot	0/0					0.00	0.00	0.00	0.00
Regional Shopping Center	12.239 / 6.16692					99.21	0.38	0.01	110.34
Total		·				1,335.26	5.10	0.14	1,486.18

#### 8.0 Waste Detail

#### 8.1 Mitigation Measures Waste

#### Category/Year

	ROG	NOx	СО	SO2	Total CO2	CH4	N2O	CO2e
		ton	s/yr					
Mitigated					237.90	14.06	0.00	533.14
Unmitigated					237.90	14.06	0.00	533.14
Total	NA	NA	NA	NA	NA	NA	NA	NA

### 8.2 Waste by Land Use

#### **Unmitigated**

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons		ton	s/yr			МТ	Γ/yr	
Apartments Mid Rise	92					18.68	1.10	0.00	41.85
Fast Food Restaurant with Drive Thru	66.23					13.44	0.79	0.00	30.13
General Office Building	708.97					143.91	8.51	0.00	322.52
High Turnover (Sit Down Restaurant)						26.64	1.57	0.00	59.71
Parking Lot	0					0.00	0.00	0.00	0.00
Regional Shopping Center	173.49					35.22	2.08	0.00	78.92
Total						237.89	14.05	0.00	533.13

#### 8.2 Waste by Land Use

#### <u>Mitigated</u>

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons		ton	s/yr		MT/yr			
Apartments Mid Rise	92					18.68	1.10	0.00	41.85
Fast Food Restaurant with Drive Thru	66.23					13.44	0.79	0.00	30.13
General Office Building	708.97					143.91	8.51	0.00	322.52
High Turnover (Sit Down Restaurant)						26.64	1.57	0.00	59.71
Parking Lot	0					0.00	0.00	0.00	0.00
Regional Shopping Center	173.49					35.22	2.08	0.00	78.92
Total	·	·				237.89	14.05	0.00	533.13

### 9.0 Vegetation

# **Appendix C Plant Palette**

#### **Plant Legend**

#### Botanical Name Common Name

#### **Trees**

Chitalpa tashkentensis Chitalpa

Cupressus sempervirens 'Tiny Towers'
Geijera parviflora
Gleditsia triacanthos 'Shademaster'
Tiny Towers Italian Cypress
Australian Willow, Wilga
Shademaster Honey Locust

Jacaranda mimosifolia Jacaranda

Juniperus scopulorum 'Skyrocket' Skyrocket Juniper

Lagerstroemia indica (Varieties)

Magnolia grandiflora

Southern Magnolia, Bull Bay

Melaleuca quinquenervia

Paperbark Tree, Cajeput Tree

Olea europaea Olive, Edible Olive Pinus canariensis Canary Island Pine Pinus pinea Italian Stone Pine Pistacia chinensis Chinese Pistache Platanus X acerifolia London Plane Tree Platanus racemosa California Sycamore Quercus agrifolia Coast Live Oak African Sumac Rhus lancea

Schinus molle California Pepper, Mission Pepper

Ulmus parvifolia 'True Green' True Green Chinese Elm

#### **Shrubs**

Alyogyne huegelii Blue Hibiscus
Buxus microphylla japonica Japanese Boxwood
Ceanothus griseus horizontalis Carmel Creeper
Cistus 'Sunset' Sunset Rockrose
Dasylirion wheeleri Desert Spoon

Dietes bicolor Yellow Moraea, Fortnight Lily

Euryops pectinatus Euryops Daisy Grevillea 'Noellii' Noell's Grevillea

Hemerocallis hybrids Hybrid Daylily (various)

Kniphofia uvaria Red Hot Poker
Lavandula angustifolia English Lavender

Leptospermum scoparium New Zealand Tea Tree, Manuka Leucophyllum frutescens Texas Ranger, Cenizo, Texas Sage

Ligustrum japonicum 'Texanum' Wax Leaf Privet

Botanical Name Common Name

Limonium perezii Sea Lavender, Statice

Liriope muscari Big Blue Lily Turf

Myrtus communis 'Compacta' Compact Myrtle

Phormium cultivars New Zealand Flax selections

Photinia X fraseri Fraser Photinia

Pittosporum tobira Tobira

Rhaphiolepis indica Indian Hawthorne

Rosa Shrub varieties Shrub Rose
Rosmarinus officinalis Rosemary

Salvia leucantha Mexican Sage, Mexican Bush Sage Westringia fruticosa Australian or Victorian Rosemary

**Ground covers** 

Aptenia cordifolia Hearts and Flowers

Gazania X rigens leucolaena Trailing Gazania, Treasure Flower

Lantana montevidensis Trailing Lantana

Myoporum parvifolium Ground Cover Myoporum

Osteospermum fruticosum Freeway Daisy, Trailing African Dai

Pelargonium peltatum Ivy Geranium

Rosa Ground Cover varieties Ground Cover Rose

Vines

Bougainvillea spectabilis

Gelsemium sempervirens

Carolina Jessamine

Hardenbergia violacea

Lilac Vine, Coral Pea

Lonicera japonica

Japanese Honeysuckle

Parthenocissus tricuspidata Boston Ivy

Vitis californica 'Roger's Red'

Roger's Red Wild Grape

Grasses

Carex divulsa Berkeley Sedge

Juncus patens California Gray Rush

Muhlenbergia capillaris Pink Muhly

Pennisetum setaceum Tender Fountain Grass

Succulents

Agave attenuata Velvet Agave, Foxtail Agave

Aloe striata Coral Aloe
Hesperaloe parviflora Red Yucca

**Palms** 

Phoenix dactylifera Edible Date Palm Washingtonia filifera California Fan Palm



**Botanical Name: Chitalpa tashkentensis** 

Common Name: Chitalpa

Plant Type:TreeHabit:BroadRoundPlant Size:25-40'Leaf Color:Green

Flower Color: White Flower Season: Summer Fall

Sun: Full sunWater: Light water

**Soil Type:** All soils Average soil Poor soil Well-drained soil Dry soil Neutral pH Basic pH This medium size deciduous tree grows rapidly to 20'-30' high and as wide, producing long, pointed, deep green leaves. Upon these leaves grow the pink to white trumpet shaped flowers with purple

markings. Over a long season, these flowers will appear in showy clusters.

Botanical Name: Cupressus sempervirens 'Tiny Towers'

Common Name: Tiny Towers Italian Cypress

Plant Type:TreeConiferHabit:ColumnarPlant Size:3-6'Leaf Color:GreenFlower Color:n/aFlower Season:n/a

Sun: Full sun

Water: Medium water

Soil Type: All soils Average soil Poor soil Neutral pH

This tree will grow to 6' tall and has dark green foliage with a lot of branches. The tree is upright,

narrow, and very dense.

Botanical Name: Geijera parviflora

Common Name: Australian Willow, Wilga

Plant Type: Tree Habit: Broad Round Weeping

Plant Size:12-25'Leaf Color: Light greenFlower Color:n/aFlower Season:n/a

Sun: Full sun

Water: Medium water

Soil Type: All soils Poor soil Neutral pH

This evergreen tree reaches a height of 25', with 3"-6" long, medium length, green colored leaves that are narrow. Its main branches sweep up and out, while the smaller branches tend to hang down.

Botanical Name: Gleditsia triacanthos 'Shademaster'

Common Name: Shademaster Honey Locust

Plant Type: Tree Habit: Broad

Plant Size: 12-25' 25-40'

Leaf Color: Light green
Flower Color: White

Flower Season: n/a

Sun: Full sunWater: Light water

Soil Type: All soils Average soil Poor soil Any soil pH

In comparison to the 'Moraine', this is a thornless and seedless locust, which grows faster and in a

more upright fashion.









Botanical Name: Jacaranda mimosifolia

Common Name: Jacaranda

Plant Type:TreeHabit:BroadPlant Size:25-40'Leaf Color:Green

Flower Color: Blue Flower Season: Spring Summer

Sun: Full sun

Water: Medium water

Soil Type: Sandy soil Loam soil Average soil Rich soil Well-drained soil Neutral pH

This irregular to rounded deciduous tree will reach about 40' tall and has fine, compound green leaves with blue flowers. Jacaranda's main blooming season is in spring and summer, but it will often produce

sporadic blooms in fall as well.



Botanical Name: Juniperus scopulorum 'Skyrocket'

Common Name: Skyrocket Juniper

Plant Type:Tree ConiferHabit: ColumnarPlant Size:12-25'Leaf Color: Blue greenFlower Color:n/aFlower Season:n/a

Sun: Full sunWater: Light water

Soil Type: All soils Average soil Poor soil Well-drained soil Any soil pH

Skyrocket Juniper has blue green foliage on vertically growing branches that create a spire-like form. It is suitable for planting where space is limited or where a large blue exclamation point is needed! It

needs full sunlight. Junipers are highly combustible plants. -Fort Collins Nursery



Botanical Name: Lagerstroemia indica (Varieties)
Common Name: Crape Myrtle, General Varieties

Plant Type:TreeShrubHabit: VasePlant Size:6-12'12-25'Leaf Color: Green

Flower Color: Lavender Pink Purple Red White Flower Season: Summer

Sun: Full sun

Water: Drought tolerant Light water

Soil Type: All soils Average soil Neutral pH

This is one of the longest blooming varieties of trees, which could be 2-4 months long. Flowers usually appear in the summer and could be red, rose, pink, purple, or white. Depending on the variety, Crape Myrtle can be a spreading shrub or upright tree. Some varieties are fast growing. Some species have exfoliating bark that exposes a lovely cinnamon or gray colored bark. This tree tends to produce

Botanical Name: Magnolia grandiflora Common Name: Southern Magnolia, Bull Bay

Plant Type: Tree Habit: Broad

Plant Size: 12-25' 25-40' Leaf Color: Dark green

Flower Color: White Flower Season: Summer Fall

Sun: Full sun Half sun Water: Medium water

Soil Type: All soils Average soil Rich soil Well-drained soil Acid pH Neutral pH

Its large, simple, leathery appearance makes the pyramidal Magnolia grandiflora perfect for either a street or lawn tree. Its leaves are 4"-8" long, and its powerfully fragrant blooms are carried throughout the summer and fall. If these plants are grafted, they are more predictable (may take 15 years to bloom). Ungrafted trees will take only 2-3 years. Restricted root areas or heavy soils will slow the





Botanical Name: Melaleuca quinquenervia Common Name: Paperbark Tree, Cajeput Tree

Plant Type:TreeHabit:BroadPlant Size:12-25'25-40'Leaf Color:Green

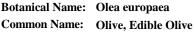
Flower Color: White Flower Season: Summer Fall

Sun: Full sunWater: Light water

Soil Type: All soils Average soil Poor soil Neutral pH

This evergreen tree will grow 20'-40' tall and 15'-25' wide. It has distinct brownish white spongy bark that peels off in sheets. It produces yellowish white flowers that bloom in spring and fall. It works well

as a street tree or in lawns.



Plant Type: Tree Habit: Broad

Plant Size:12-25'25-40'Leaf Color:Grey greenFlower Color:n/aFlower Season:n/a

Sun: Full sun
Water: Light water

**Soil Type:** Sandy soil Loam soil Rocky soil Average soil Poor soil Neutral pH Basic pH This broad tree will grow to 40' tall and has small, gray green leaves with fleshy black fruit that

appears in fall.



Botanical Name: Pinus canariensis Common Name: Canary Island Pine

Plant Type:Tree ConiferHabit: ColumnarPlant Size:25-40'Leaf Color: Dark greenFlower Color:n/aFlower Season:n/a

Sun: Full sunWater: Light water

Soil Type: All soils Average soil Neutral pH

This graceful, slender-growing pine has a pyramidal form to about 70'. ITs needles are long and drooping inb bundles of 3. The foliage is a blue-green color, maturing to a dark green shade. Pines are

highly combustible plants.



Botanical Name: Pinus pinea Common Name: Italian Stone Pine

Plant Type:Tree ConiferHabit:Broad RoundPlant Size:25-40'Leaf Color:Dark greenFlower Color:n/aFlower Season:n/a

Sun: Full sunWater: Light water

Soil Type: All soils Average soil Well-drained soil Neutral pH

Italian Stone Pine has a moderate growth rate to 40'-80' in height. It eventually forms a broad umbrella with a shaped, flat crown. The needles cluster in 2's, 5"-8" long, and brown to gray green in color.

Pines are highly combustible plants.



Botanical Name: Pistacia chinensis Common Name: Chinese Pistache

Plant Type: Tree Habit: Round

Plant Size: 12-25' 25-40' Leaf Color: Dark green Yellow Red

Flower Color: n/a Flower Season: n/a

Sun: Full sunWater: Light water

Soil Type: All soils Average soil Well-drained soil Neutral pH

The Pistacia chinensis is a deciduous tree with broad, spreading growth to 50' in height. Its leaves have 10-16 leaflets, and the fall coloring arrives in beautiful shades of red, orange and yellow. The young

trees are often gawky, but some become shapely with age.

Botanical Name: Platanus X acerifolia Common Name: London Plane Tree

Plant Type: Tree Habit: Broad

Plant Size: 25-40'

Leaf Color: Light green
Flower Color: n/a

Flower Season: n/a

Sun: Full sunWater: Light water

Soil Type: All soils Poor soil Neutral pH

London Plane Tree is a fast growing, deciduous tree that reaches a size 40'-80' high by 30'-40' wide. Its leaves are 3-5 lobed, with a width of 4"-10". This plant is tolerant of most soils, smog, dust and

reflected heat.

Botanical Name: Platanus racemosa Common Name: California Sycamore

Plant Type: Tree Habit: Broad Irregular

Plant Size: 25-40' Leaf Color: Light green Yellow green

Flower Color: n/a Flower Season: n/a

Sun: Full sun

Water: Medium water

Soil Type: All soils Average soil Moist soil Neutral pH

The California Sycamore is a fast growing deciduous tree that reaches up to 40'-50' high. It tolerates heat, smog, and drought conditions as well as moist conditions; it is native to riparian areas. It has

interesting mottled bark when the tree is bare in winter.

Botanical Name: Quercus agrifolia Common Name: Coast Live Oak

Plant Type: Tree Habit: Broad

Plant Size:25-40'40-60'Leaf Color:Dark greenFlower Color:n/aFlower Season:Fall

Sun: Full sun

Water: Drought tolerant

Soil Type: All soils Average soil Well-drained soil Neutral pH

The Coast Live Oak is an evergreen round headed tree. It can reach 15'-40' high and 20' wide; it grows very well from the coastal areas to the interior valleys. It is native to California, is drought tolerant, and

attracts butterflies. -Cornflower Farms









Botanical Name: Rhus lancea Common Name: African Sumac

Plant Type:TreeHabit:BroadPlant Size:12-25'Leaf Color:GreenFlower Color:n/aFlower Season:n/a

Sun: Full sun
Water: Light water

**Soil Type:** Clay soil Loam soil Rocky soil Average soil Well-drained soil Dry soil Neutral This small, evergreen tree grows slowly to 25' and exhibits an open, spreading habit. Its leaves are dark green, glossy, and divided into 3 willow-like leaflets 4"-5" long. The bark has a dark red color. The tree has males and females. It often has a drooping habit and is prone to Texas Root Rot.



**Botanical Name: Schinus molle** 

Common Name: California Pepper, Mission Pepper

Plant Type:TreeHabit: Broad WeepingPlant Size:12-25'25-40'Leaf Color: Light greenFlower Color:n/aFlower Season:n/a

Sun: Full sun

Water: Drought tolerant

Soil Type: All soils Poor soil Neutral pH

The California Pepper is a fast growing evergreen tree that will mature to a height of 25'-40' and as

wide. Its bright green leaves are divided into many narrow, 1.5"-2" long leaflets.



Botanical Name: Ulmus parvifolia 'True Green'
Common Name: True Green Chinese Elm

Plant Type:TreeHabit:BroadRoundVasePlant Size:40-60'Leaf Color:Dark greenGreen

Flower Color: n/a Flower Season: n/a

Sun: Full sun

Water: Light water Extra summer water

**Soil Type:** Sandy soil Clay soil Loam soil Average soil Poor soil Well-drained soil Neutral This evergreen elm reaches 60' tall and 50-70' wide. When mature it has a round crown with long,

arching branches and small, dark green leaves. It is a good shade tree.



Botanical Name: Alyogyne huegelii Common Name: Blue Hibiscus

Plant Type:ShrubHabit:RoundPlant Size:3-6'6-12'Leaf Color:Green

Flower Color: Blue Lavender Flower Season: Intermittent

Sun: Full sun Half sun

Water: Light water Extra summer water

**Soil Type:** Sandy soil Loam soil Average soil Rich soil Poor soil Well-drained soil Dry soil This round shrub will grow about 6' tall by 6' wide and has medium-sized green leaves with lavender

blue flowers that bloom all year.



Botanical Name: Buxus microphylla japonica

Common Name: Japanese Boxwood

Plant Type: Shrub Habit: Upright

Plant Size: 1-3' 3-6' Leaf Color: Green Light green

Flower Color: n/a Flower Season: n/a

Sun: Full sun Half sun Shade

Water: Medium water

Soil Type: Sandy soil Clay soil Loam soil Average soil Neutral pH Basic pH

Japanese Boxwood is often used as a hedge. It is compact, with small bright green leaves. It can reach 4'-6' tall and wide or be kept smaller through pruning. It can be sheared to shape. It does better in areas

with milder winters. Leaves may turn bronze in cold weather.



**Botanical Name: Ceanothus griseus horizontalis** 

Common Name: Carmel Creeper

Plant Type:ShrubGround coverHabit:ProstratePlant Size:1-3'3-6'Leaf Color:GreenFlower Color:BlueFlower Season:Spring

Sun: Full sun Half sun Water: Light water

Soil Type: All soils Average soil Well-drained soil Neutral pH

Carmel Creeper is one of the most popular forms of spreading shrubs. Its glossy oval leaves of 2" are bright green. The tiny, light blue flowers are abundant and form 1" clusters. This shrub benefits from

pruning. It does best in well-drained soil with little to no summer water.



Botanical Name: Cistus 'Sunset' Common Name: Sunset Rockrose

Plant Type: Shrub Ground cover Habit: Broad Round

Plant Size:1-3'Leaf Color: Green Grey greenFlower Color:PinkFlower Season: Spring Summer

Sun: Full sun Half sun

Water: Drought tolerant Light water Medium water

Soil Type: All soils Average soil Well-drained soil Dry soil Neutral pH Basic pH

This Rockrose stands 2-3' tall and has magenta flowers with gray/green leaves that have wrinkled

edges.



Botanical Name: Dasylirion wheeleri Common Name: Desert Spoon

Plant Type: Shrub Habit: Round

Plant Size:3-6'Leaf Color:Grey green GreyFlower Color:WhiteFlower Season:Spring Summer

Sun: Full sun Half sun

Water: Drought tolerant Light water

Soil Type: All soils Average soil Neutral pH Basic pH

Desert Spoon requires little maintenance, as it tolerates drought, reflected heat and poor soils. It develops a short, thick trunk while reaching 6' tall and wide. Leaves are linear gray-green to 3' long and armed. During late spring and summer, erect stems of white creamy flowers are visible. It is a long

lived shrub and slow-growing. It needs a well-drained site; it is cold and drought hardy.



**Botanical Name: Dietes bicolor** 

Common Name: Yellow Moraea, Fortnight Lily

Plant Type:PerennialHabit: Arching UprightPlant Size:1-3'Leaf Color: Green Light greenFlower Color:Purple YellowFlower Season: Intermittent

Sun: Full sun Half sun Water: Medium water

Soil Type: All soils Average soil Rich soil Well-drained soil Dry soil Neutral pH

This clumping perennial Iris relative stands 3'-4' high. It has light yellow, iris-like flowers with maroon

blotches that are about 2" wide. It performs best in full sun and in soil with good drainage.



Botanical Name: Euryops pectinatus Common Name: Euryops Daisy

Plant Type: Shrub Perennial Habit: Round

Plant Size: 1-3' 3-6' Leaf Color: Dark green Grey green

Flower Color: Yellow Flower Season: Constant

Sun: Full sun
Water: Light water

**Soil Type:** Sandy soil Loam soil Average soil Rich soil Well-drained soil Dry soil Neutral As a small perennial shrub with 2" wide, bright yellow, daisy-like flowers, blooms on this plant are seen seen almost year round. Its leaves are gray green in color. 'Viridis' is a variety with deep green

foliage.



Botanical Name: Grevillea 'Noellis' Common Name: Noell's Grevillea

Plant Type: Shrub Ground cover Habit: Arching Broad Mound

Plant Size: 3-6' Leaf Color: Green

Flower Color: Pink White Flower Season: Winter Spring Summer

Sun: Full sun
Water: Light water

Soil Type: All soils Average soil Poor soil Well-drained soil Neutral pH

A low, compact evergreen shrub, the blooms of this plant are rose red and white, appearing in the

spring. Its bright green foliage is needle-like. Full sun is required for growth.



Botanical Name: Hemerocallis hybrids Common Name: Hybrid Daylily (various)

Plant Type:Ground coverPerennialHabit: Arching UprightPlant Size:Under 1' 1-3' 3-6'Leaf Color: Green

Flower Color: Orange Pink Red Yellow Flower Season: Intermittent

Sun: Full sun Half sun

Water: Light water Medium water Extra summer water Soil Type: All soils Any soil condition Any soil pH

These summer-blooming perennials form clumps with large, grass-like leaves. Its showy flowers,

resembling lilies, are borne in clusters on stems held well above the foliage



Botanical Name: Kniphofia uvaria Common Name: Red Hot Poker

Plant Type:PerennialHabit:UprightPlant Size:1-3'Leaf Color:Green

Flower Color: Orange Flower Season: Summer Fall

Sun: Full sun Half sunWater: Light water

**Soil Type:** All soils Average soil Rich soil Poor soil Well-drained soil Dry soil Neutral pH This perennial will reach about 3' tall and has large green leaves with orange flowers that bloom in

summer and fall.



Botanical Name: Lavandula angustifolia Common Name: English Lavender

Plant Type: Perennial Herb Habit: Upright

Plant Size: 1-3' Leaf Color: Grey green Blue green White

Flower Color: Lavender Flower Season: Summer

Sun: Full sun

Water: Drought tolerant Light water Extra summer water

Soil Type: All soils Average soil Well-drained soil Dry soil Neutral pH Basic pH

A well-developed woody base is apparent with this evergreen subshrub. Its leaves assume an obtuse form, and have a grey-green color above and a white tomentose shade below. It is fragarant and needs

little water, full sun, and well drained soils.



Botanical Name: Leptospermum scoparium

Common Name: New Zealand Tea Tree, Manuka

Plant Type: Shrub Habit: Broad Upright

Plant Size: 3-6' 6-12' Leaf Color:

Flower Color: n/a Flower Season: n/a

Sun: Full sun Half sun

Water: Drought tolerant Light water Extra summer water

**Soil Type:** Sandy soil Loam soil Rocky soil Average soil Rich soil Poor soil Well-drained This small tree will grow about 5' tall and has green, needle-like leaves with white, pink, or red flowers

that bloom in spring and summer.



**Botanical Name: Leucophyllum frutescens** 

Common Name: Texas Ranger, Cenizo, Texas Sage

Plant Type:ShrubHabit:MoundUprightPlant Size:6-12'Leaf Color:Grey greenGreyFlower Color:PinkPurpleFlower Season:Summer

Sun: Full sun
Water: Light water

**Soil Type:** Sandy soil Loam soil Rocky soil Average soil Poor soil Well-drained soil Dry Texas Ranger is a dense shrub that grows from 6'-8' high and wide. It has pink flowers in the summer which accent the gray foliage. It tolerates wind, heat and full sun. It is drought tolerant and attracts

hummingbirds.



Botanical Name: Ligustrum japonicum 'Texanum'

Common Name: Wax Leaf Privet

Plant Type: Shrub Habit: Broad Upright

Plant Size:3-6' 6-12'Leaf Color:Dark green GreenFlower Color:WhiteFlower Season:Spring Summer

Sun: Full sun Half sun Water: Medium water

Soil Type: All soils Average soil Neutral pH

This dense evergreen shrub of an upright habit is capable of growing as a shrub or small tree. Its dark

green, leathery leaves are opposite those of a simple evergreen plant.



Botanical Name: Limonium perezii Common Name: Sea Lavender, Statice

Plant Type:ShrubPerennialHabit:MoundUprightPlant Size:1-3'Leaf Color:Dark green

Flower Color: Blue Purple Flower Season: Spring Summer

Sun: Full sun Half sun Water: Light water

Soil Type: All soils Average soil Well-drained soil Dry soil Neutral pH Basic pH

This mounding shrub will reach about 3' high and has large, dark green leaves with small blue and

purple flowers that bloom in spring and summer.



Botanical Name: Liriope muscari Common Name: Big Blue Lily Turf

Plant Type:ShrubHabit: Arching UprightPlant Size:Under 1'Leaf Color: Dark green

Flower Color: Blue White Flower Season: Summer Fall

Sun: Half sun Shade Water: Medium water

Soil Type: Sandy soil Loam soil Average soil Rich soil Well-drained soil Neutral pH

Grass-like clumps of dark green leaves 1" wide up to 18" long are found on the Liriope muscari. It can reach a height of 12"-15", and dark blue flowers spikes can be seen held above the leaves during the summer. This is an excellent border, accent or ground cover plant that requires part shade exposure.



**Botanical Name:** Myrtus communis 'Compacta'

Common Name: Compact Myrtle

Plant Type:ShrubHabit:MoundRoundUprightPlant Size:1-3'Leaf Color:Dark greenGreenWhite

Flower Color: White Flower Season: Summer

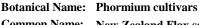
Sun: Full sun Half sun Water: Light water

**Soil Type:** Sandy soil Clay soil Loam soil Average soil Rich soil Well-drained soil Neutral This evergreen shrub is 6' high and 5' wide with aromatic leaves. It blooms with white, sweet-scented flowers followed by bluish black berries. It can be grown in sun or partial shade; well drained soil is

essential. 'Compacta' has smaller leaves and is often used for edges and low formal hedges.







Common Name: New Zealand Flax selections

Plant Type:ShrubHabit:ArchingRoundPlant Size:3-6' 6-12'Leaf Color:Dark greenGreenFlower Color:Red YellowFlower Season:Summer

Sun: Full sun Half sun Shade

Water: Light water

Soil Type: All soils Poor soil Moist soil Neutral pH

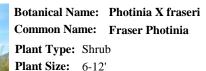
New Zealand Flax is a large, bold plant with stiffly vertical, sword-like, green leaves that arise from its base. It should be grown under full sun for best color. Varieties will offer different growth habits and

Habit: Broad Mound Upright

Leaf Color: Dark green Red

Flower Season: Spring

leaf color.



Flower Color: White Sun: Full sun Half sun Water: Medium water

Soil Type: Loam soil Average soil Rich soil Well-drained soil Neutral pH

The Photina fraseri is an evergreen, medium-sized shrub with new foliage that is a glistening, copper red color. It is excellent as a hedge, screen, or accent plant. It should be grown under conditions of

sun.

**Botanical Name: Pittosporum tobira** 

Common Name: Tobira

Plant Type:ShrubHabit:BroadMoundRoundPlant Size:6-12'Leaf Color:Dark greenFlower Color:WhiteFlower Season:Spring

Sun: Full sun Half sun

Water: Drought tolerant Light water

Soil Type: All soils Average soil Well-drained soil Neutral pH Basic pH

This large, dense, evergreen shrub or small tree has shiny dark green leaves. In the spring, clusters of small, cream-colored flowers appear with the fragrance of orange blossoms. Tobira can be grown in full sun or partial shade. It is considered one of the most durable shrubs in California landscapes.

Botanical Name: Rhaphiolepis indica Common Name: Indian Hawthorne

Plant Type: Shrub Habit: Mound

Plant Size: 1-3' Leaf Color: Dark green

Flower Color: Pink Flower Season: Winter Spring Fall

Sun: Full sun Half sunWater: Light water

Soil Type: All soils Average soil Rich soil Well-drained soil Dry soil Neutral pH

This small shrub will grow 2' tall and 4' wide. It has small, dark green leaves that get a red tint in the

winter and deep pink flowers that bloom fall through spring.







**Botanical Name: Rosa Shrub varieties** 

Common Name: Shrub Rose

Plant Type:ShrubHabit:UprightPlant Size:3-6'Leaf Color:Green

Flower Color: Pink Red Flower Season: Intermittent

Sun: Full sun Half sun

Water: Light water Medium water Extra summer water Soil Type: Loam soil Average soil Poor soil Neutral pH

The dark green, heavily veined leaves of this bushy shrub are strong support for the pure white or pink, nearly double flowers it produces. This is a very tolerant, heavily scented plant with an impressive fall

color. Also, large hips appear intermittently with this plant.



**Botanical Name: Rosmarinus officinalis** 

Common Name: Rosemary

 Plant Type:
 Herb
 Habit:
 Mound
 Round

 Plant Size:
 3-6'
 Leaf Color:
 Dark green

 Flower Color:
 Blue
 Flower Season:
 Intermittent

Sun: Full sunWater: Light water

Soil Type: All soils Average soil Poor soil Well-drained soil Dry soil Neutral pH

Rosemary is hardy in full sun areas where winter temperatures do not drop below 10 degrees F. They can be grown in a clay pot with well-drained, porous soil in bright indoor light, and will also flourish on the backporch in spring, summer and fall. Its beautiful, slowly trailing stems and shiny slender leaves are perfect for showing off the small, light blue flowers that blossom in the summer. It has

**Botanical Name: Salvia leucantha** 

Common Name: Mexican Sage, Mexican Bush Sage

Plant Type:ShrubHabit:MoundRoundPlant Size:1-3'3-6'Leaf Color:Grey green

Flower Color: Blue Purple White Flower Season: Summer Fall

Sun: Full sun Half sunWater: Drought tolerant

Soil Type: All soils Average soil Well-drained soil Dry soil Neutral pH Basic pH

The Mexican Sage is a bushy shrub that grows 3'-4' tall and wide. It has hairy white stems, gray green leaves and velvet-like purple flower spikes that bloom summer through fall. This shrub tolerates sun, light shade, little water, and is hardy to 15 degrees F. The Mexican Sage is drought tolerant and

attracts hummingbirds. -Cornflower Farms

**Botanical Name: Westringia fruticosa** 

Common Name: Australian or Victorian Rosemary

Plant Type:ShrubHabit:MoundUprightPlant Size:3-6'Leaf Color:Grey greenFlower Color:Lavender WhiteFlower Season:Intermittent

Sun: Full sun Half sunWater: Drought tolerant

Soil Type: All soils Well-drained soil Neutral pH

The Australian Rosemary is an evergreen shrub that grows 3'-6' tall. It has soft, gray green leaves and white flowers throughout the year and prefers sun and little to average amounts of water. This shrub is

also drought tolerant. -Cornflower Farms







Botanical Name: Aptenia cordifolia Common Name: Hearts and Flowers

Plant Type:Ground coverPerennialSucculentHabit:ProstratePlant Size:Under 1'Leaf Color:Green

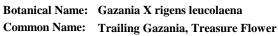
Flower Color: Red Yellow Flower Season: Spring Summer Fall

Sun: Full sun Half sun Shade

Water: Light water Medium water Extra summer water

Soil Type: Sandy soil Loam soil Rocky soil Average soil Rich soil Well-drained soil Dry Aptenis is a herbaceous perennial groundcover with fleshy heart shaped leaves on succulent stems. Tiny, solitary red flowers appear among leaves. Foliage is shiny and bright green. It is salt tolerant and great in containers, planters or hanging baskets. It needs full sun or light shade. Be careful not to

overwater. It can die back with heavy frost and will not tolerate foot traffic.



Plant Type: Ground cover Perennial Habit: Horizontal Prostrate

Plant Size: Under 1'

Leaf Color: Dark green Grey green
Flower Color: Orange

Flower Season: Intermittent

Sun: Full sun Half sun Water: Light water

Soil Type: All soils Average soil Neutral pH

Gazania X rigens leucolaena is a clumping or spreading plant grown for colorful daisies over a long bloom season. It tolerates seacoast conditions. It grows well in most soil conditions and needs only

occasional water once established (2-3 times per month).



Botanical Name: Lantana montevidensis Common Name: Trailing Lantana

Plant Type:Ground coverHabit: Mound ProstratePlant Size:1-3'Leaf Color: Dark green GreenFlower Color:PurpleFlower Season: Constant

Sun: Full sun Half sun Water: Light water

**Soil Type:** All soils Average soil Poor soil Well-drained soil Dry soil Neutral pH Basic pH Lavender flowers accent the trailing growth habit of this Lantana. It is excellent for spilling over walls or down banks. Eventually, it will reach about 2' tall by 6' wide; size is controlled by pruning and severity of winter. It does best in full sun and is drought tolerant. It grows rapidly, even in heat, smog and poor soil. It is cold hardy to 25 degrees F, but recovers quickly. Fruit is poisonous. Butterflies are

Botanical Name: Myoporum parvifolium Common Name: Ground Cover Myoporum

 Plant Type:
 Ground cover
 Habit: Prostrate

 Plant Size:
 Under 1'
 Leaf Color: Green

Flower Color: White Flower Season: Summer

Sun: Full sun Half sunWater: Light water

tiny, bright green leaves.

**Soil Type:** Sandy soil Loam soil Rocky soil Average soil Well-drained soil Neutral pH This great groundcover will grow 9" high and 9' wide and does well in partial or full sun with moderate watering. It produces delicate white flowers that bloom in summer and are surrounded by





**Botanical Name: Osteospermum fruticosum** 

Common Name: Freeway Daisy, Trailing African Dai

Plant Type:ShrubGround coverPerennialHabit:ProstratePlant Size:Under 1' 1-3'Leaf Color:Green

Flower Color: Blue Purple Flower Season: Intermittent

Sun: Full sun Half sun Water: Light water

Soil Type: All soils Average soil Well-drained soil Dry soil Neutral pH

This groundcover will grow 1'-3' tall and has medium-sized, green leaves with purple or blue flowers

that can bloom all year.



**Botanical Name: Pelargonium peltatum** 

Common Name: Ivy Geranium

Plant Type: Annual Habit: Prostrate

Plant Size: Under 1' Leaf Color: Dark green Green
Flower Color: Lavender Red White Flower Season: Constant

Sun: Full sun Half sun Shade

Water: Medium water

**Soil Type:** Sandy soil Loam soil Rocky soil Average soil Rich soil Well-drained soil Dry Clouds of single flowers are produced from spring through fall on this plant, which should be planted

in areas that receive part sun. -Monterey Bay Nursery



**Botanical Name: Rosa Ground Cover varieties** 

Common Name: Ground Cover Rose

Plant Type:Ground coverHabit: UprightPlant Size:3-6'Leaf Color: Green

Flower Color: Pink Red Flower Season: Intermittent

Sun: Full sun Half sun

Water: Light water Medium water Extra summer water

Soil Type: Sandy soil Loam soil Average soil Poor soil Neutral pH

There are many deciduous, evergreen and semi-deciduous roses that are used as groundcovers, usually reaching 2' in height. They look lovely draping a slope. Rosa groundcovers come in a variety of colors

but all need full sun and a moderate amount of water to do well.



Botanical Name: Bougainvillea spectabilis Common Name: Bougainvillea, Magenta

Plant Type:Ground cover VineHabit: TwiningPlant Size:25-40'Leaf Color: Green

Flower Color: Red Flower Season: Intermittent

Sun: Full sun Half sun

Water: Light water Medium water

Soil Type: Sandy soil Loam soil Rocky soil Average soil Well-drained soil Neutral pH

The large amount of flamboyant colors on this species come not from the small inconspicuous flowers, but rather from the three large bracts which surround them. Once established, they tend to be carefree.

All varieties are susceptible to fost damage, and vary in size, vigor, and growth habit.



Botanical Name: Gelsemium sempervirens Common Name: Carolina Jessamine

Plant Type:Ground cover VineHabit: TwiningPlant Size:12-25'Leaf Color: Green

Flower Color: Yellow Flower Season: Winter Spring

Sun: Full sun Half sun Water: Medium water

**Soil Type:** All soils Average soil Rich soil Well-drained soil Dry soil Acid pH Neutral pH As a vigorous evergreen, this vine has fine, rich, glossy foliage complete with trumpet-shaped, yellow flowers that are borne from late winter to spring. Carolina Jessamine will bloom best in full sun.



Botanical Name: Hardenbergia violacea Common Name: Lilac Vine, Coral Pea

Plant Type:ShrubVineHabit:TwiningPlant Size:6-12'Leaf Color:Green

Flower Color: Pink Purple Flower Season: Winter Spring

Sun: Full sunWater: Light water

Soil Type: Sandy soil Loam soil Average soil Neutral pH

Hardenbergia violacea rosea an evergreen, shrubby vine. Leaves are usually undivided, 2"-4" long.

Flowers are lilac or rose and look like sweet peas. Flower color depends on the cultivar.



Botanical Name: Lonicera japonica Common Name: Japanese Honeysuckle

Plant Type: Ground cover Perennial Vine Habit: Horizontal Twining

Plant Size: 25-40' Leaf Color:

Flower Color: n/a Flower Season: n/a

Sun: Full sun Half sun

Water: Light water Medium water Extra summer water

Soil Type: Sandy soil Loam soil Average soil Rich soil Well-drained soil Neutral pH

This plant is a fast-growing groundcover, hedge or screen, or adaptive vine. It is considered invasive in many areas. The twining and woody vine can grow to 30' long. Leaves are semi-evergreen, dark and lustrous green. Flowers are white and fade to yellow. They bloom from spring through summer.

Flowers are fragrant and attract hummingbirds.

**Botanical Name: Parthenocissus tricuspidata** 

Common Name: Boston Ivy

Plant Type: Vine Habit: Clinging

Plant Size: 6-12' 12-25'

Flower Color: n/a

Leaf Color: Green Bronze
Flower Season: n/a

Sun: Full sun Half sun Shade

Water: Medium water

Soil Type: Loam soil Average soil Well-drained soil Neutral pH

This deciduous vine grows leaves that are usually lobed and divided into 3 leaflets. It clings tightly to

any surface.





Botanical Name: Vitis californica 'Roger's Red' Common Name: Roger's Red Wild Grape

Plant Type:VineHabit: Irregular Upright TwiningPlant Size:12-25' 25-40'Leaf Color: Dark green Green Red

Flower Color: Yellow Flower Season: Summer

Sun: Full sun Half sun Shade

Water: Light water Extra summer water Soil Type: All soils Rich soil Neutral pH

This plant is a woody deciduous vine with round large leaves. The flowers are in small fragrant blooms and berry clusters appear in the summer. This vine has a sprawling, climbing growth habit. It is a selection with outstanding fall color. This plant is native to CA and is drought tolerant. This cultivar is

named for its red leaves in the fall. -Cornflower Farms



Botanical Name: Carex divulsa Common Name: Berkeley Sedge

Plant Type:PerennialGrassHabit:MoundPlant Size:1-3'Leaf Color:Green

Flower Color: n/a Flower Season: Summer

Sun: Full sun Half sun Water: Medium water

Soil Type: All soils Average soil Poor soil Moist soil Neutral pH Basic pH

Berkeley Sedge is a fast growing, vibrant green clumping sedge to 2' tall and wide. Widely adaptable, it can be planted in wet soil or arid soil, tolerates sun to partial shade and can be drought tolerant. Tan

to brown flowers show in spring.



Botanical Name: Juncus patens
Common Name: California Gray Rush

Plant Type: Perennial Habit: Mound Upright

Plant Size: 1-3' Leaf Color: Grey green Blue green

Flower Color: n/a Flower Season: n/a

Sun: Full sun Half sun

Water: Light water Medium water Extra summer water

Soil Type: Sandy soil Clay soil Loam soil Average soil Rich soil Moist soil Dry soil

Although a wetland plant, Juncus patens can tolerate fairly dry conditions. It will slowly clump to 2'-3' wide and a height of 2'-2.5'. There are many selections of this species available with different heights and widths. It is carefree, with little to no maintenance. It provides great upright structure to many

styles of landscapes.

Botanical Name: Muhlenbergia capillaris

Common Name: Pink Muhly

Plant Type:GrassHabit:MoundPlant Size:3-6'Leaf Color:GreenFlower Color:PinkFlower Season:Fall

Sun: Full sun Half sun Water: Medium water

**Soil Type:** Sandy soil Loam soil Rocky soil Average soil Rich soil Well-drained soil Dry Mounding grass grows quickly to 3' x 3'. Leaves are medium green and turn tan in fall. Pink airy plumes appear in fall. Place plants where pink flower plumes can be backlit by the sun. Look for selections with deep pink flower plumes. Accepts full sun or partial shade. Very frost tolerant. Prune in early spring for best looking new growth. Native to Texas and Mexico.



## Tuscana



Botanical Name: Pennisetum setaceum Common Name: Tender Fountain Grass

Plant Type:PerennialAnnualGrassHabit:ArchingRoundUprightPlant Size:1-3'Leaf Color:GreenPurpleFlower Color:PurpleFlower Season:Summer

Sun: Full sun

Water: Drought tolerant Light water

Soil Type: All soils Average soil Poor soil Neutral pH Basic pH

This perennial grass reaches a size of 5' tall and wide, and is grown for its feathery plume-like seed heads. The plant should receive sun with little or no summer watering. Heavy seed head production can make this grass very invasive. Remove flower plumes before seeds mature to check their spread.



**Botanical Name: Agave attenuata** 

Common Name: Velvet Agave, Foxtail Agave

Plant Type:SucculentHabit:IrregularMoundPlant Size:1-3'Leaf Color:Light greenFlower Color:Green YellowFlower Season:n/a

Sun: Full sun Half sun Shade

Water: Light water

Soil Type: All soils Average soil Poor soil Well-drained soil Neutral pH Basic pH

This Agave has a dramatic tropical form. Even light frost can damage its succulent leaves. It is great for containers. In the low desert, partial sun will be best. If it becomes top heavy, simply cut and stick in the ground to root. It is not a fast grower and has light green foliage. It will also die after flowering but pups around the mother will survive. Distinctive with its large rosette of leaves perched on a long



Botanical Name: Aloe striata Common Name: Coral Aloe

Plant Type: Succulent Habit: Irregular Mound

Plant Size: 1-3' Leaf Color: Grey green Blue green Red

Flower Color: Orange Red Flower Season: Winter Spring

Sun: Full sun Half sun Shade

Water: Light water

Soil Type: Sandy soil Rocky soil Average soil Poor soil Well-drained soil Neutral pH

More attractive than saponaria. Great flower display in late winter. A slow to moderate grower forms a large rosette. Fleshy leaves are pale gray and broad at the base. Leaves have fine longitudinal lines and also pink margins. Clusters of flowers are coral red to orange on 3' stalks. South African native. Best with filtered sun. Frost tender but more cold hardy than saponaria.

**Botanical Name: Hesperaloe parviflora** 

Common Name: Red Yucca

Plant Type:ShrubGrassSucculentHabit:ArchingMoundPlant Size:1-3'Leaf Color:Grey greenGreyFlower Color:RedFlower Season:SpringSummer

Sun: Full sunWater: Light water

**Soil Type:** All soils Average soil Poor soil Well-drained soil Dry soil Neutral pH Basic pH This spectacular succulent is wonderful for a desert garden, with rosettes of gray green leaves to about 3'-4' tall and 6' wide. Red flower stalks emerge during spring and remain on the plant until the end of summer. This shrub will spread to form a crowded grass-like clump. This evergreen shrub is drought resistant but will appear better and bloom longer with added moisture. It does well in full sun, reflected





Botanical Name: Phoenix dactylifera Common Name: Edible Date Palm

Plant Type: Tree Palm Habit: Upright

Plant Size: 40-60' Leaf Color: Grey green
Flower Color: Yellow Flower Season: Summer

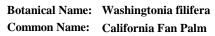
Sun: Full sun

Water: Drought tolerant Light water Medium water

Soil Type: All soils Average soil Poor soil Well-drained soil Neutral pH

This tree, the source of edible dates, will grow up to 80' tall and has grayish green leaves on a slender trunk. It does well in desert and ocean gardens and those in between. This palm is often used in formal

groupings around large buildings.



Plant Type:PalmHabit: IrregularUprightPlant Size:12-25'25-40'Leaf Color: GreenFlower Color:n/aFlower Season:n/a

Sun: Full sun

Water: Medium water

Soil Type: All soils Average soil Well-drained soil Neutral pH

California Fan Palm is the only palm native to California. It populates the areas along the San Andreas Fault where desert water has seeped to the surface and formed springs. It grows to 60' tall and 20' wide. It has light green fronds 3'-6' long. One of the most common uses of the palms fronds by Native Californians was in forming housing and thatched Ramadas. Fronds and frond fiber were also used to

