

Section IV
Development Plan

4.1 PURPOSE AND INTENT

The total development plan consists of nine (9) separate and individual components. They are as follows:

1. Land Use Plan
2. Circulation Plan
3. Conceptual Landscape Plan
4. Utility Plan
5. Conceptual Grading and Drainage Plan
6. Site Sections Plan
7. Conceptual Sign Plan
8. Noise Impact Plan
9. Conceptual Phasing Plan

These components are not supplementary in nature as to the Concept Site Plan in Exhibit 4, page 7. These specific exhibits are intended to govern development within the Centrelake Specific Plan.

There is a description of the standards accompanying each individual component in this section.

4.2 LAND USE PLAN DESCRIPTION

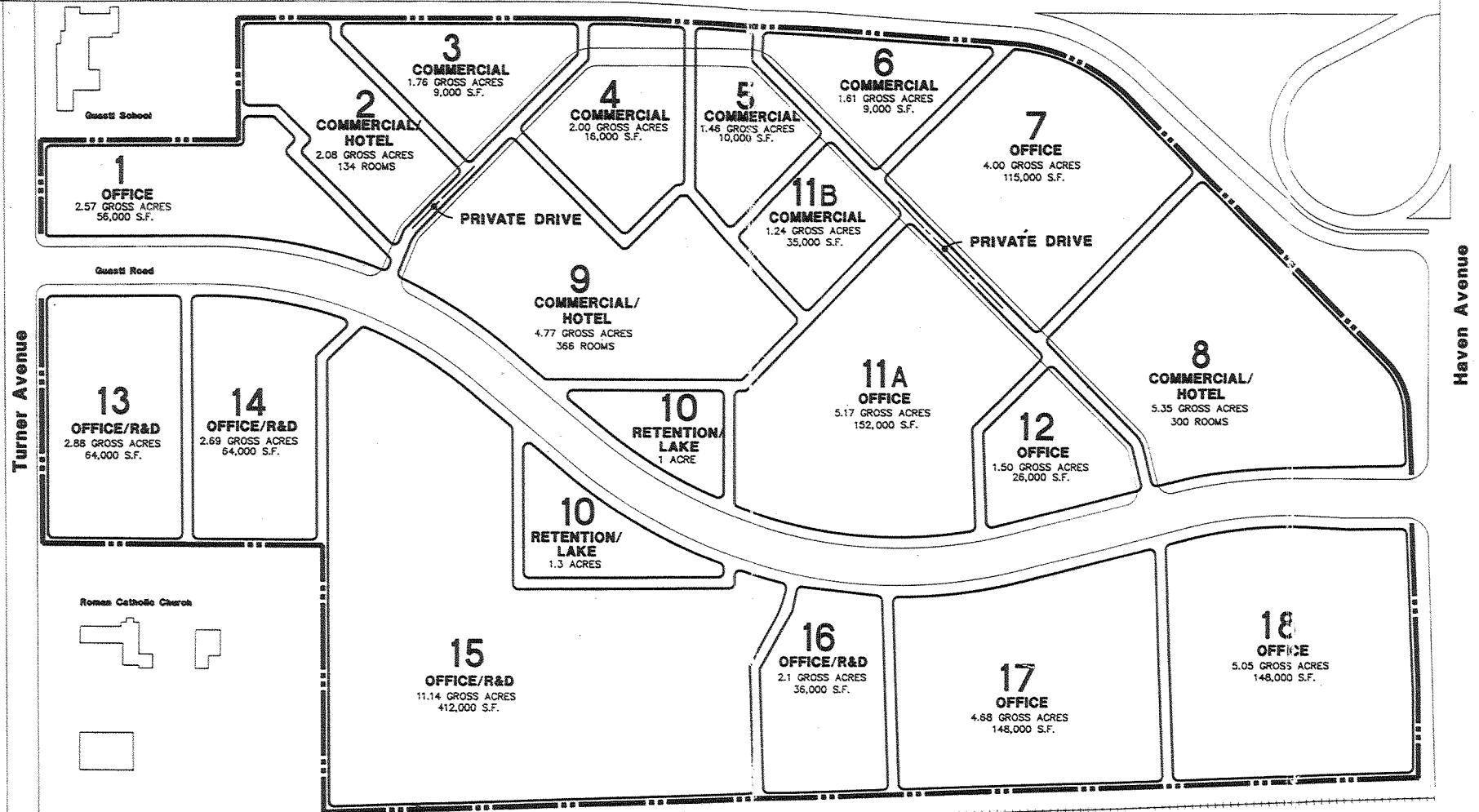
The Land Use Plan, Exhibit 5, shows the types of land uses permitted, the location, the acreage and the density or maximum anticipated square footage of buildings permitted in each land use area. The density is a percentage of the building square footage permitted to the land use areas total square footage.

The Land Use Plan calls out specific densities for each land use. Densities will vary to respond to individual users, which could result in re-assigning densities to other parcels in order maintain the total allowable square footage as indicated in the Land Use Plan, Exhibit 5, page 15.

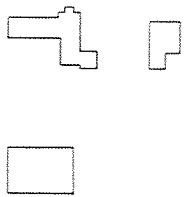
The Land Use Plan calls out densities which are expressed as floor area ratios (F.A.R.). The F.A.R. represents the amount of square footage built on the parcel in relation to the site acreage. (See Section 5.6, page 58 for information on F.A.R. and density). This ratio is defined as follows:

$$\frac{\text{Buildings s.f.}}{\text{Parcel s.f.}} = \text{F.A.R.}$$

San Bernardino Freeway



Roman Catholic Church



APRIL 11, 1988

NO.	LAND USE	ACREAGE	F.A.R.	BLDG. S.F.
1	OFFICE	2.57	.49	56,000
2	COMMERCIAL/HOTEL	2.08	--	134 ROOMS
3	COMMERCIAL	1.76	.11	9,000
4	COMMERCIAL	2.00	.18	18,000
5	COMMERCIAL	1.46	.15	10,000
6	COMMERCIAL	1.81	.13	9,000
7	OFFICE	4.00	.68	115,000
8	COMMERCIAL/HOTEL	5.35	--	300 ROOMS
9	COMMERCIAL/HOTEL	4.77	--	366 ROOMS
10	RETENTION/LAKE	2.30	--	--
11a	OFFICE	5.17	.70	152,000

NO.	LAND USE	ACREAGE	F.A.R.	BLDG. S.F.
11b	THEATRE/COMMERCIAL	1.24	.56	35,000
12	OFFICE	1.50	.40	28,000
13	OFFICE/R&D	2.88	.50	64,000
14	OFFICE/R&D	2.69	.55	64,000
15	OFFICE/R&D	11.14	.85	412,000
16	OFFICE/R&D	2.10	.39	36,000
17	OFFICE	4.68	.73	148,000
18	OFFICE	5.05	.67	148,000
19	QUEST ROAD	5.35	--	--
TOTAL:		69.70	--	1,300,000
				800 ROOMS

NOTE: Gross acreage of parcels North of Guest Road include areas up to centerline of private drive

LAND USE PLAN - EXHIBIT 5

4.3 CIRCULATION PLAN DESCRIPTION

A. The Circulation Plan Overview

The circulation plan represents the overall concept of vehicular and pedestrian movement within the Centrelake development.

The primary collector through Centrelake is Guasti Road which connects Turner Avenue to Haven Avenue. The City's Master Plan of Streets and Highways shows Guasti Road connecting from Archibald Avenue easterly, to Haven Avenue through Centrelake, thus allowing a major collector to carry all the traffic on all proposed development north of the railroad and south of the San Bernardino Freeway, between Archibald Avenue and Haven Avenue. A private interior street system will complete the internal project vehicular circulation scheme. The exact alignment of this private street is subject to modification depending on eventual development.

Vehicular circulation is designed to provide a smooth and continuous flow to all individual sites and to complete the major traffic artery running through the site. Pedestrian circulation is designed to complement vehicular circulation while maximizing project aesthetics and safety.

There is a five foot wide sidewalk along the south side of Guasti Road from Haven Avenue to Turner Road. It meanders along the lake area connecting with additional pedestrian pathways. When the sidewalk leaves the right of way and continues on private property, a change in the concrete finish shall announce the transition. In other areas the Guasti sidewalk is against the curb, which allows for general berming and landscaping on its south side. A sidewalk on the north side of the private drive will provide the major pedestrian circulation link on the project. Interior pedestrian circulation will connect all major uses with the lake area. Streetscape plantings and the amenities such as benches and kiosks will enhance the character and flair of Centrelake, and complement the architectural style. Precise design and placement of kiosks and benches is subject to City approval. Public benches will be provided. See both the Circulation Plan, Exhibit 6, page 19, and Landscape Plan, page 21.

B. Street Sections

Three street designs establish the vehicular circulation system. Haven Avenue, Guasti Road, and the interior private street provide access to Centrelake. See the Circulation Plan, Exhibit 6, page 19.

C. Haven Avenue

Haven Avenue is a major southwest arterial on which the major entrance to Centrelake occurs. The city hopes, through the provision of generous setbacks and landscape, to create a tree lined parkway on Haven Avenue. The landscape plans and setback requirements of Centrelake will serve to reinforce the parkway image.

According to the City Engineer, ultimately Haven Avenue will include three through lanes, 1 through right turn lane and 1 left turn lane southbound. Northbound will include 4 through lanes, 1 through right lane and 1 left turn lane. 1 right turn and 1 optional right turn and through lane southbound, and 1 left turn lane northbound are approved on Haven Avenue to serve the site. Exhibit 6 depicts 3 through traffic lanes, 1 right turn lane and 1 left turn lane in each direction for Haven Avenue at Guasti Road.

There presently exists right-of-way for Haven Avenue varying from 210 feet at the Southern Pacific Railroad to a minimum width of 180 feet near the intersection of Guasti Road and Haven Avenue, see Exhibit 6.

Centrelake will participate in construction of Haven Avenue improvements on a fair and equitable basis. This agreement shall be stipulated in the condition of approval for the parcel map or maps.

D. Guasti Road

Guasti Road, traversing the site east to west, is proposed to have a minimum right-of-way of 88', with a curb-to-curb dimension of 64'. Guasti road will be widened to 76' curb-to-curb within right-of-way of 96' at the intersection of Haven Avenue to accommodate two east bound left turn lanes, one east bound through lane, one eastbound right turn lane, and two westbound through lanes. A landscaped median enhances the lake area, midway on Guasti Road.

E. Private Interior Street

The private interior street is planned to unify the circulation concept. The design is proposed to enhance and soften the transition between the public and private streets. The proposed curb-to-curb dimension 40', with the exception of the northerly portion, parallel to the freeway which will be 32'. The exact alignment must remain flexible until site plans for land use areas 2, 3, 4, 5, & 6 have been designed and approved. It is anticipated that the alignment shown on all the plans will be slightly modified.

F. Turner Avenue

Turner Avenue is presently not classified on the City's "Master Plan of Streets and Highways" plan. Turner Avenue terminates at the San Bernardino Freeway on the North and is anticipated to terminate at the Southern Pacific Railroad on the South when the Archibald Avenue Grade Separation of the Southern Pacific Railroad is completed. Turner Avenue functions as a local street transversing the Guasti Winery property and the Church of San Secundo de Asti. The proposed right-of-way is 66' with 48' curb-to-curb per City standards. The existing open channel along the east side of the street fronting Centrelake has been replaced by an appropriate underground storm drain system.

G. Transportation Management Plan Provisions

The Transportation Management Plan measures noted in the Air Pollution Reduction Guidelines shall be incorporated in the development of the circulation plan for Centrelake. Also, Traffic Service Level "D" will be maintained by projects within the Specific Plan. At such time as the peak hour traffic volumes within the Specific Plan reach Traffic Service Level "C" (as determined by the City Engineer), a Transportation Management Plan shall be prepared by a registered professional traffic engineer. This Transportation Management Plan shall provide specific implementation mechanism and procedures for:

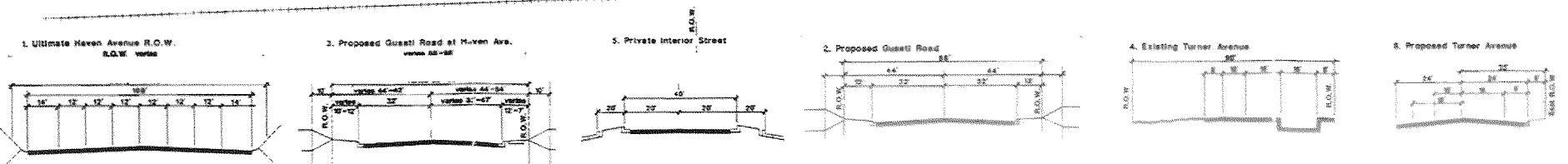
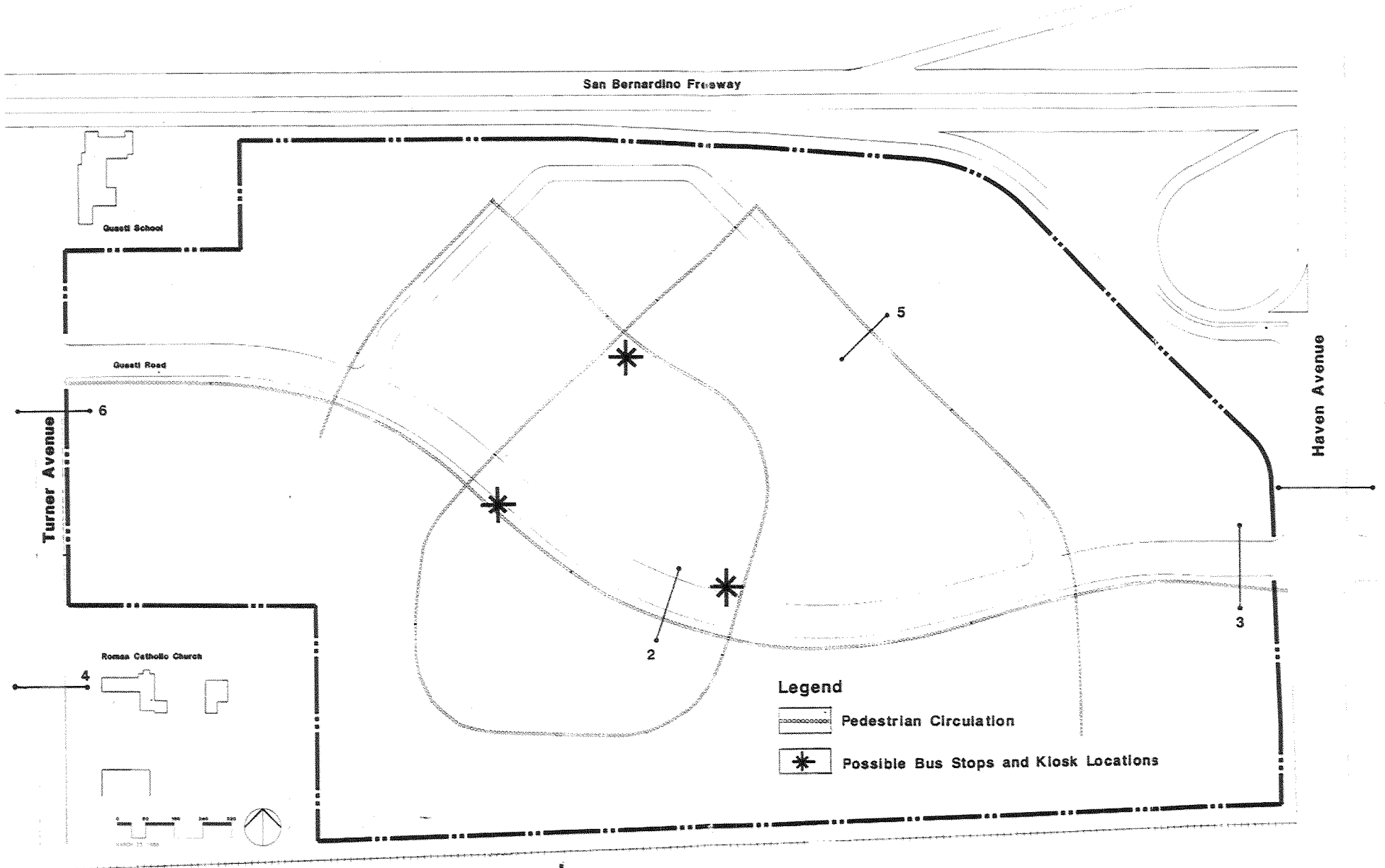
- a) transit incentives
- b) carpool/vanpool incentives
- c) alternate transportation inducements
- d) staggered work schedules/flexible work schedules
- e) jitney/minibus service
- f) internal capture
- g) ridesharing
- h) traffic signal coordination
- i) bicycles/mopeds
- j) park-and-ride lots, and other transportation management measures, as applicable.

H. Signal Warrants

Traffic signals will be required in the future at the intersection of Haven Avenue and Guasti Road. A fair share formula shall be developed by the City Engineer to fund said signal and other intersection improvements. The financial participation in signal construction and intersection improvements by Centrelake shall be on a fair and equitable share basis in accordance with an agreement made with the City Engineer. This agreement shall be stipulated in the conditions of approval of the parcel map.

Signal warrants have been completed reflecting current densities and uses.

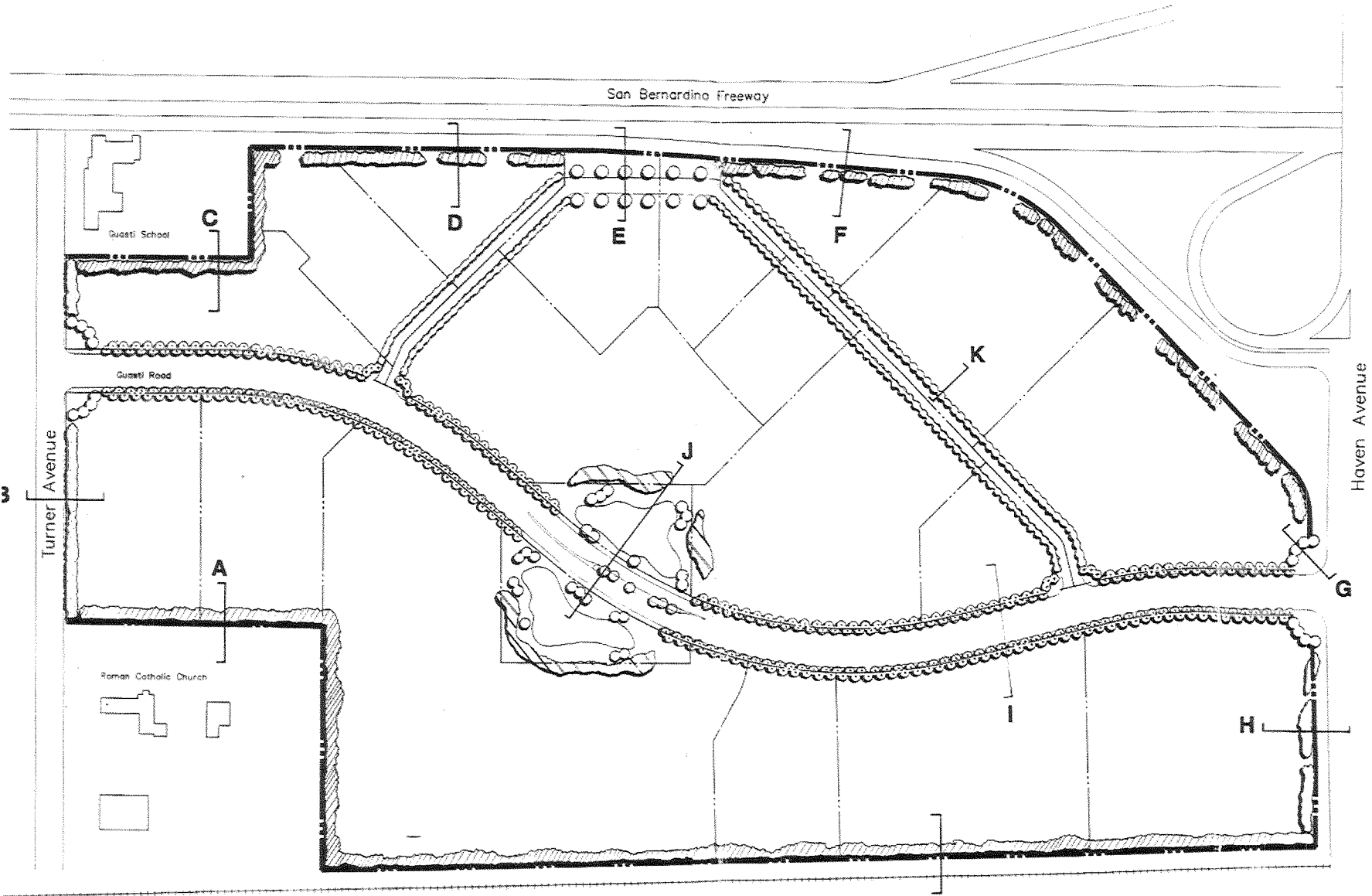
Subdivider/Developer shall construct traffic signal improvements at Haven Avenue and Guasti Road prior to January 1, 1990 unless the signal has been constructed or is under construction under A.D. #103 before that time.



CIRCULATION PLAN - EXHIBIT 6

4.4 CONCEPTUAL STREETScape AND LANDSCAPE PLAN

The Landscape Plan sets forth a coordinated framework of landscape elements that will provide landscaping continuity within Centrelake. The plan shows a variety of tree and shrub species, creating a hierarchy of street trees, entries, parking areas, entry drive, screening and accent plantings. The intent of the conceptual landscape plan is to coordinate the different land use areas and site boundaries in a whole. (See Conceptual Landscape Plan, Exhibit 7, page 21.). Special and specific entry treatments will be coordinated with the project signage, street furniture and lighting schemes.



Sections Appear on Pages 30-33.

LEGEND

STREETS

- GUASTI
- HAVEN
- TURNER
- PRIVATE ROAD
- CAMPHOR
- ALDER
- ALDER/PINE
- ARISTOCRAT PEAR/PALM

ENTRIES

- HAVEN / TURNER
- PRIVATE ROAD
- PALM
- FLOWERING PLUM

EDGES

- LAKE
- PERIMETER
- PALM, WILLOW, EUCALYPTUS
- EUCALYPTUS

CONCEPTUAL LANDSCAPE AND STREETScape PLAN - EXHIBIT 7

4.5 UTILITY PLAN DESCRIPTION

The Utility Plan shows the existing and proposed water, sewer, gas, and electric systems for Centrelake. All utility companies have been contacted and service to Centrelake has been verified. The following companies and their representatives have been contacted, statements of service capabilities are available. (See Utility Plan, Exhibit 8, page 23, and the utility service capability letters, Appendix 5, page A11.)

Southern California Gas Company
P.O. Box 3003
Redlands, California 92373-0306

Jerry Soderburg

General Telephone Electrics
585 North Mountain Avenue
Upland, California 91786

Willie Kainz

Southern California Edison
1351 Francis Street
Ontario, California 91762

Barney Moen

Sewer/Water
City of Ontario
303 East B Street
Ontario, California 91764

Jim Kinley

Sewer-Cucamonga Interceptor
Chino Basin Municipal Water District
8555 Archibald Avenue
Cucamonga, California 91730

Larry Miller

Water Conservation
Chino Basin Water Conservation District
P.O. Box 2127
4594 San Bernardino Street
Montclair, California 91263

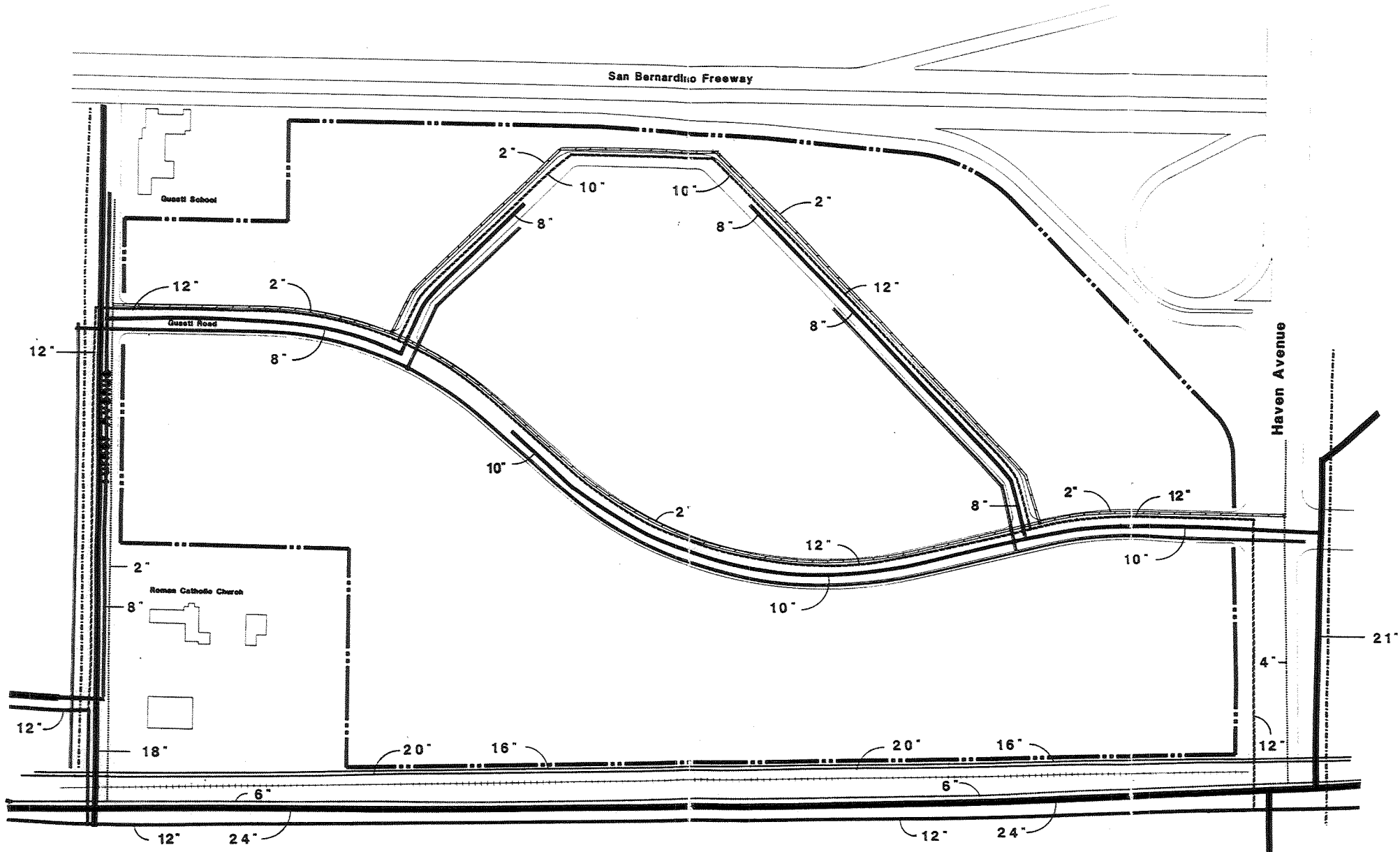
Ernest E. Rowley

Water Basin Management
Chino Basin Municipal Water District
8555 Archibald Avenue
Cucamonga, California 91730

Donald R. Peters

A. Water

Domestic service and fire protection water system design is calculated for maximum domestic demand of 0.165 gal/min./sq. ft. of building or 500 gal/min 5,000 GPM fire flow.



- | | | | | | |
|--|--------------------|--|----------------|--|-------------------------------|
| | EXISTING 12KV LINE | | EXISTING GAS | | PROPOSED GAS |
| | PROPOSED WATER | | EXISTING WATER | | PROPOSED ELECTRIC & TELEPHONE |
| | PROPOSED SEWER | | EXISTING SEWER | | EXISTING PETROLEUM LINE |

UTILITY PLAN - EXHIBIT 8

Construction plans for the water lines within the interior of the project will be approved by the City Engineer in accordance with the approved Water Master Plan and City Standards before construction. All public water facilities shall be placed in dedicated public streets or dedicated easements in private streets as approved by the City Engineer.

Water service provided is adequate to support the currently approved land use.

B. Sewer

The sewer design will accommodate the 1.3 million square feet of office/retail, theatre and restaurant, and 800 hotel rooms as currently approved for the site.

The allotted capacity of 2.5 M.G.D. for the project in the 21 inch truck sewer in Haven Avenue is sufficient to carry the design flows for the easterly portion of Centrelake Business Park. Allotted capacity of 0.5 cfs in the 8 inch sewer in Guasti Road west of Turner Avenue is sufficient to carry the design flows for the westerly portion of the project.

Construction plans for the sewer lines shall be approved by the City Engineer in accordance with the approved Master Plan for Sewer and City Standards, prior to construction.

4.6 GRADING & DRAINAGE PLAN DESCRIPTION

The project site was in its unimproved condition, a vineyard. As a result, the existing run-off is relatively low. On-site drainage under these unimproved conditions is split approximately equal to a natural low area at Haven Avenue and Southern Pacific Railroad to the east, and to the existing Lower Deer Creek Channel to the west.

Development of Centrelake will provide increased run-off as a result of the construction of new roadways, sidewalks and buildings, and the modification of the natural topography.

Grading of the project site will be such that storm run-off from approximately 25.9, 24.4 and 19.5 acres will be tributary to the Haven Avenue and Lower Deer Creek/Turner Avenue storm drains and the detention lakes, respectively. A combination swale and storm drain system will be constructed within the southerly portion of the site to convey flows to the primary outlet piping system.

Because of the limited capacity of the existing storm drain beneath the Ontario International Airport runways, the Centrelake drainage plan necessitated the use of detention facilities. The permanent on-site lake will take the place of the standard earthen detention basin in order to create an aesthetically enhanced environment while providing the retention volume required to maintain the maximum design flow at the Ontario International Airport drain.

The lakes will cover approximately 2.3 acres and will maintain a permanent depth of 8 feet. Additional retention depth of one foot with one foot of freeboard will also be provided. The permanent water level will be controlled by a primary outlet which will gravity drain the accumulated storm water retained in the lake within a maximum 24 hour period. The primary outlet will be a pipe extending to the west and connecting to the lower Deer Creek Channel just north of the Catholic Diocese on Turner Avenue. A secondary outlet will control the maximum water elevation. The secondary outlet will be an emergency spillway which will allow flows to surface drain westerly across the parking lot also connecting to the Lower Deer Creek Channel just north of the Catholic Diocese on Turner Avenue. The spillway and overflow swale have been designed to carry the maximum flow tributary to the lake. Low flow piping and drainage facilities will be utilized to minimize nuisance flow from draining directly into the lake. These low flow facilities will intercept the first flows from a storm that are contaminated with silt, oils, and other debris from the parking areas and by-pass the lake. Other low flow facilities would consist of using swales in the landscaping area where it is possible to intercept flows and reduce velocity thereby allowing debris to settle out before draining into the lake.

Control and containment of off-site water will be accomplished by construction of swales, berms and storm drains. Run-off from the off site areas to the north will be intercepted at the outlet of the culverts under Interstate 10 and conveyed within the eastern site boundary to a storm drain system at the Haven Avenue underpass where flows are intercepted and conveyed southerly to the existing improved Deer Creek System.

Approved design of the proposed drainage facilities (i.e., detention lake, storm drains, etc.) shall be in accordance with the City's criteria and standards in effect at the time of final plan submittal. The final design of the permanent lake storm flow retention feature shall be the worst case of a 2, 10, 25-hour and 100-year frequency storm considering a single event within a 24-hour period.

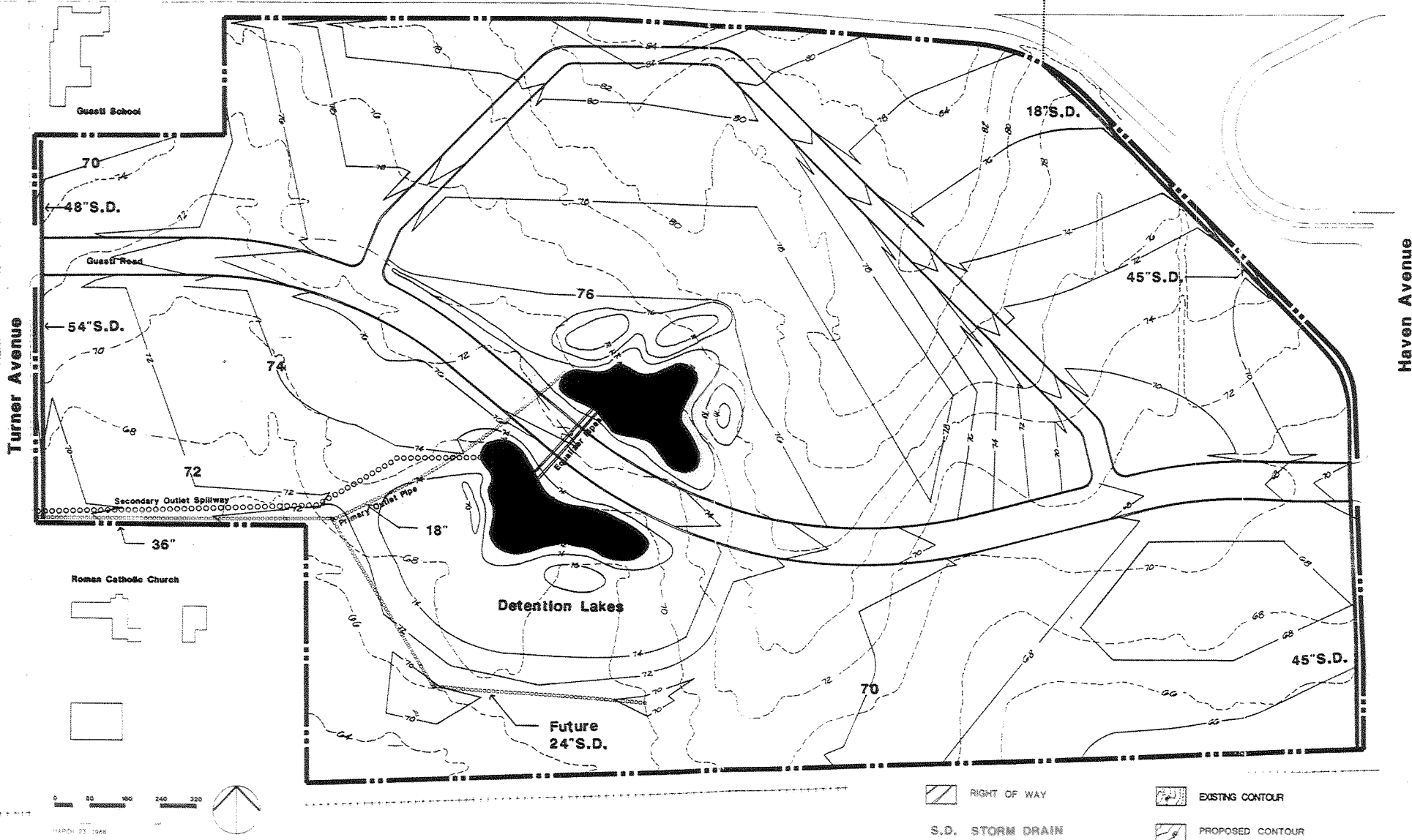
Each site plan approval in this project will be required to provide its own on site drainage study to be approved by the City Engineer. This study, among other things, will discuss the ultimate disposal of the on site run-off.

Water Quality, Quantity and Erosion Control and Conservation

Water Quality in this project located in the northern part of the Chino Basin is considered good. Major programs to recharge the Chino Basin underground aquifer have been instituted (MEA 11-22). Factors associated with urban development can have a negative impact on the quality and quantity of recharge waters. In order to mitigate the problems associated with urban covering of permeable surfaces and urban pollution of run-off and polluting of subsequent recharge, the following design and maintenance programs shall be instituted on the Centrelake Project:

- A. Prior to construction, an erosion control plan shall be prepared and submitted for City review. This erosion control plan shall be monitored monthly in the field during April through October months. The erosion control plan shall be monitored in the field every two weeks during the months of November through March. The erosion control plan shall contain provisions for regular water schedules, graded and construction area diking, water outflow channel desiltation devices within graded construction areas and in front of catch basins receiving on-site and on-street water. Regular street watering and cleaning shall be identified on the erosion control plan.
- B. After construction, regular on-site street and parking lot sweeping shall be maintained to reduce the accumulation of urban waste and sediments.
- C. Special design and engineering considerations should be made to parking lot design to catch, filter and reduce the discharge of supernatant liquids, intrained sludge, urban waste and sediments. A regular cleaning program of such parking lot devices shall be made after each major storm and at monthly intervals during the months of April through October.
- D. Specific designs for project area development should maximize open spaces, thereby reducing or eliminating incremental increases in run-off to maximize ground water absorption rates. Landscape design criteria shall be coordinated with engineering drainage plans to initiate the following objectives: hardscape areas should use pervious paving materials; grassy areas should utilize swale designs to slow down run-off and maximize infiltration; roof leaders on buildings should discharge to pervious areas, greenbelts or seepage pit areas; landscaped areas should be bermed to contain on-site water with special overflow systems designed into the landscape area systems; small landscaped areas such as planters, tree well and medians should be designed so no automatic irrigation water flows off the planted areas; automatic sprinkler or irrigation systems will be required and will include drip or other water conserving apparatus to include tensiometer control systems. (See Grading and Drainage Plan, Exhibit 9, page 27.)
- E. All permanent water contained within the retention lake shall be circulated so as to maintain adequate levels of clarity and to meet all applicable health standards.

San Bernardino Freeway

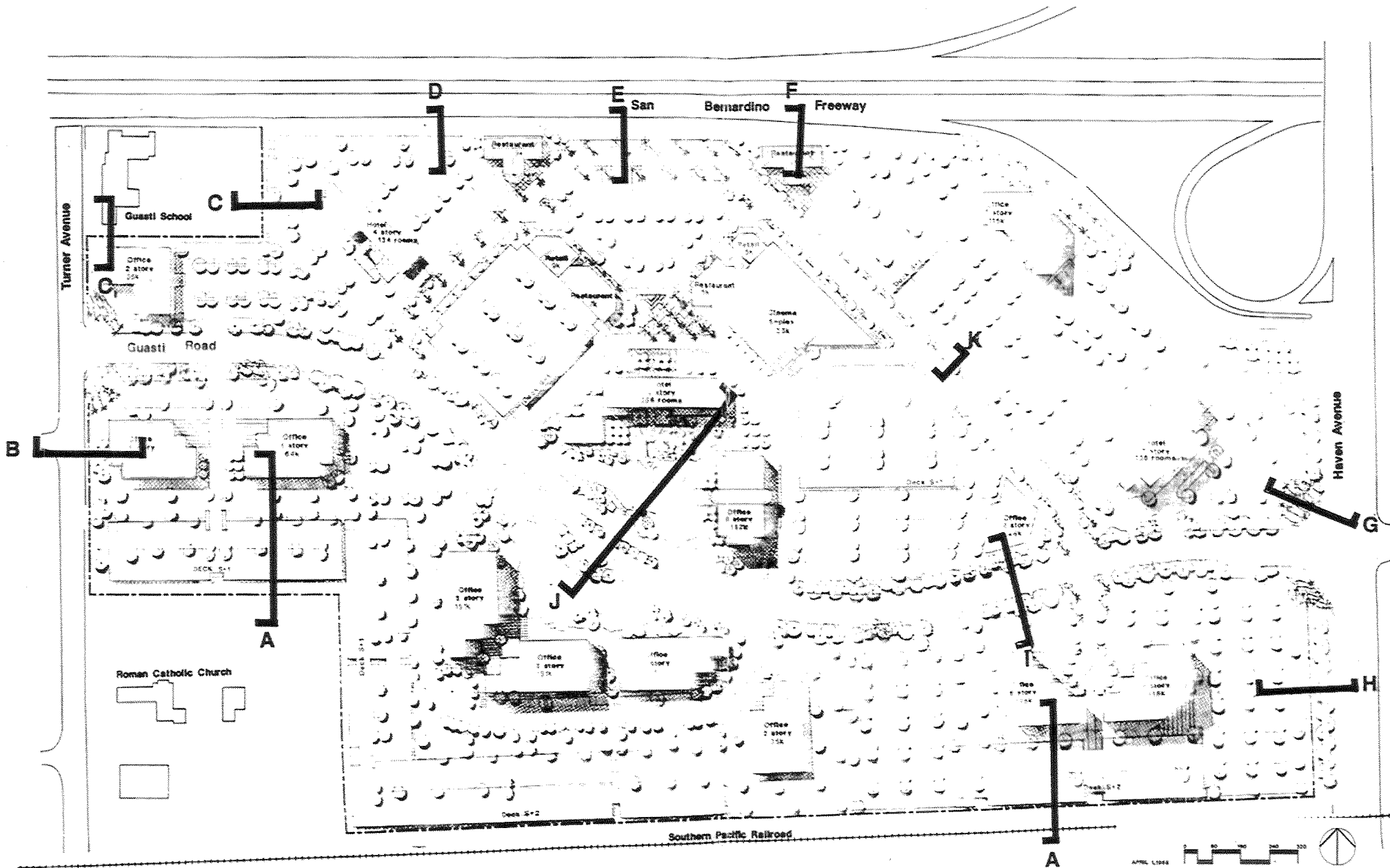


CONCEPTUAL GRADING AND DRAINAGE PLAN - EXHIBIT 9

4.7 SITE SECTIONS PLAN DESCRIPTION

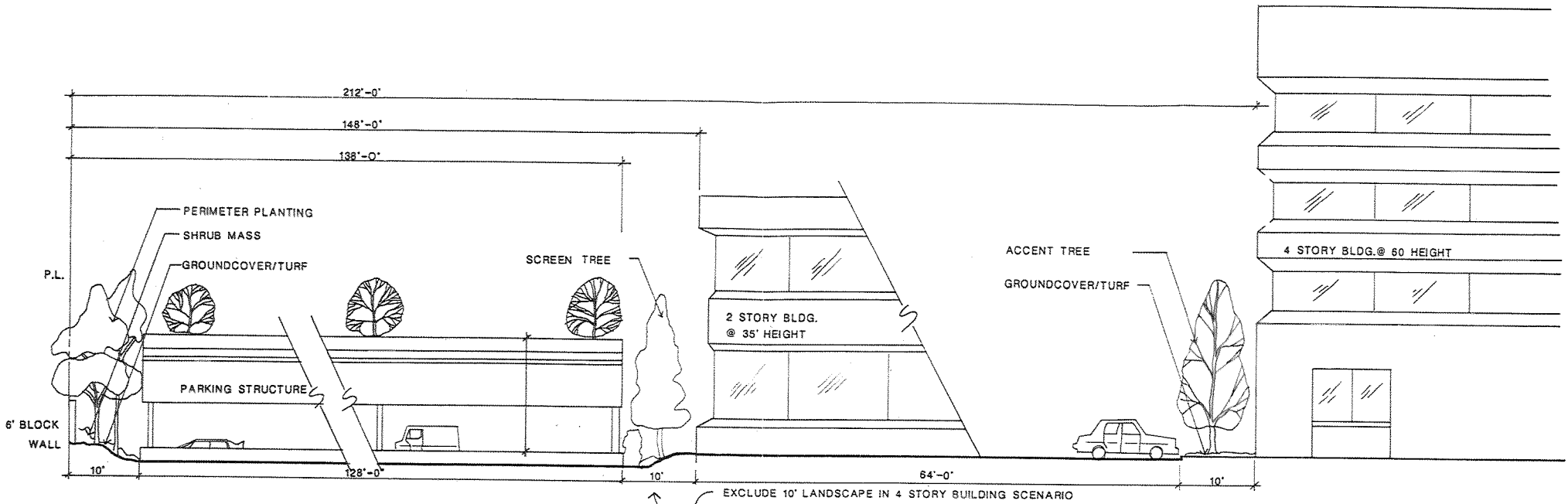
The Site Sections Plan shows a variety of building setbacks and landscaping conditions. Special attention shall be paid to minimizing light and glare from on site uses emanating to and impacting adjacent land use and roadways. All future site plans shall design exterior lighting specifications on all buildings, parking lots, storage and open space areas, to protect the existing and adjacent land uses, specifically Guasti School and San Secundo D'Asti Church from proposed Centrelake uses. Buildings and other uses adjacent to office uses shall be noted on site plans, with specific notation regarding line of sight studies of buildings, parking lots, lighting or other potentially intrusive structures on site. Refer to Sections I and J, Exhibit 13A, page 33, for illustrative examples of use buffers.

The Detail Key Plan, Exhibit 10, page 29, shows the location where the various sections were taken.

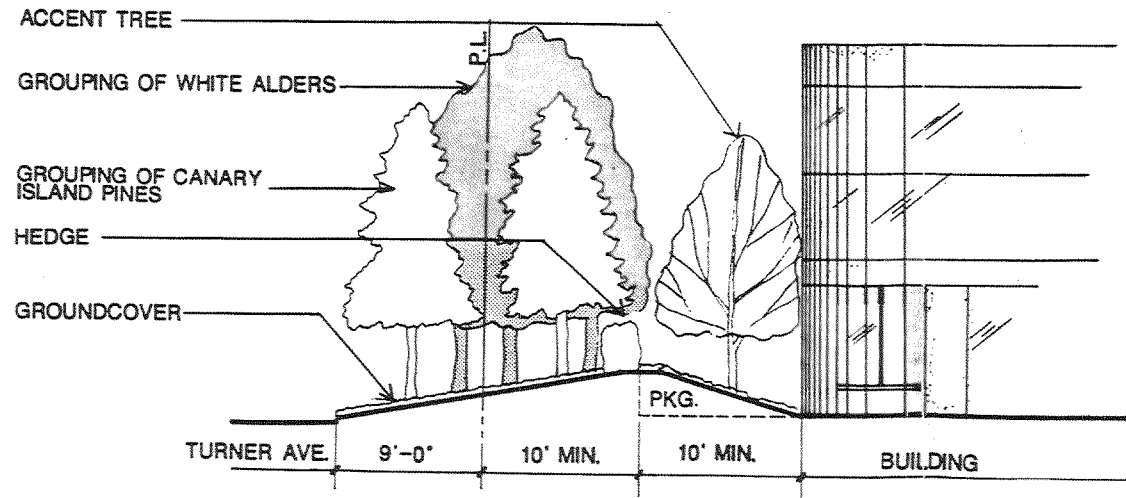


Total Hotel Rooms: 800
 Total Building Square Footage: 1,300,000 S.F.

SITE SECTION DETAIL KEY PLAN - EXHIBIT 10



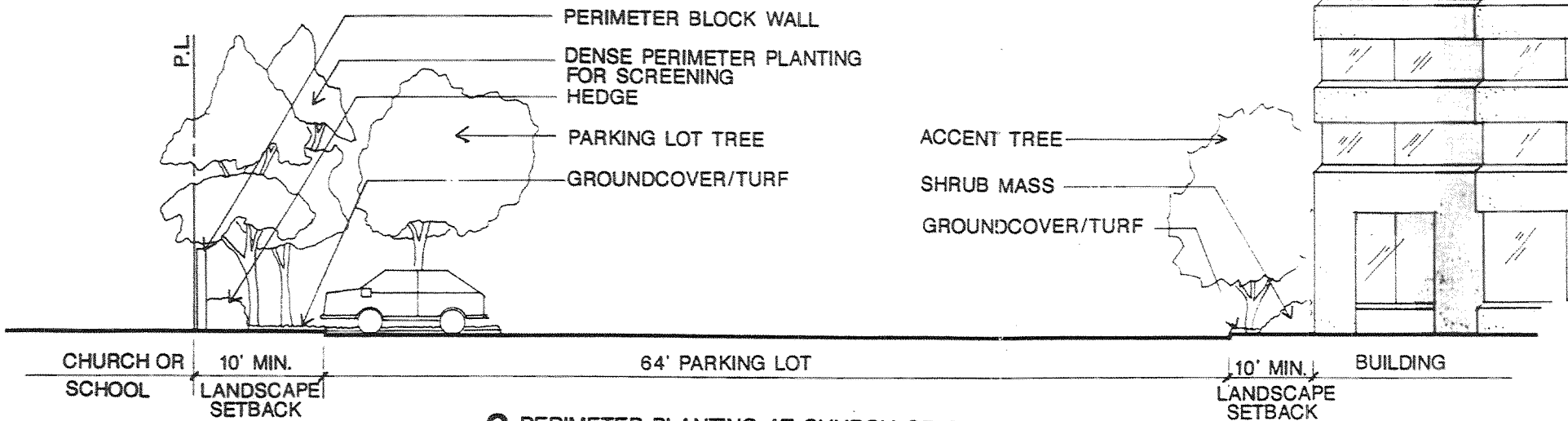
A PERIMETER PLANTING & BUILDING HEIGHT LIMITATION



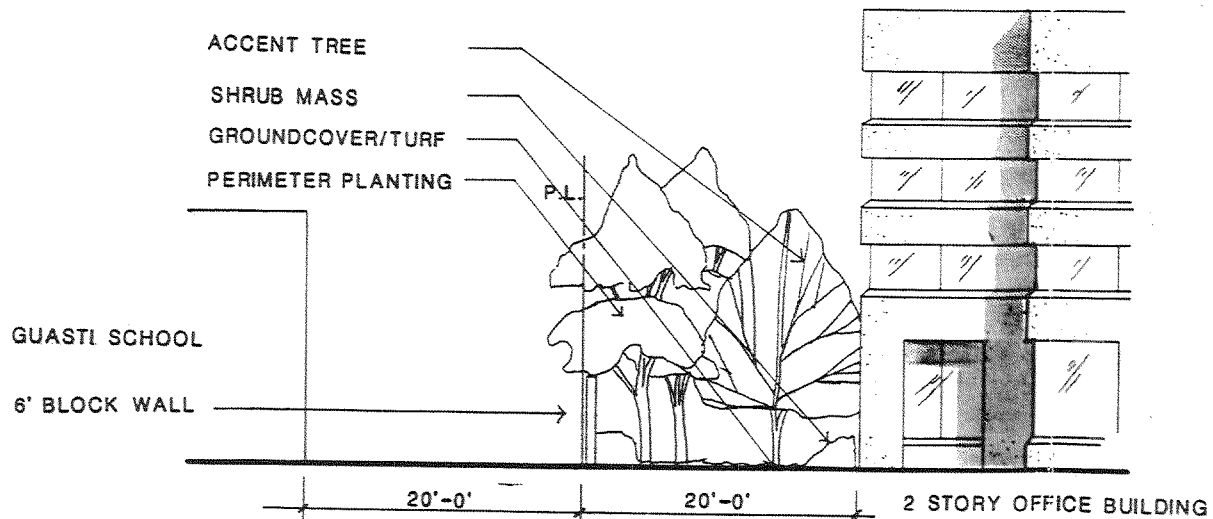
B TURNER AVE.

EXHIBIT 11

NOTE: LANDSCAPING TO PROVIDE SCREENING FROM PARKING LOT FOR LIGHT OR GLARE ONTO SCHOOL OR CHURCH

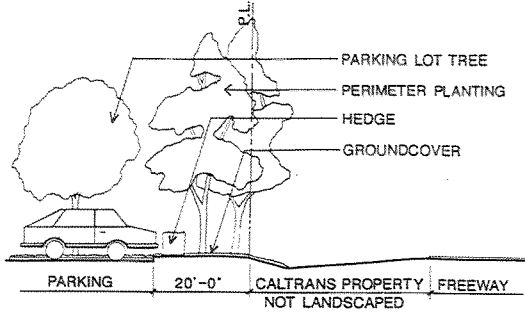


C PERIMETER PLANTING AT CHURCH OR SCHOOL

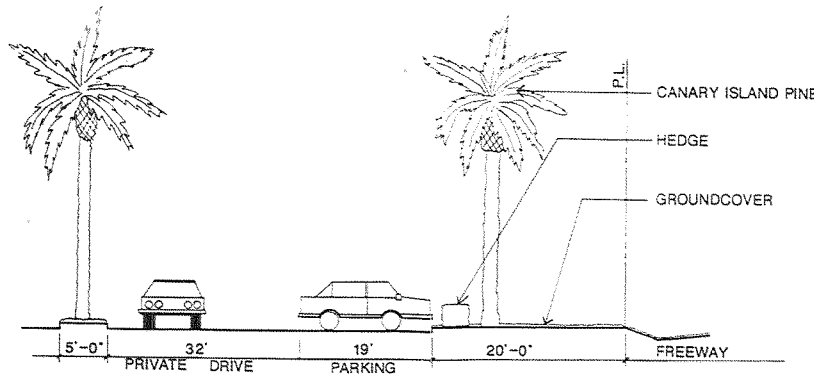


C₁ PERIMETER PLANTING AT SCHOOL

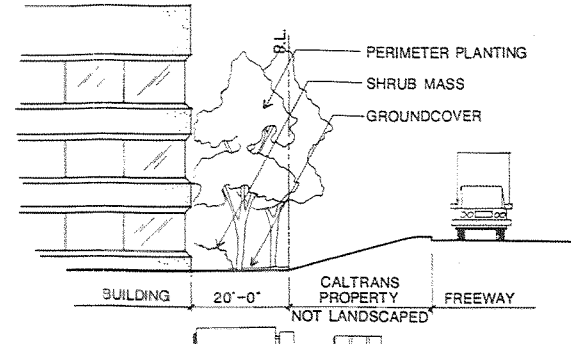
EXHIBIT 12



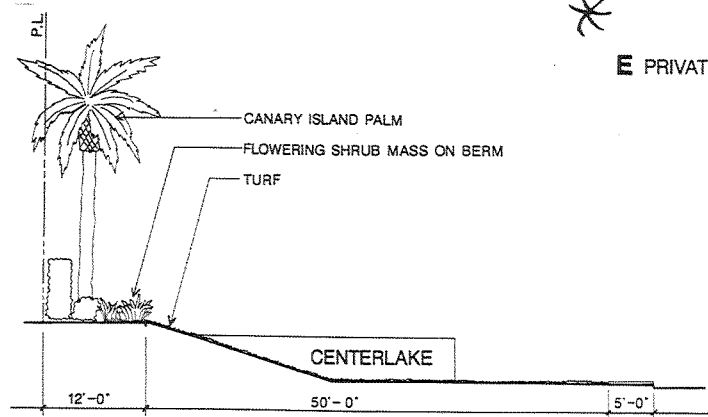
D PERIMETER PLANTING ALONG FREEWAY



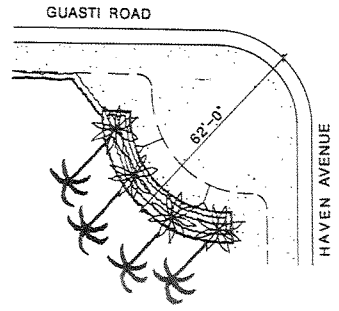
E PRIVATE DRIVE/RETAIL PARKING



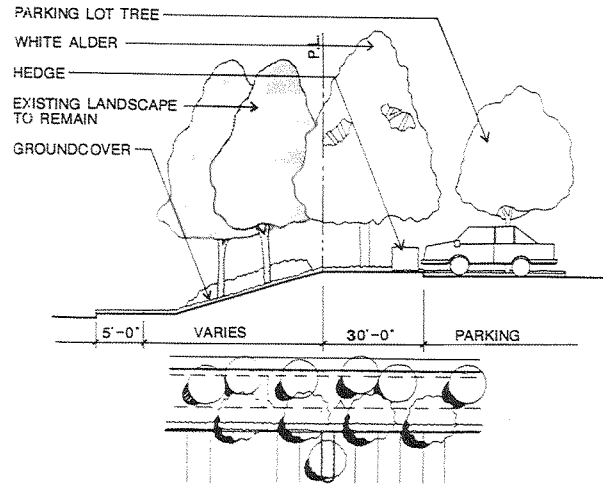
F PERIMETER PLANTING ALONG FREEWAY RAMP



G CENTERLAKE ENTRY PLANTING

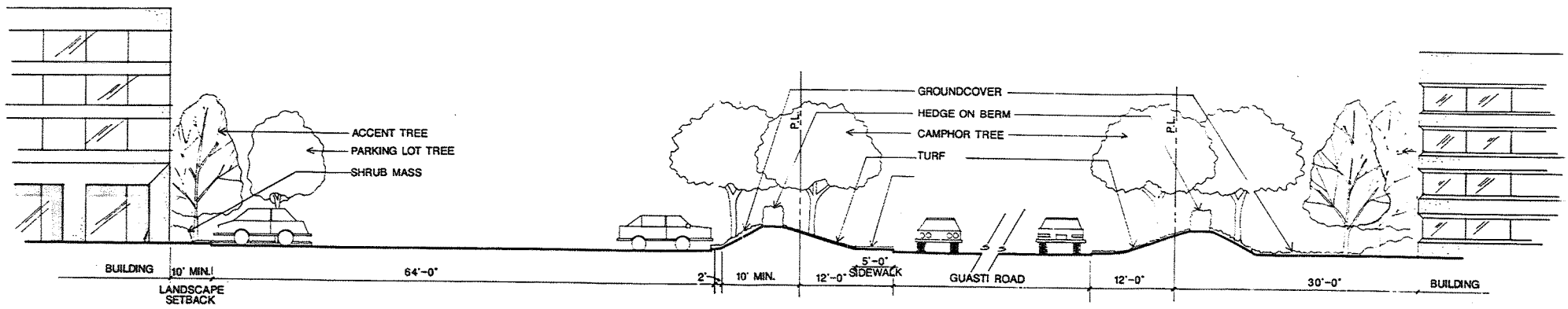


NOTE: NO PARKING ALONG SOUTHERLY EDGE OF PRIVATE DRIVE

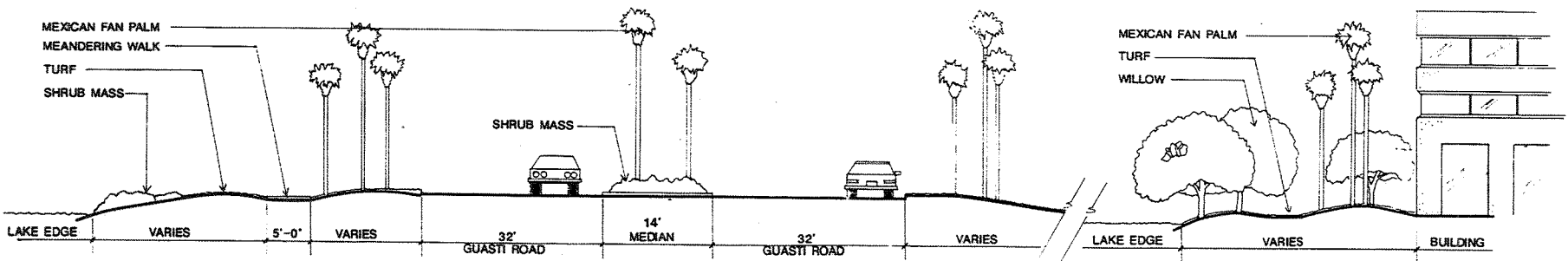


H HAVEN AVENUE PLANTING

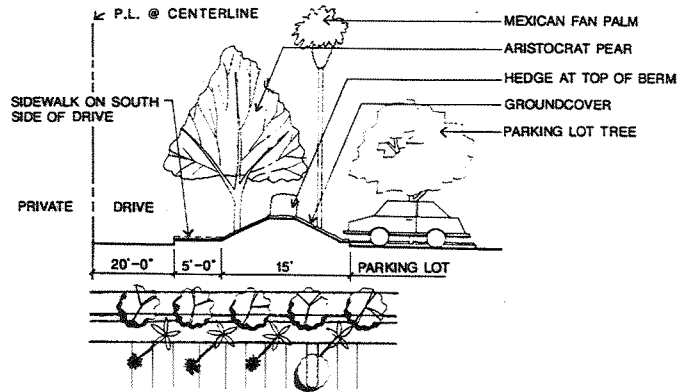
EXHIBIT 13



GUASTI ROAD



J GUASTI ROAD AT LAKE



K PRIVATE DRIVE

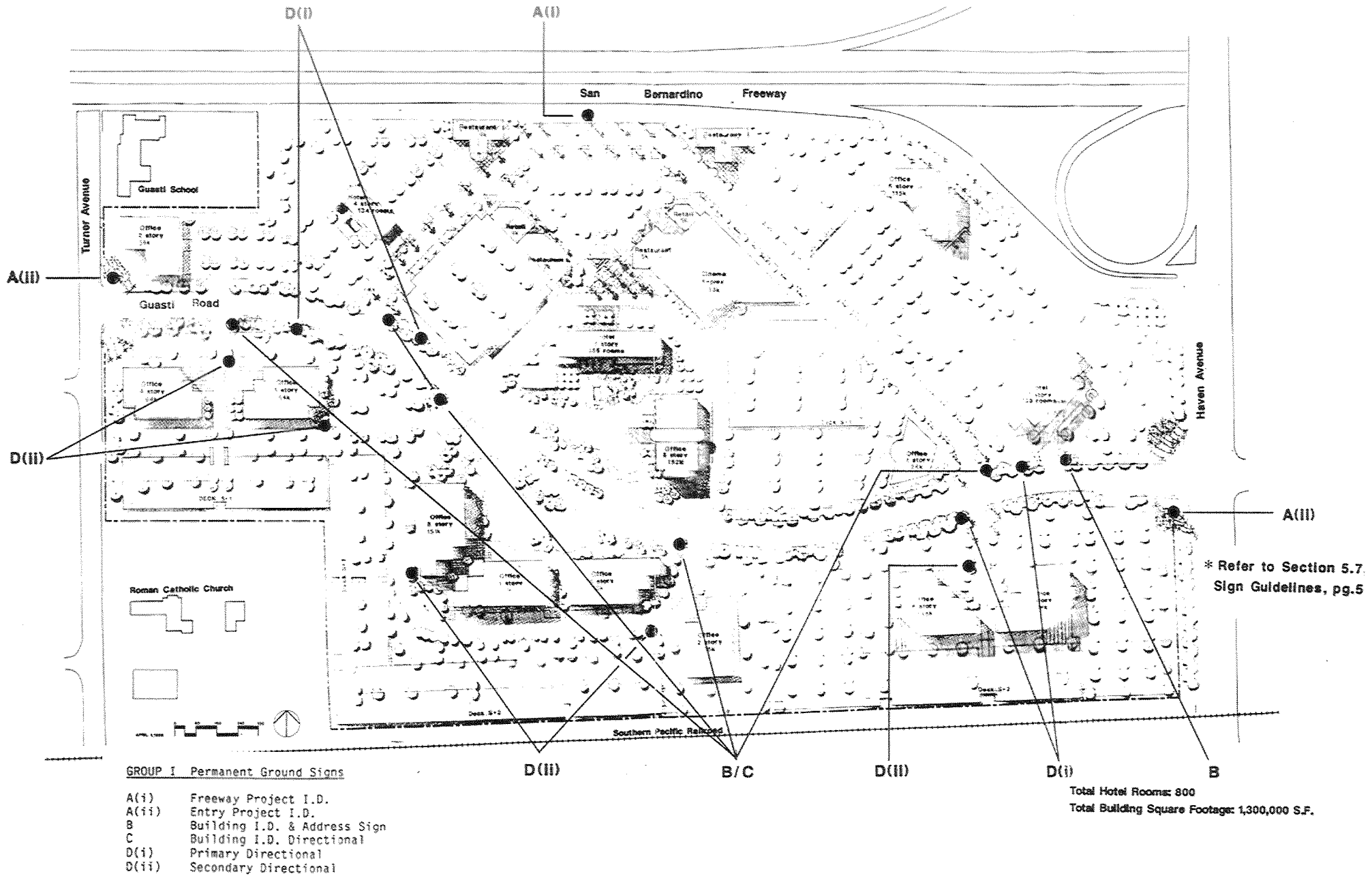
EXHIBIT 13 A

4.8 CONCEPTUAL SIGN PLAN DESCRIPTION

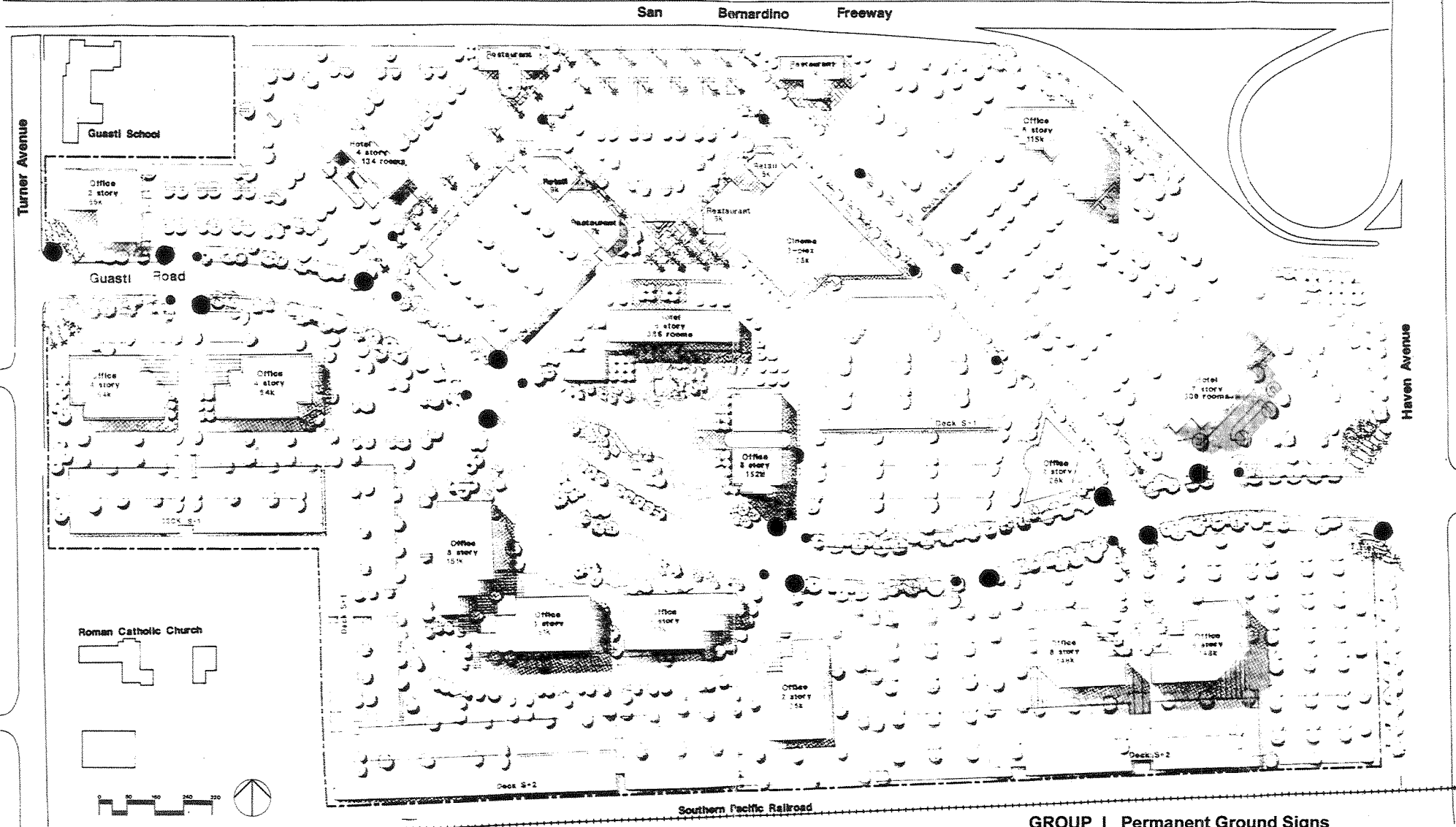
The signs and sign standards for Centrelake have been comprehensively designed because of the importance of controlling signage and to provide an overall coordinated signage program equally beneficial to all development within the park.

The conceptual sign plans that follow show suggested physical design locations of the sign types allowed in Centrelake. Exact locations to be determined.

Refer to Sign Guidelines in Section V, page 59, Development Plan Standards for further requirements and specifications. (See Suggested Ground Sign Location Plans, Exhibit 14, 14A and 14B, pages 35 through 37.)



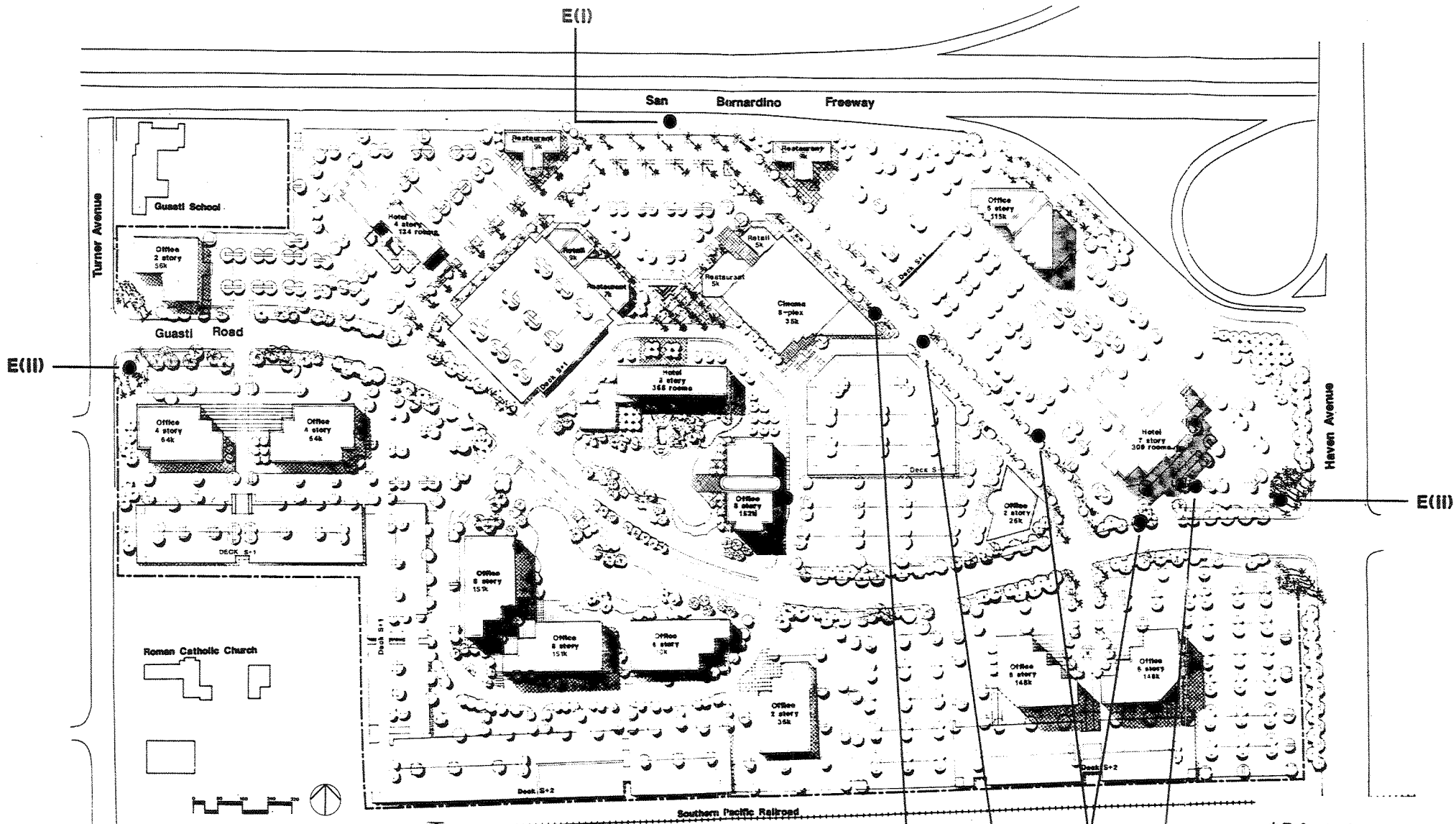
SUGGESTED PERMANENT GROUND SIGN LOCATION PLAN - EXHIBIT 14



* Refer to Section 5.7, Sign Guidelines, Page 65, D(III) & D(IV)
 Total Hotel Rooms: 800
 Total Building Square Footage: 1,300,000 S.F.

GROUP I Permanent Ground Signs
 ● D(III) Handicapped/Private Property Entry Sign
 ● D(IV) Stop Sign

SUGGESTED PERMANENT GROUND SIGN LOCATION PLAN - EXHIBIT 14A



Total Hotel Rooms: 800
 Total Building Square Footage: 1,300,000 S.F.

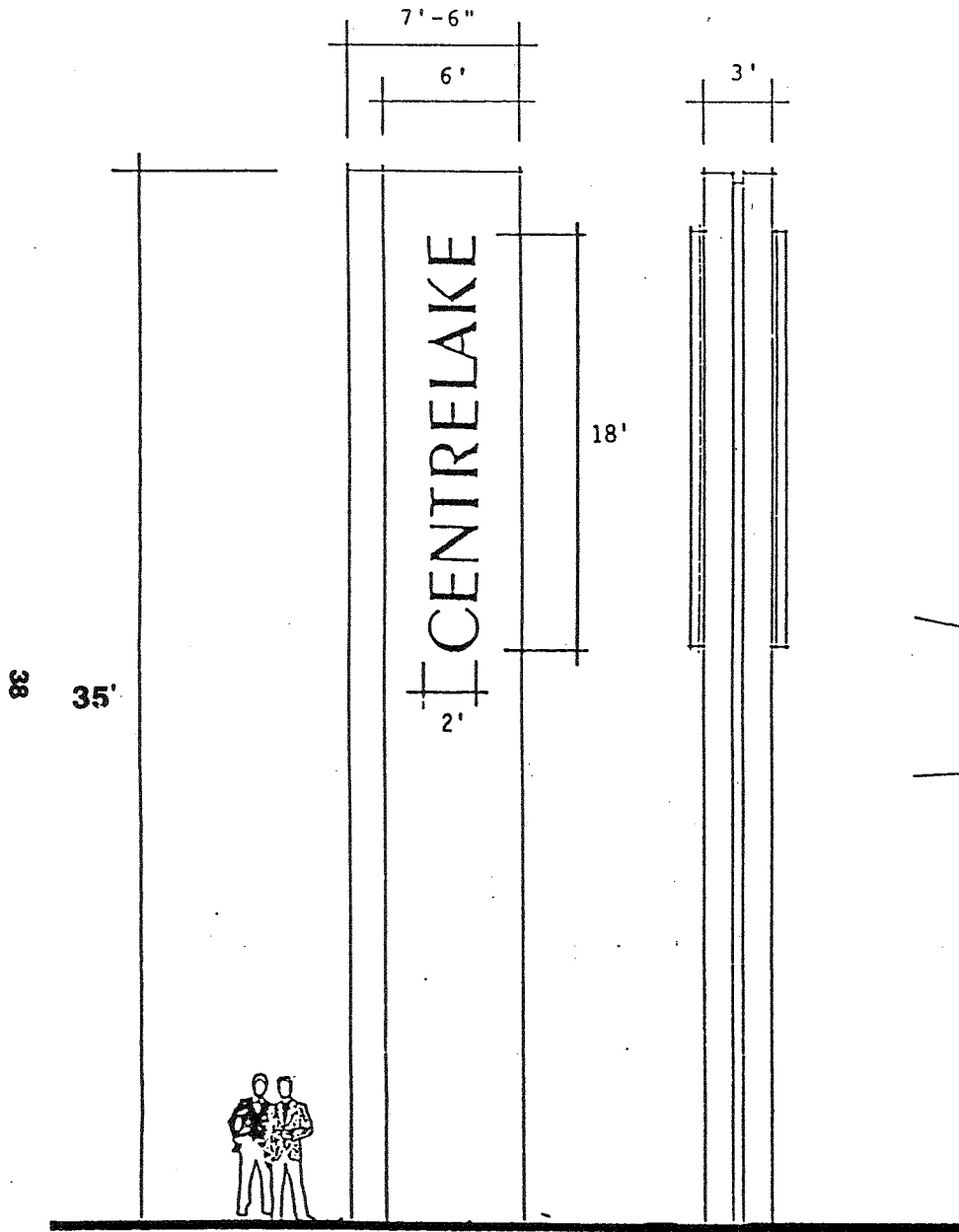
GROUP II Temporary Ground Signs

- E(i) Freeway Project Marketing Sign
- E(ii) Entry Project Marketing Sign
- F Individual Building Marketing Sign
- G(i) Construction Sign
- G(ii) Pre-Lease Sign
- G(iii) On-Going Leasing Signs

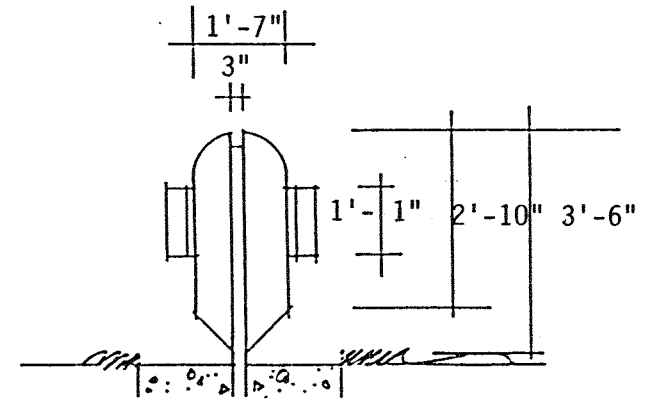
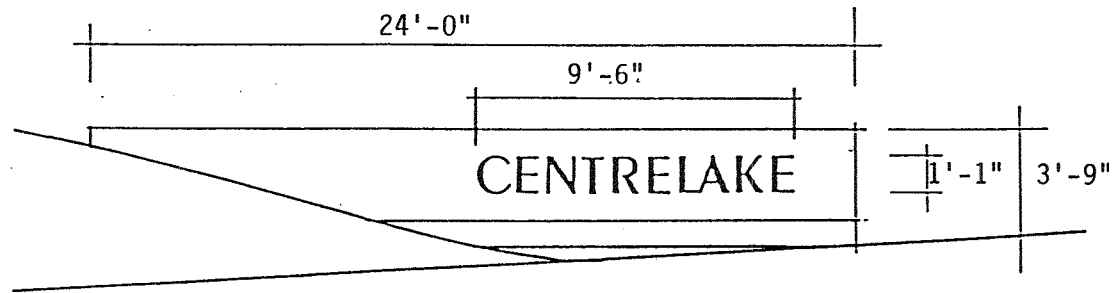
G(II) F G(II) F
 G(III) G(I) G(III) G(I)

* Refer to Section 5.7, Sign Guidelines, pg.65.

SUGGESTED TEMPORARY GROUND SIGN LOCATION PLAN - EXHIBIT 14B
 PHASE 1



A(i) Freeway Project Identification Sign

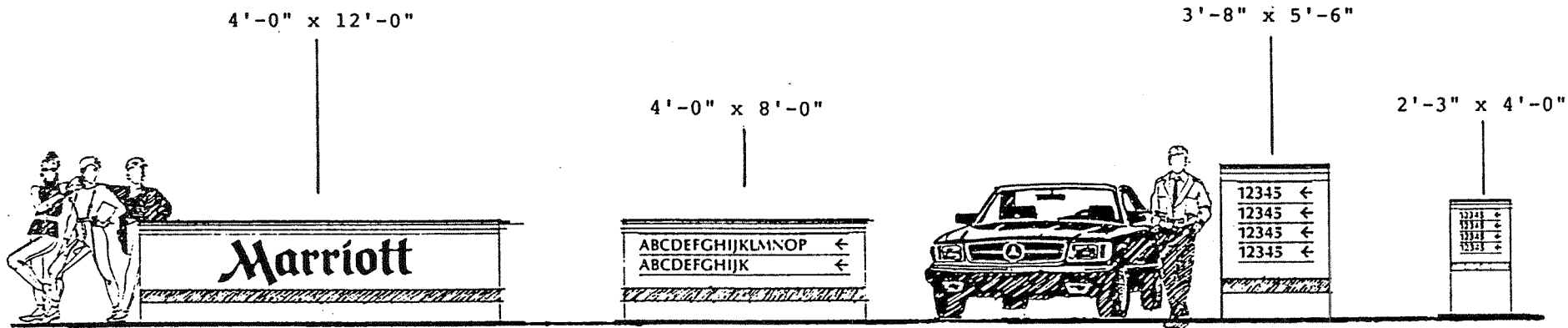


A(ii) Entry Project Identification Sign



Scale: 1/8" = 1'-0"

39



B. Building Identification & Address Sign (Street)

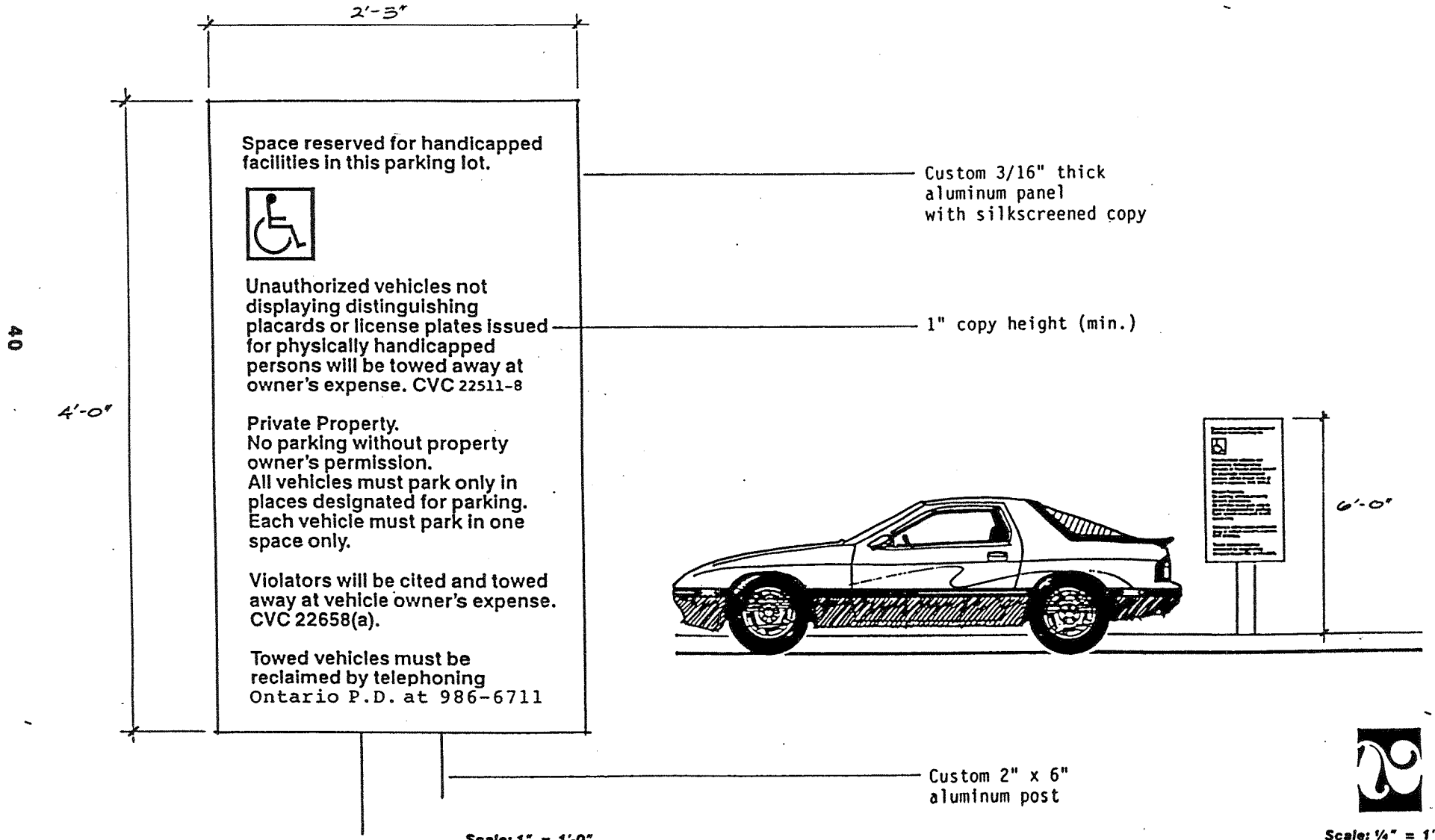
C. Building Identification Directional (Street)

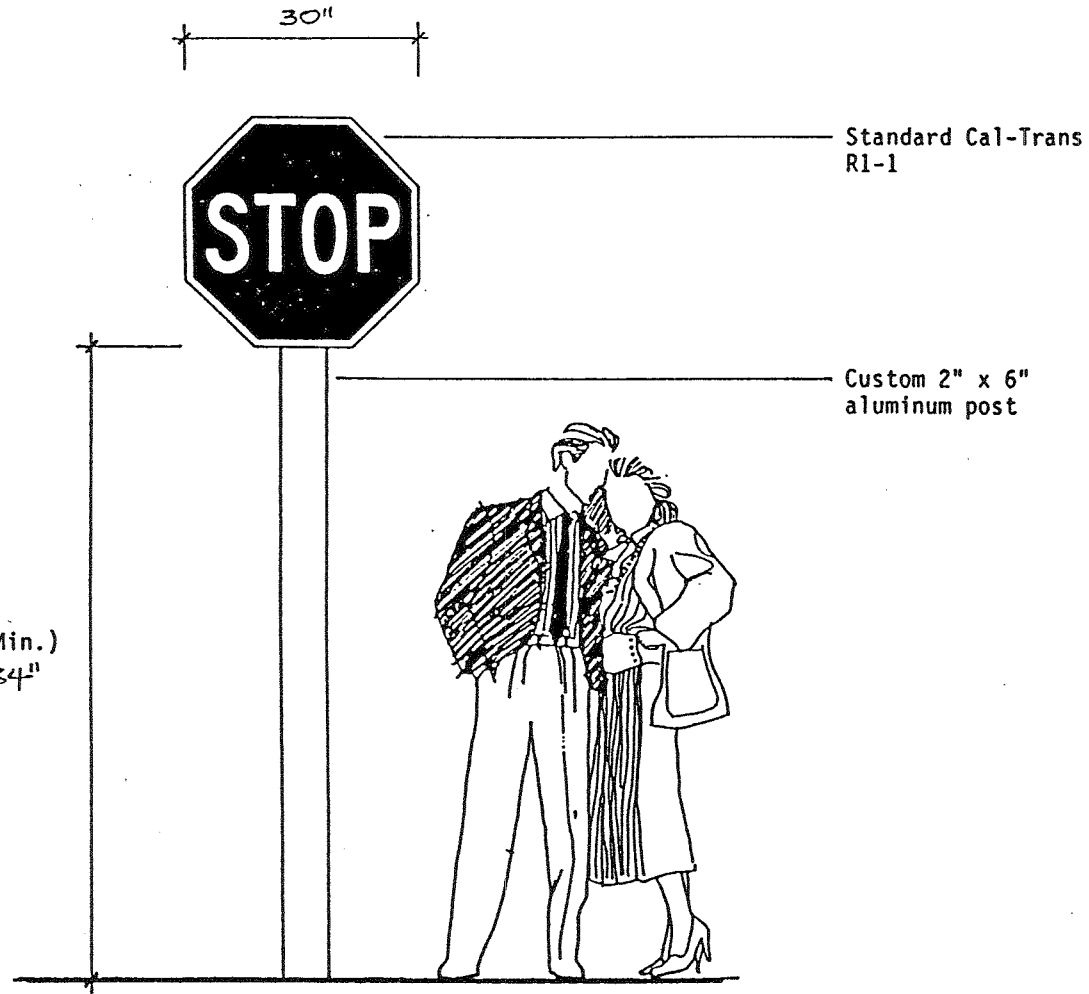
D(i) Primary Directional (Street)

D(ii) Secondary Directional (Internal)



Scale: 3/16" = 1'-0"



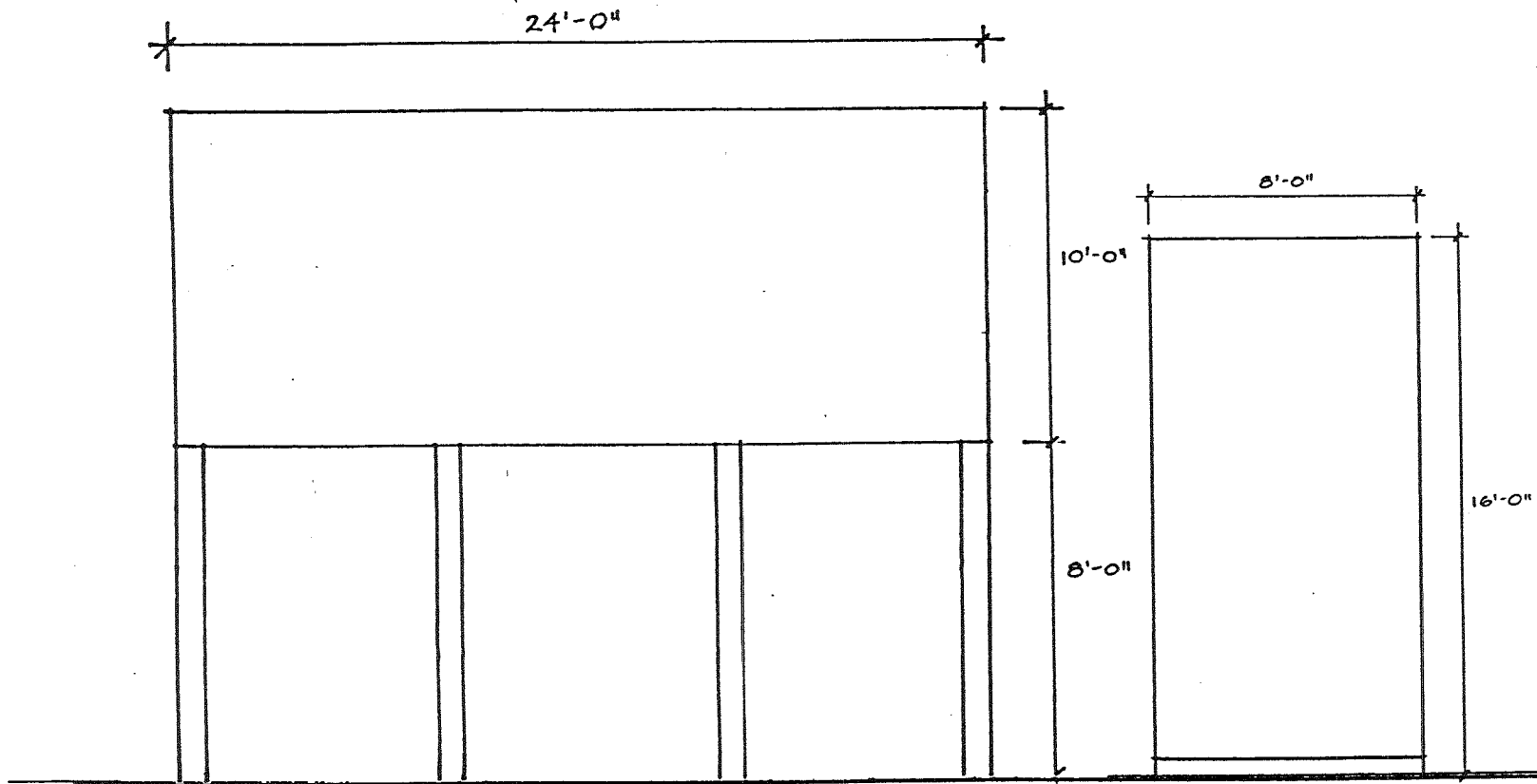


41



Scale: 1/2" = 1'-0"

42

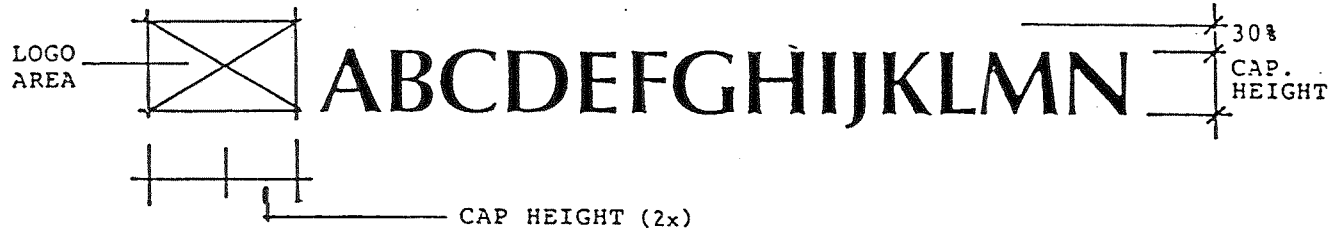


E(i) Freeway Project Marketing Sign

E(ii) Entry Project Marketing Sign

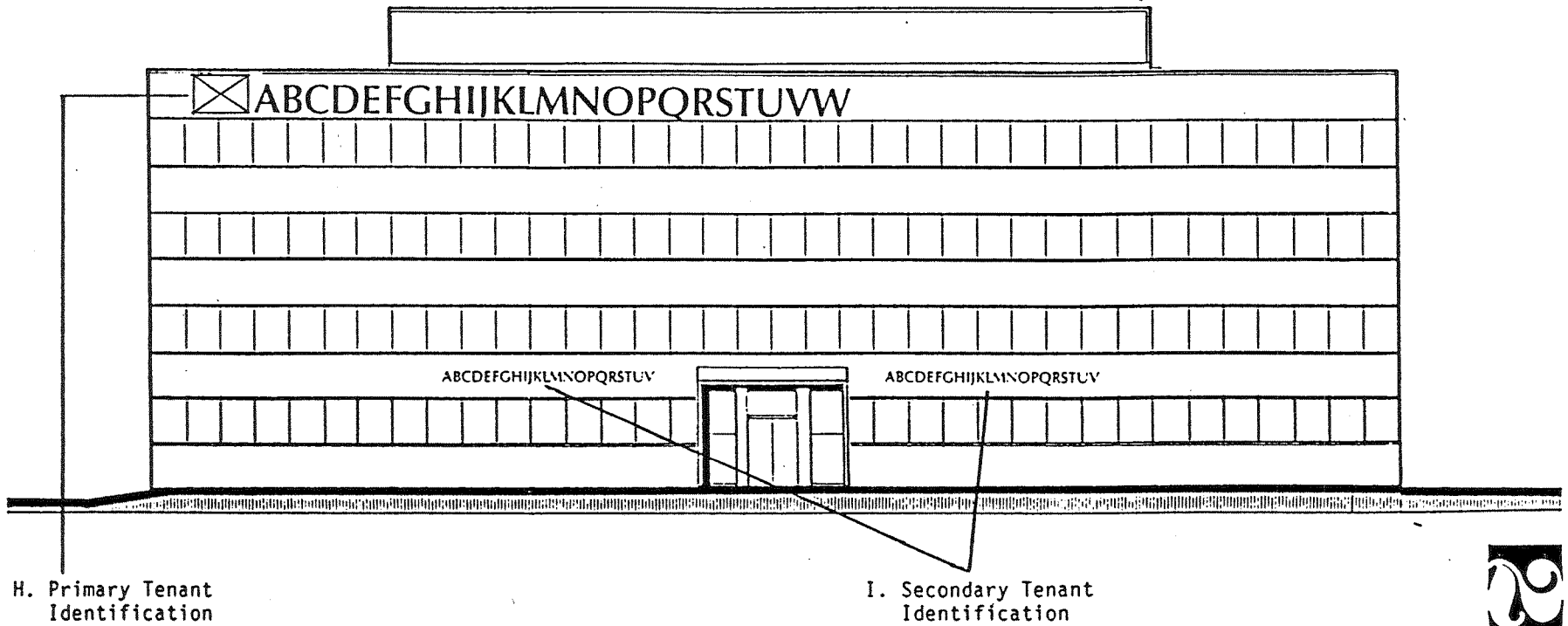


Scale: 3/16" = 1'-0"



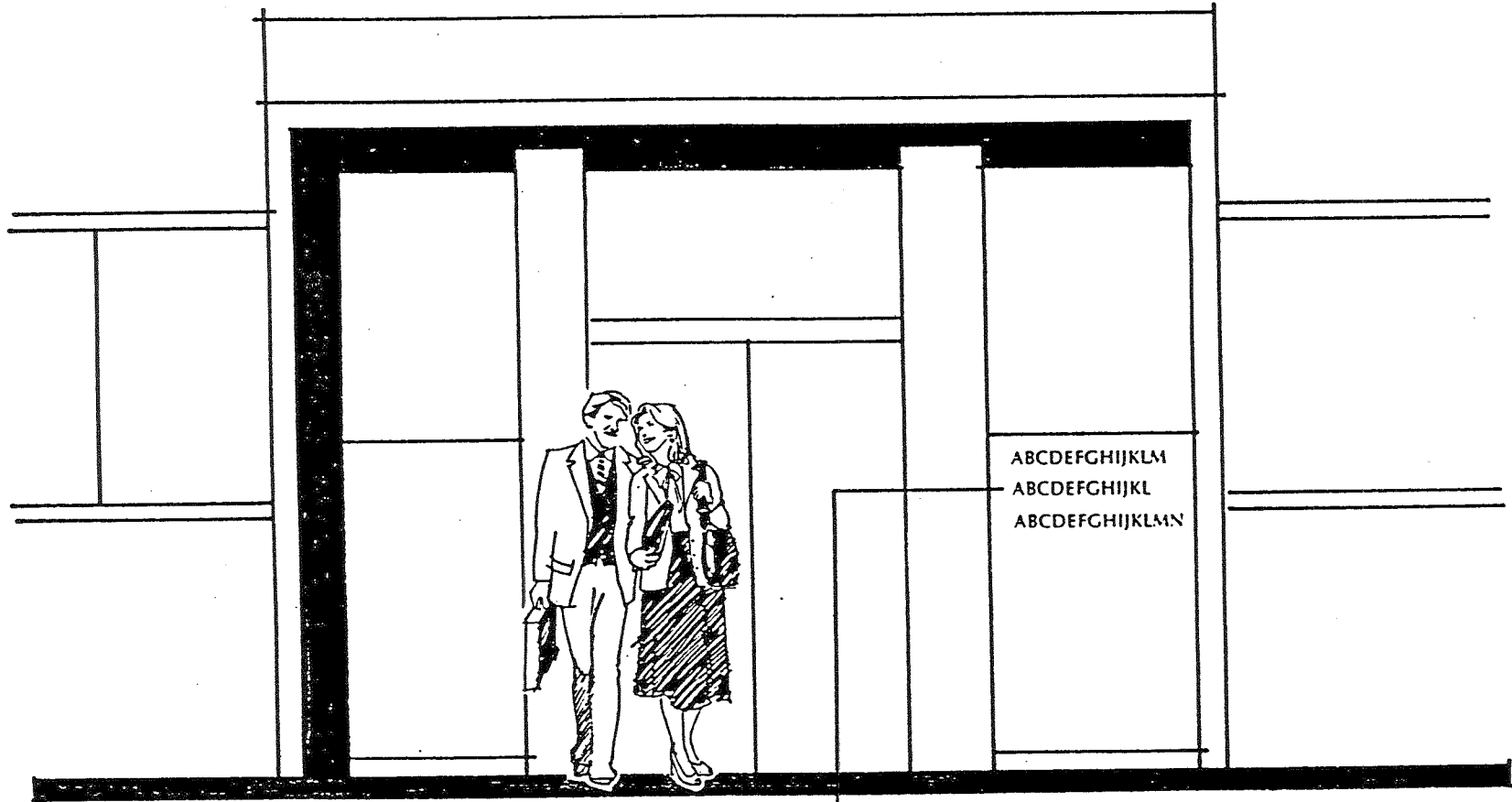
Building Height in stories	Cap Height in inches
1	18
2	24
3	30
4	36
5	42
6	48
7 and above	60

43



Scale: 1/16" = 1'-0"

44



J. Exterior Entry
Door Sign



Scale: 3/8" = 1"

4.9 NOISE IMPACT PLAN DESCRIPTION

In an Acoustical Analysis, it was concluded that Centrelake is impacted by commercial jet noise from Ontario International Airport, by traffic noise from the San Bernardino Freeway, and by the Southern Pacific Railroad.

The purpose of the study was to assess the noise impact to the site from all significant sources and to determine building setbacks and typical generic exterior building shell specifications to mitigate the existing and future noise sources on development.

To provide a comfortable interior environment for the Centrelake Project, the following design criteria shall be followed: (Initial Study Noise Analysis).

USE	INTERIOR LEVEL, Lev 12, dba (7 A.M. to 7 P.M.)
Private Offices	45
General Offices, Reception, Clerical, etc.	50
Bank Lobby, Retail Stores, Restaurant, Typing Pool, etc.	55
Other Areas for Manufacturing, Assembly, Test, Warehousing, etc.	65

In order to implement the noise design criteria, the following standards shall be followed:

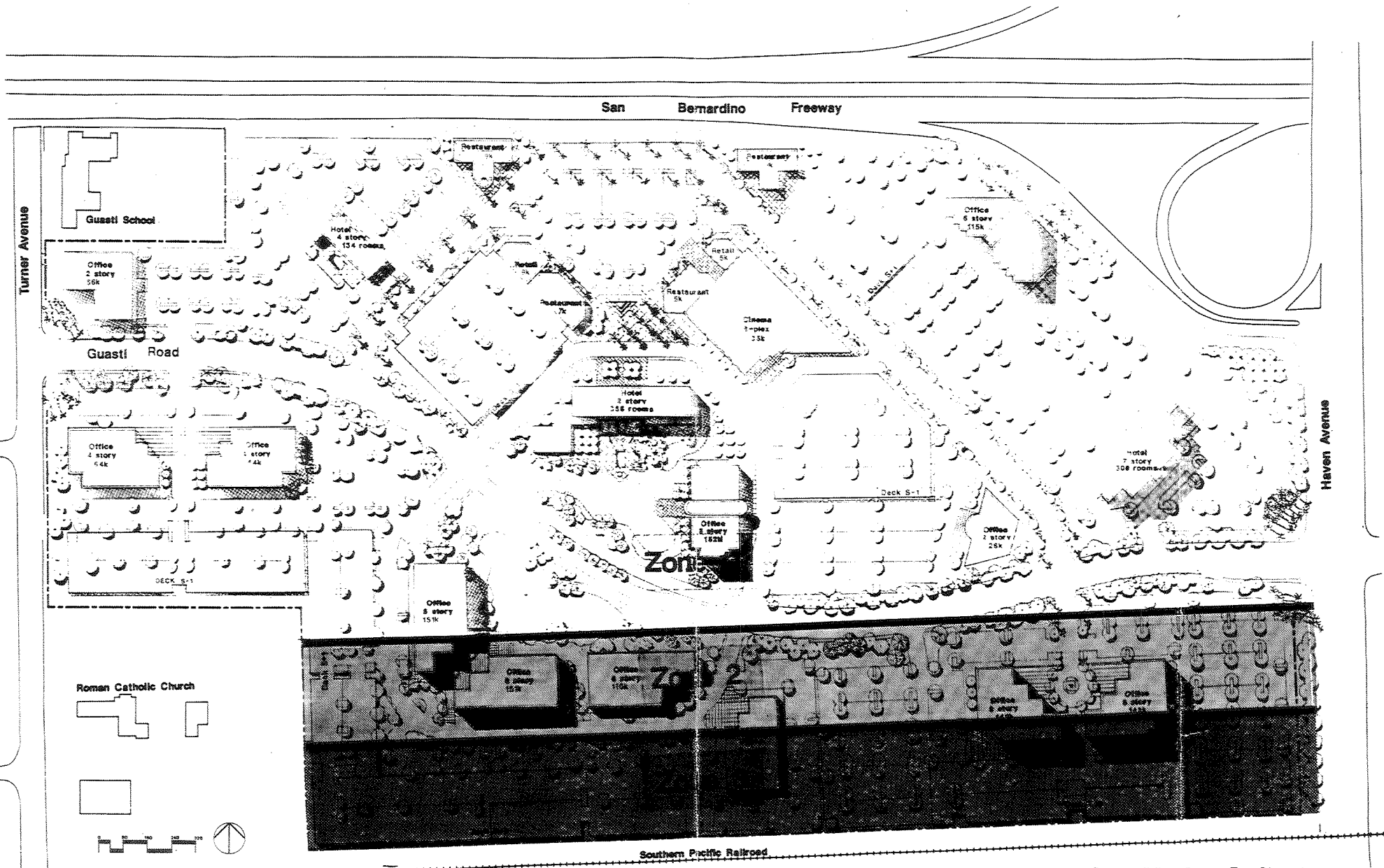
A. Glazing

1. The noise impact analysis drawing, Exhibit 16, page 49, depicts the building setbacks and exterior glazing specifications protecting uses from the Southern Pacific Railroad noise source. Zone One (1) represents the least impacted area requiring a minimum of 1/4" monolithic glazing noise attenuation from the noise source. Zone Two represents an area requiring a minimum of 5/16" laminated glazing only on a building with 90° of the facade exterior glass for noise attenuation from the noise source. Zone Three (3) represents the area for which specific acoustical study will be required, per building, to determine proper glazing specifications.
2. The noise impact analysis drawing, Exhibit 17, page 48, depicts the building setbacks and exterior glazing specifications protecting uses from the San Bernardino Freeway noise source. Zone One (1) again represents the area of least impact while Zone Two (2) represents an area requiring a minimum of 5/16" laminated

glazing only on a building with 90° of the facade exterior glass for noise attenuation from the noise source. Zone Three (3) represents the area for which specific acoustical study will be required to determine a proper glazing specification, or the equivalent.




B. Interior Space Treatment

1. The acoustic absorption characteristics of the interior walls, floors, and ceilings for planned office spaces will influence the interior noise levels. The noise levels will be increased with hard finishes and decreased by absorptive surface finishes. Since the exterior noise environment is so high, both the exterior building shell and the interior surface treatment are relied upon to provide the required noise reduction. If standard gypsum wallboard is used for all wall-glazed surfaces, then in all rooms with exterior windows, a ceiling with absorptive drop-in tile must be specified by acoustic design, or equivalent.
2. Carpets must be installed on the floors, or an equivalent absorptive surface finish.



Total Hotel Rooms: 800
 Total Building Square Footage: 1,300,000 S.F.

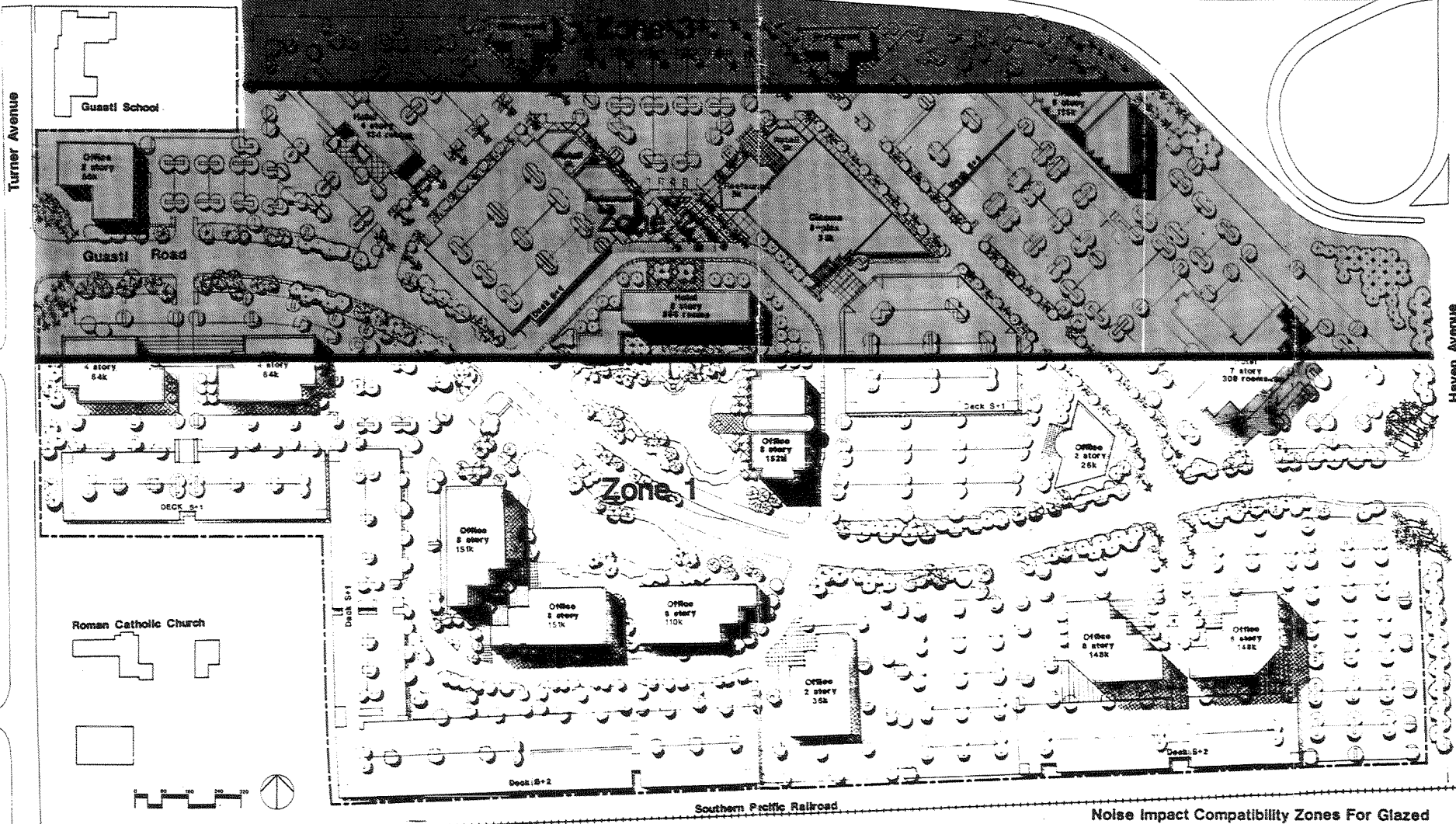
Legend

	Zone 1	Least Impacted Area 1/4" Monolithic Glazing
	Zone 2	5/16" Laminated Glazing
	Zone 3	Mitigation Factors Will be Provided in Accordance with the Acoustical Report or Equivalent

Noise Impact Compatibility Zones For Glazed Exterior Curtain Walls Facing Towards Freeway

NOISE IMPACT ANALYSIS PLAN 1 - EXHIBIT 16




San Bernardino Freeway



Legend

Noise Impact Compatibility Zones For Glazed Exterior Curtain Walls Facing Towards Freeway

Total Hotel Rooms: 800
 Total Building Square Footage: 1,300,000 S.F.

-  Zone 1 Least Impacted Area 1/4" Monolithic Glazing
-  Zone 2 5/16" Laminated Glazing
-  Zone 3 Mitigation Factors Will be Provided in Accordance with the Acoustical Report or Equivalent

NOISE IMPACT ANALYSIS PLAN 2 - EXHIBIT 17

4.10 PHASING PLAN DESCRIPTION

It is anticipated that Centrelake will be developed in four (4) major phases. Phases I and II consists of mass grading of the site, infrastructure, street and lake installation, including landscape and irrigation right of ways and medians. Phase III consists of substantial completion of the site development north of Guasti Road. Phase IV consists of completion of the remaining portions of the site.

The anticipated time duration for the four phases or total build-out is estimated at about ten years.