

Fontana Grandview Community Plan

Prepared for the City of Fontana

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1.0 Introduction

1.0 INTRODUCTION

1.1 Purpose Of the Fontana Grandview Community Plan

The Fontana Grandview Community Plan document is designed to ensure an integrated, well-planned, high quality environment for the development of residential use within a master-planned community. Timely and efficient processing for the development of the property can be ensured through the Community Plan. This document fulfills the planned community requirements of the State of California and the City of Fontana.

The Fontana Grandview Community Plan is also herein referred to as a planned community and a project. Within this document, community plan, planned community, and project shall be synonymous.

This Community Plan contains a CEQA initial study (Appendix Two). The CEQA initial study has been combined into the Community Plan for ease of review and reference.

1.2 Background

The Fontana Grandview Community Plan was previously filed as The Pacific Mirage Planned Community in 1991. In 1998, significant changes were made to the land use plan, leading to a decision to make a revised Community Plan filing. In 1998, the project name was changed to Fontana Grandview. All of the technical reports, contained within the Appendix, refer to the project name as The Fontana Grandview. However, all of these reports were reviewed and updated to present 1998 and are applicable to the current land use plan and proposed Community Plan.

1.3 Authority

The Fontana Grandview Community Plan has been prepared pursuant to the provisions of California Government Code Section 65450, which grants local planning agencies the authority to prepare Specific Plans. It has also been prepared pursuant to the City of Fontana Development Code, Article II, Division 9, which specifies requirements for Specific Plans and Community Plans. Division 9 considers Community Plans to be a modified form of a specific plan, with characteristics unique from a specific plan. The environmental assessment has been prepared pursuant to the environmental review requirements of the City of Fontana and the State of California. Standards contained in this document shall govern all areas within the project.

1.4 Project Location

The project site is located in southwest San Bernardino County, in the northwestern portion of the City of Fontana (see Figures 1-1, Regional Map and Figure 1-2, Local Area Map). Surrounding jurisdictions include the cities of Rancho Cucamonga, Rialto, Ontario, and unincorporated areas of San Bernardino and Riverside Counties.

Regional access to the site is provided by the San Bernardino (Interstate 10) and the Devore (Interstate 15) Freeways. The San Bernardino Freeway is a major east-west route connecting the Fontana area with the Los Angeles metropolitan area to the west and the desert areas to the east. The Devore Freeway is a major north-south route, connecting Fontana with Corona and San Diego to the south, and Barstow and Las Vegas to the north.

The project site consists of 39.88 gross acres located east of Lytle Creek Road, north of Curtis Avenue and west of Knox Avenue in the City of Fontana. Fontana Grandview is within the boundaries of the North Fontana Redevelopment Project Area, which encompasses approximately 14 square miles of North Fontana. Figure 1-3, North Fontana Planned Communities, shows the location of existing and proposed specific plans and community plans in the North Fontana area.

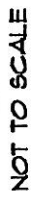
Several major development projects have been approved or proposed and are partially developed in the vicinity of Fontana Grandview within North Fontana Area. These development projects include:

Hunter's Ridge (570 acres) is located 1 mile northwest of the project site, above the I-15 Freeway. At buildout, Hunter's Ridge will consist of 1,501 single-family residences, 620 multi-family residences, 5.5 acres of neighborhood commercial uses, park/open space and a school site.

Summit Heights (316 acres) is located adjacent to the west of the project site, north of Highland Avenue, west of Lytle Creek Road, east of San Sevaine Road, and south of Summit Avenue. At buildout, Summit Heights will consist of 903 single-family residences, commercial, park and other public uses.

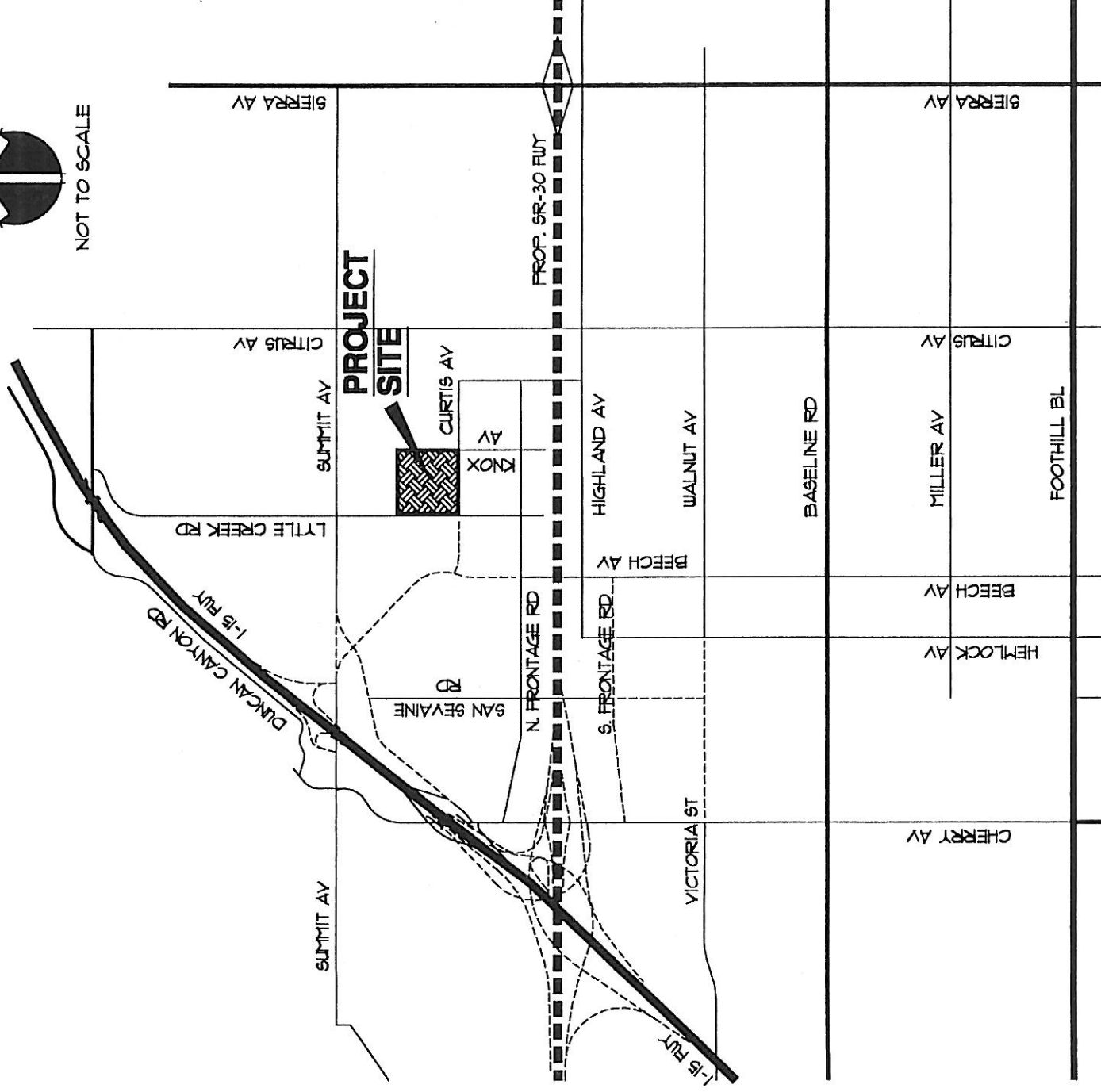
Sierra Lakes (700 acres) is located 1 mile east of the project site, at Citrus Avenue and Highland Avenue. At buildout, Sierra Lakes will consist of 2,100 single-family residences, 64 acres of commercial/business park, a golf course, parks, and a school site.

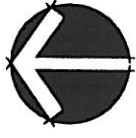
Westgate (954 acres) is located 1 mile southwest of the project site. Westgate consists of 2,505 single-family residences, commercial/business park, parks, and other public uses.



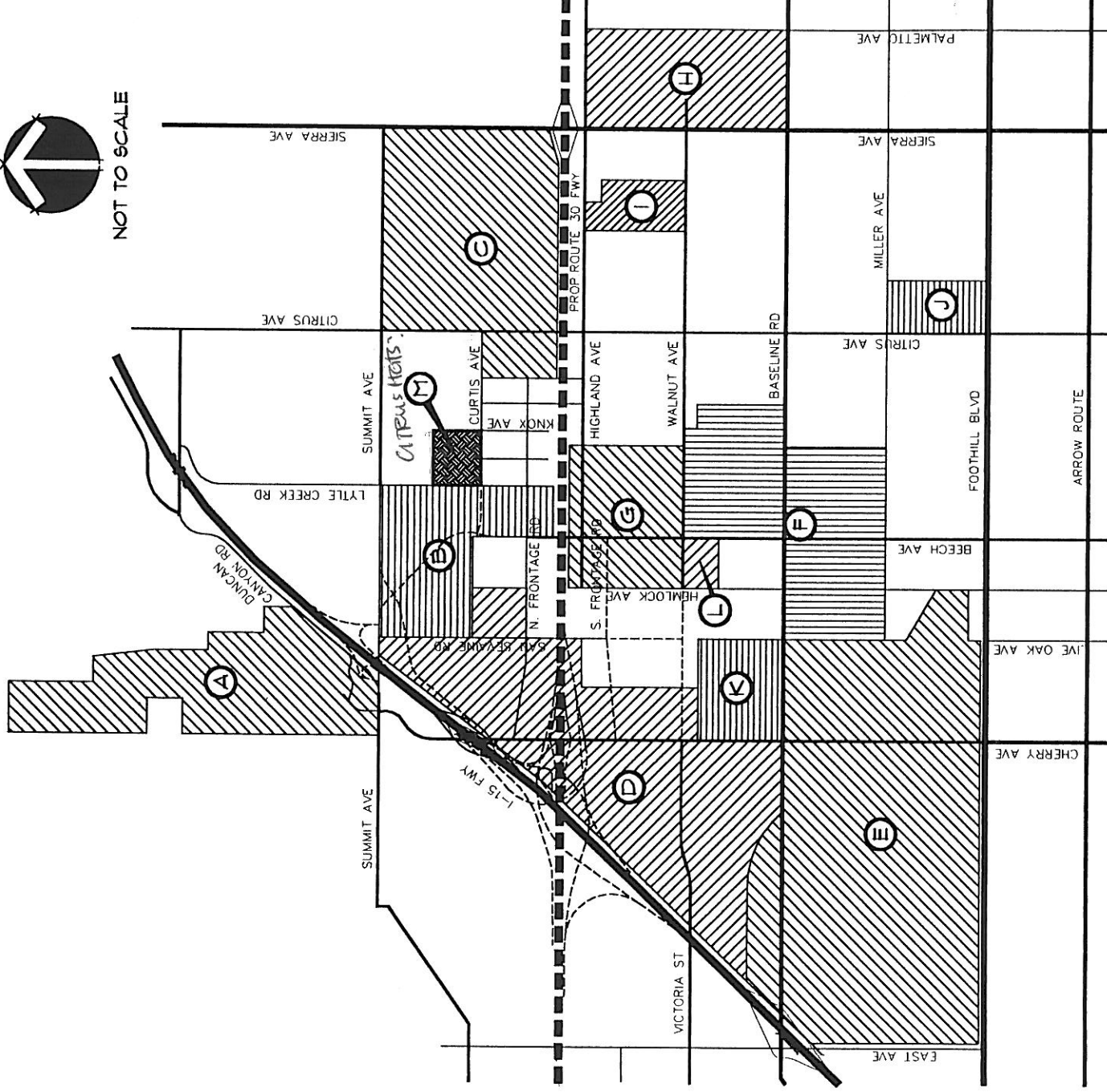


NOT TO SCALE





NOT TO SCALE



LEGEND :

- A HUNTER'S RIDGE (A)
- B SUMMIT HEIGHTS (P)
- C SIERRA LAKES (A)
- D WESTGATE (A)
- E HERITAGE (WEST END) (A)
- F RANCHO FONTANA (A)
- G CALIFORNIA LANDINGS (A)

- (A) APPROVED
- (P) PROPOSED

- H WALNUT VILLAGE (A)
- I CLURMAN (P)
- J NORTHGATE (A)
- K MORNINGSIDE (A)
- L FONTANA STAR (A)
- M FONTANA GRANDVIEW (P)

Fontana Grandview
L & L (USA), INC.

California Landings (223 acres) is 1 mile south of the project site, south of Highland. At buildout, California Landings will consist of 750 single-family residences, 15 acres of commercial, a park, and a school site.

Morningside (120 acres) is located 1 mile southwest of the project site, north of Baseline Avenue and east of Cherry Avenue. At build out, Morningside will consist of 440 residential units, 10 acres of commercial uses.

Village of Heritage (1,478 acres) is located 2 miles southwest of the project site north of Foothill Blvd. At buildout, Heritage will consist of 2,955 single family residences, 294 multi-family residences, 31 acres of commercial, 110 acres of office park, open space/parks, and two school sites.

Walnut Village (342 acres) is located 2 miles southeast of the project site, south of Highland Avenue and east of Sierra Avenue. At buildout, Walnut Village will consist of 1,644 residential units, 39 acres of commercial uses, together with community facilities and park/open space.

1.5 Planning Goals

Prior to the preparation of this Community Plan document, numerous meetings were held with City Staff to discuss goals for development of the Fontana Grandview project. The following goals were identified:

- Develop a community with all single family detached homes on lots of 7,200 square feet and larger in order to help achieve the City's goal of providing additional larger lots in North Fontana.
- Provide a master planned community in conformance with the spirit and intent of the City General Plan Land Use Map and Policies and in conformance with the Development Code, thereby allowing fast-tracking of the planning process via the Community Plan process.
- Encourage enhancement of an upscale North Fontana image.
- Create a high quality, unique community design.
- Develop a community of larger homes with 60% larger than 2,000 square feet.
- Provide entries accentuated by planting, creating enhanced gateways to the planned community.
- Provide an efficient and attractive system of collector streets and local streets.

- Support the city in achieving its newly revised vision statement. *“The City of Fontana is dedicated to being a safe, well-maintained, family oriented community supported by a diverse, job rich economy, capitalizing on the City’s superior location and accessibility”*.
- Provide for adequate infrastructure, public facilities and services.

2.0 Project Overview

2.0 PROJECT OVERVIEW

2.1 Ownership

The 39.88 acre Community Plan site consists of one parcel and is owned by one ownership under L&L (USA), Inc., a California Corporation. The Assessor's Parcel Number of the parcel is 226-151-01.

2.2 Existing Land Use and Conditions

The 39.88 acre site is an undeveloped vacant land. The primary natural feature on the site is open grazing land with disked fire breaks. There is no man-made structures nor buildings present on the site. Existing land uses are shown on Figure 2-1.

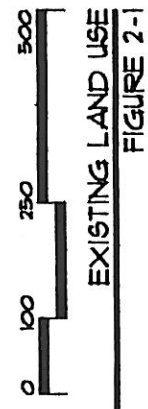
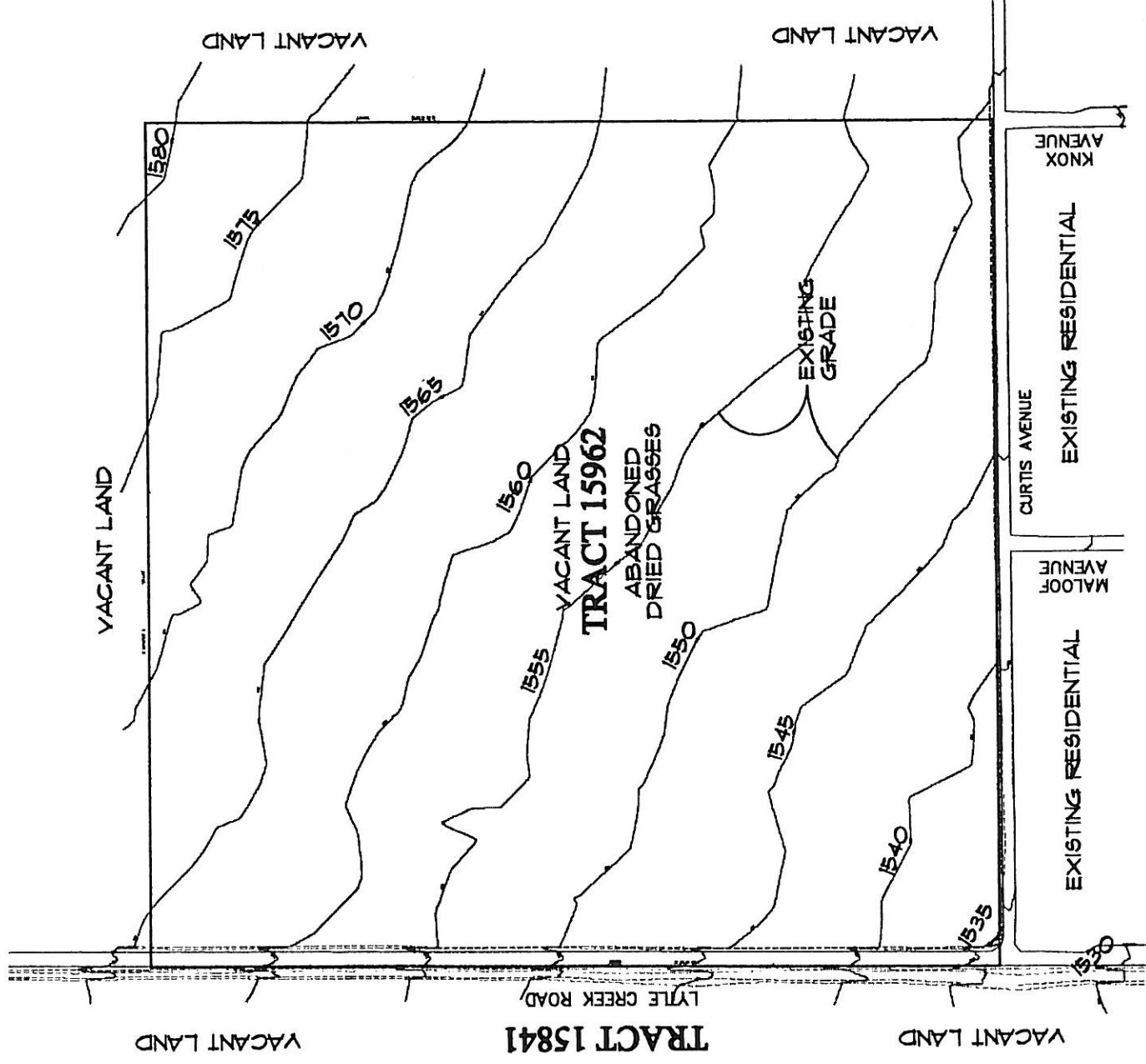
Existing terrain of the site is flat and gently sloping. The slope is at approximately 2~3% with the high point located approximately at the northeast corner and low point located approximately at the southwest corner.

2.3 Project Description

The Fontana Grandview Community Plan consists 156 lots of 7,200 square feet and larger for residential single family detached (SFD). A summary of land use of the project is listed below:

Table 2-1 Land Use Statistical Summary

Land Use Summary	Net Acres	# of DU
Residential-SFD (7,200 square feet minimum)	28.40	157
Perimeter R.O.W.	3.05	
Internal R.O.W. (Neighborhood Circulation)	7.62	
Landscape Easement	0.81	
Total Community Plan	39.88	157
Residential Density: 5.53 D.U./Net Acre		
Residential Density: 3.94 D.U./Gross Acre		



VACANT LAND

TRACT 15841

PROPOSED RESIDENTIAL, COMMERCIAL/OFFICE & PARK
(PROPOSED SUMMIT HEIGHTS COMMUNITY)

LYTLE CREEK ROAD

VACANT LAND

TRACT 15962

AP#226-151-01

RESIDENTIAL - SFD

VACANT LAND

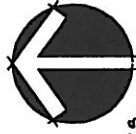
VACANT LAND

VACANT LAND

EXISTING RESIDENTIAL	EXISTING RESIDENTIAL
MALCOLM AVENUE	KNOX AVENUE
CURTIS AVENUE	
OWNERSHIP SUMMARY	LAND USE SUMMARY
L & L (USA), INC. OWNS 100%	RESIDENTIAL - SFD (7200 sq.ft. min.)
	PERIMETER R.O.W.
	INTERNAL R.O.W.
	(NEIGHBORHOOD CIRCULATION)
	LANDSCAPE EASEMENT
	TOTAL COMMUNITY PLAN
	RESIDENTIAL DENSITY 5.53 D.U./ NET ACRE
	RESIDENTIAL DENSITY 3.94 D.U./ GROSS ACRE
	ACRES D.U.'S
	28.40 157
	3.05
	7.62
	0.81
	39.88 157

NOTES:

- Gross Site Area includes area up to center line of perimeter R.O.W.
- Perimeter R.O.W. acreage = 1/2 of R.O.W. of adjacent perimeter street.
- Neighborhood circulation includes all community entry streets and local streets.
- R.O.W. = Right-of-way (road, parkway, and where applicable)



2.4 General Plan Land Use Map Conformance

A. Existing General Plan

The current general plan land use designations for the Community Plan area are Planned Community Residential (R-PC). The General Plan specifies that R-PC is to provide master planned residential development.

2.5 General Plan Policy Consistency

Community Plans are intended to provide a site specific, detailed description of standards and guidelines for implementing General Plan goals and policies. To achieve this, the Community Plan must be in conformance with and be consistent with the General Plan.

The Fontana Grandview Community Plan is designed to implement the goals and policies of the City of Fontana's General Plan. An element by element discussion of General Plan conformance pertaining to goals and policies is provided below. (See Figure 2-2).

A. Land Use

Goal: Provide a balance of residential, commercial, industrial, educational, open space and recreational land uses which will provide diverse economic, social and cultural opportunities. (See Figure 2-2)

Consistency: Fontana Grandview is a Planned Community that will contain lots of 7,200 square feet and larger and will therefore help achieve General Plan Policy 3.1.3 to support more upscale single family housing. Fontana Grandview will provide a variety of single family detached house plan types with a range of sizes. The project will enhance the image of the North Fontana area.

Goal: Provide for a logical, orderly and environmentally sound land use strategy which establishes Fontana as a unified and economically sound community.

Consistency: This Community Plan has been developed in accordance with the General Plan's land use strategy and creates logical and orderly development. This development does not burden the City's existing infrastructure, rather, it will provide additional public facilities for the North Fontana area. Furthermore, the project contributes new sources of revenue generated by enhanced property values.

Goal: Protection and enhancement of community values by affecting land use patterns that are compatible with the local and regional environment.

Consistency: The Fontana Grandview project responds to both local and regional issues by utilizing land uses which respond to the existing and proposed development in the local area. These land uses reflect community values, as expressed by the Fontana General Plan Land Use Map, as the community plan land uses are consistent with the General Plan Map.

B. Circulation

Goal: Promote greater efficiency in transportation through the logical placement of land uses and intensities.

Consistency: The Fontana Grandview Community Plan is consistent with the Circulation Element of the General Plan. It provides street improvement of Lytle Creek Road, Curtis Avenue, and Knox Avenue for ¾ street width or 36' pavement for two-way traffic. In the event the development of Fontana Grandview proceeds prior to the adjacent development of Summit Heights, the necessary improvement of surrounding streets will be constructed by the developer of Fontana Grandview. The development also provides a roadway network of local streets consistent with City standards.

Goal: Promote the use of other modes of transportation to reduce dependency on the automobile.

Consistency: The project promotes the use of alternative modes of transportation by providing

- A safe pedestrian walkway system to encourage pedestrian movement.
- A network of off-street and on-street bike paths and sidewalks to ensure safe access throughout the residential development.

C. Housing

Goal: Encourage the provision of a wide range of housing by location, type of unit, and price to meet the existing and future needs of Fontana residents.

Consistency: Fontana Grandview Planned Community will provide a variety of quality single-family detached housing sizes and price ranges.

Goal: Provide equal opportunity for all residents to reside in the housing of their choice.

Consistency: The variety of housing sizes and prices provided within Fontana Grandview will accommodate families with differing housing needs and socioeconomic levels.

D. Community Design

Goal: Reduce/prevent conflicts between land uses in existing and future developments.

Consistency: Fontana Grandview Land Use Plan is compatible with existing and proposed surrounding land uses by its proposed land use design.

Goal: Improve the image and appearance and promote the functional efficiency of the City.

Consistency: Fontana Grandview has been designed to enhance the North Fontana image. Theme entries and monumentation at major and secondary entries and key street intersections will incorporate landscaping, decorative walls and attractive signage.

Goal: Preserve the unique character of neighborhoods throughout the City.

Consistency: The project site is presently vacant. No unique or historical features exist on the site warranting preservation or identification of the project site as a unique neighborhood.

Goal: Maintain a balance between job opportunities, housing opportunities and supporting commercial uses.

Consistency: The Fontana Grandview project is consistent with the City's goal of a jobs/housing balance and increased tax revenue.

E. Infrastructure and Public Services/Facilities

Goal: Provide facilities to meet the needs for education, culture, entertainment, protection of public safety/health, and civic pride.

Consistency:

- Proposed infrastructure extension and improvements will provide area-wide enhancements and utility access. In the event the development of

Fontana Grandview proceeds prior to the development of Summit Heights, the installation of necessary off-site infrastructure extension and improvement will be constructed by Fontana Grandview.

- The proposed circulation system improvements will facilitate area-wide access to local and regional schools, theaters and entertainment facilities, consistent with the City's public services requirements.

Goal: Provide facilities to meet the needs of all segments of the community for recreational activities, relaxation, and social interaction.

Consistency: Fontana Grandview provides active and passive opportunities in the form of off street bikeways/walkways for the use of community residents of adjacent properties.

Goal: Provide appropriate pedestrian and offsite bicycle trails as linkages between open space and recreational facilities within the area.

Consistency: The Fontana Grandview Circulation Plan has been designed to provide safe, efficient, and aesthetically pleasing offsite pedestrian walkways with landscaping consistent with the City's Circulation and Open Space requirements.

F. Safety

Goal: Minimize potential hazards to public health, safety and welfare.

Consistency:

- Adequate police and fire protection will be made available to the site by the City of Fontana and the San Bernardino County Fire Department.
- The Fontana Grandview site design incorporates appropriate grading and development design standards to protect the community from geological and flood hazards.
- The circulation system for Fontana Grandview has been designed to facilitate emergency access consistent with the City's Public Services requirements.

G. Noise

Goal: Provide an acceptable noise environment for existing and future residents of the City.

Consistency: State of California and City of Fontana interior and exterior noise standards for the development of residential areas will be followed in the designs for Fontana Grandview. Proper sound attenuation will be provided by a combination of building setback, sound wall construction and building type location throughout the site.

2.6 Zoning

A. Existing Zoning

The current zoning designation for the Community Plan site is R-1-10,000. The R-1-10000 allows for 1 dwelling unit per 10,000 square feet lot. (See Figure 2-3).

Per the City code, upon adoption of the Community Plan, 7,200 square foot lots will be allowed within the R-1-10000 zone, and R-1-7200 zoning standards will apply. The zoning will be R-1-7200 for the Fontana Grandview Community Plan.

VACANT LAND

TRACT 15841
PROPOSED RESIDENTIAL, COMMERCIAL/OFFICE & PARK
(PROPOSED SUMMIT HEIGHTS COMMUNITY)

VACANT LAND

VACANT LAND

TRACT 15962
AP#226-151-01
SINGLE FAMILY RESIDENTIAL
R-1-10000

LYTLE CREEK ROAD

VACANT LAND

VACANT LAND

MALOOF
AVENUE

EXISTING RESIDENTIAL

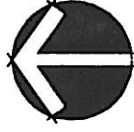
CURTIS AVENUE

EXISTING RESIDENTIAL

KNOX
AVENUE

NOTES:

UPON ADOPTION OF THE COMMUNITY PLAN AND ZONING
CHANGE FROM R-1-10000 TO R-1-1200, 1200 SQUARE
FOOT LOTS WILL BE ALLOWED AND R-1-1200 ZONING
STANDARDS WILL APPLY.



2.7 Existing Infrastructure

A. Streets

The project site consists of 39.88 gross acres located east of Lytle Creek Road, north of Curtis Avenue and west of proposed Knox Avenue extension.

In the north-south direction, the existing Lytle Creek Road has 20' pavement dimension within the site limit and is currently serving two-way traffic connecting Summit Avenue, a secondary highway, and Duncan Canyon Road at further north and has terminated before Route 30 freeway at the south as part of the Route 30 project by Caltrans. The existing Knox Avenue, a collector has pavement width ranged from 20' to 30', is also serving two-way traffic and starts from Curtis Avenue at the north and terminates before Route 30 freeway at the south. In the east-west direction, the existing Curtis Avenue, a collector with 20' pavement width and 2600' in length, is serving two-way traffic. Existing Curtis Avenue runs from Lytle Creek Road at the west to Catawba Avenue at the east.

As identified in the Specific Plan of the proposed Summit Heights Development, Curtis Avenue will be extended westerly and connected to the proposed extension of Beech Avenue, a primary highway with two travel lanes in each direction and 104 feet right-of-way. Also, a required pavement width of Lytle Creek Road will be reconstructed between Summit Avenue and Carter Avenue, a primary highway. However, these proposed improvement identified by the Summit Heights development may not be started any time in the near future.

B. Water

Existing water facilities consist of a 6 inch water line along Curtis Avenue from east end of the project to Maloof Avenue and along Maloof Avenue from Curtis Avenue towards south direction (see Figure 2-4). The existing 6 inch water line is serving the residential area along Curtis Avenue and Maloof Avenue.

Fontana Grandview is located within the Fontana Water Company's service area. Fontana Water Company has indicated it is capable of meeting all of the water service requirements within Fontana Grandview.

C. Sewer

There is no existing sewer lines adjacent to the project site. The residents at the south are discharged to underground septic tanks. According to the sewer report conducted by Madole and Associates, Inc. for the Summit Heights, a 15" sewer main will run along Lytle Creek Road from Summit Avenue to Curtis Avenue, and turns west on Curtis Avenue from Lytle Creek Road to Beech Avenue, then turns south along Beech Avenue and runs under the

future Route 30. The proposed sewer main improvement identified by the Summit Heights development may not be started any time in the near future.

D. Drainage

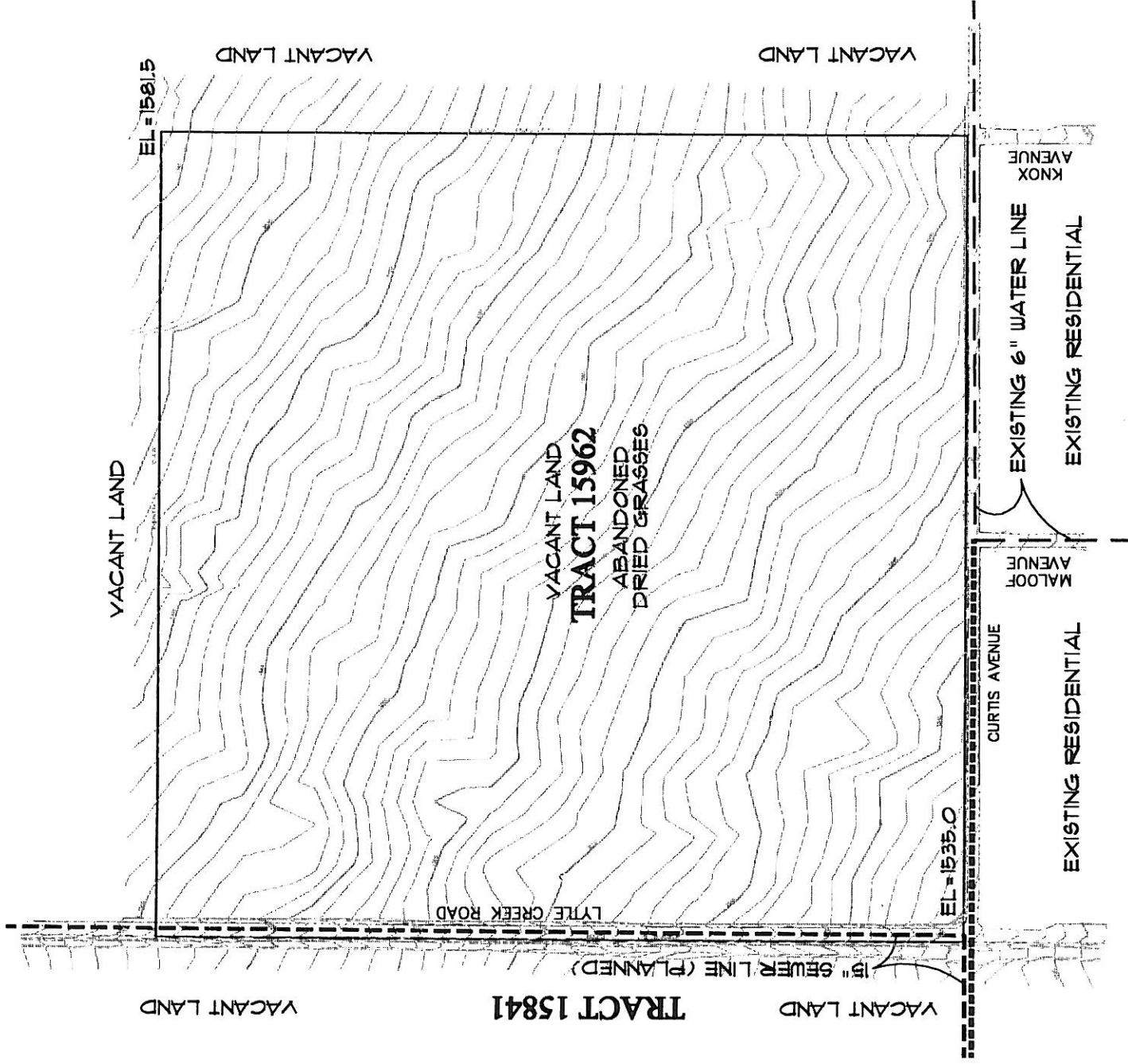
The Fontana Grandview Community Plan area is located on gently sloping undeveloped terrain with a uniform slope of approximately 2.5%. The property slopes in a southwesterly direction from northeast corner of the site at an elevation of approximately 1,581.5 feet to the intersection of Lytle Creek Road and Curtis Avenue at the southwest corner of the site at an elevation of approximately 1,534 feet.

Along Curtis Avenue at the south of the plan area, existing ditch swales conduct the storm flows westerly, while drainage from more intense storms would flow across Lytle Creek Road and join the flows in the swale along Lytle Creek Road in a southerly direction. Along Lytle Creek Road at the west of the plan area, the existing ditch swales conduct storm water run-off from undeveloped property in a southerly direction toward Highland Channel.

The recently constructed Highland Channel is located at north side of the Route 30 freeway, approximately 2,000 feet south of the project site. Based on the latest Caltrans Route 30 construction date projections, the Highland Channel should be ready to accept flows in summer 1999. An existing 36" drainage stub-out is connected to the Highland Channel at the end of Lytle Creek Road to handle storm run-off along Lytle Creek Road. Due the capacity constrain at the existing San Sevaine Channel and detour roadway for Route 30 construction, the capacity for the developed flows from the Fontana Grandview will need to be discussed with San Bernardino County Flood Control District and Caltrans.

2.8 Tentative Tract Map 15962

Tentative Tract Map 15962 will be processed concurrently with this Community Plan.



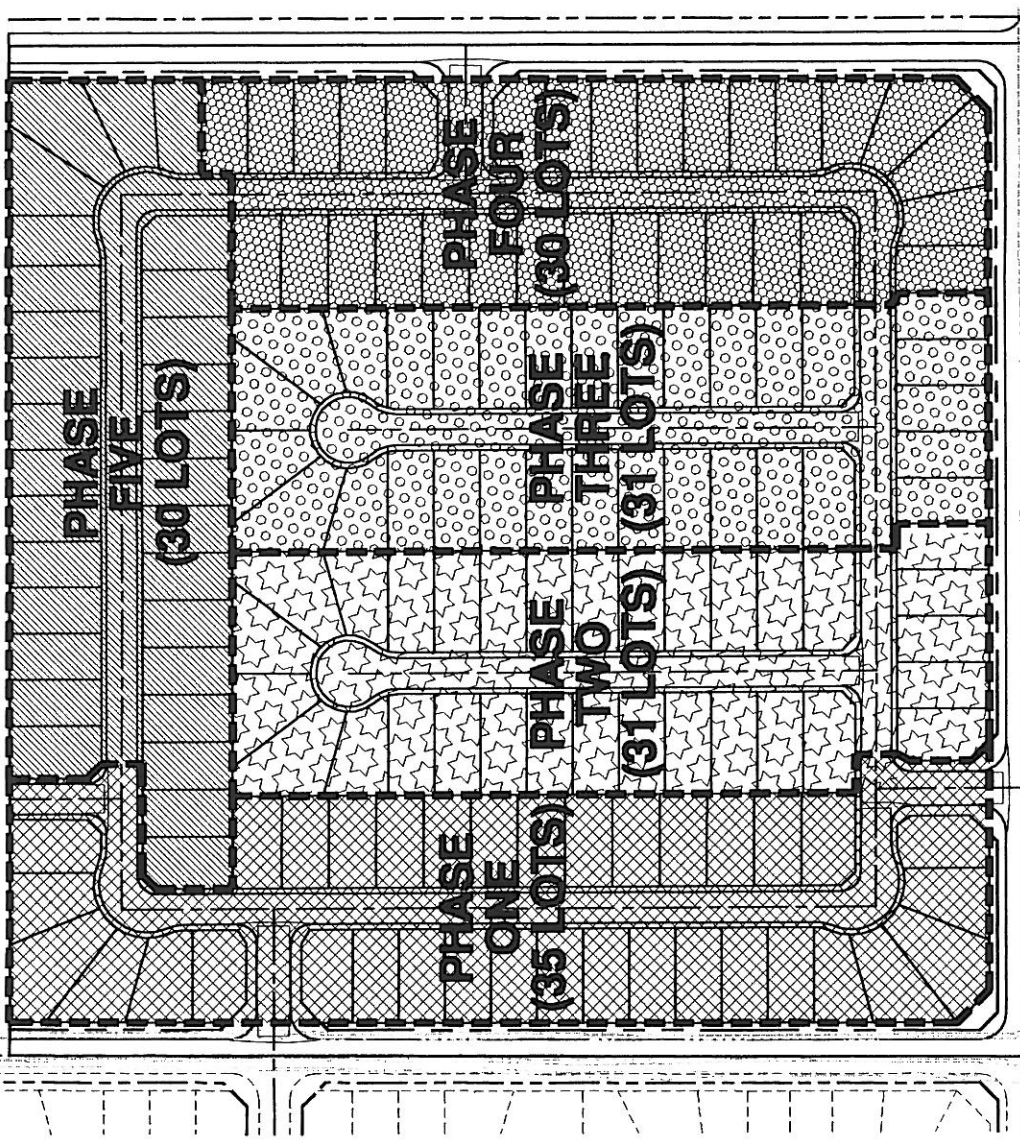
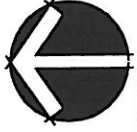
LEGEND :

- EXISTING WATER LINE
- 15" SEWER LINE (PLANNED BY SUMMIT HEIGHTS PROJECT)
- 48" STORM DRAIN (PLANNED BY SUMMIT HEIGHTS PROJECT)



2.9 Phasing Plan

There will be (4) four phases for the project. The proposed phasing plan is shown on the Figure 2-5. Development is expected to last over a period of three to four years. Development is expected to start at the southwest quadrant as phase one and progress to the east and north directions for phases two, three, and four. The surrounding roadways, interior roadways and the related utilities will be constructed according to the requirement by the City for each corresponding phase.



NOTES :

- MINIMUM OF 3/4 STREET WIDTH OR 36' OF PAVEMENT WIDTH WILL BE CONSTRUCTED TO MAINTAIN TWO-WAY TRAFFIC FOR THE PERIMETER COLLECTORS.
- STREETS AND OTHER INFRASTRUCTURE SHALL BE COMPLETED IN ACCORDANCE WITH THE TENTATIVE TRACT MAP CONDITIONS OF APPROVAL.



3.0 Community Plan Components

3.0 COMMUNITY PLAN COMPONENTS

The following descriptions and graphics define the overall framework for development within the Fontana Grandview Community Plan. The components describe the various planning concepts for an orderly and attractive development within the planned community area. The Community Plan components include: **Land Use, Circulation, and Landscape Master Plan and Guidelines, Streetscape Design Concepts, Entry Monumentation/Signage, Community Walls, and Infrastructure**. Architectural Design Guidelines are contained within Community Plan Section 4.2.

3.1 Land Use Plan

Proposed land use for the Fontana Grandview Community Plan is exclusively residential (see Figure 3-1). The land use elements will be linked by a unifying landscape theme and consistent architectural treatments.

All residential planning areas will be developed with single family detached homes on lots with a minimum size of 7,200 square feet. Residential development will occur on 39.88 gross acres, with an overall density of 3.91 dwelling units per gross acre. A network of off-street and on-street bike paths and sidewalks will provide safe access throughout the residential development.

3.2 Circulation

The Circulation Plan (See Figure 3-2) illustrates the proposed Fontana Grandview roadway and bikeway system. Street sections are shown on Figure 3-3. Streetscape landscaping concepts and designs are provided within Community Plan Sections 3.3 and 3.4.

Circulation within the planned community area features internal roadways (Streets A, D, E, F, H, I, and J). All the internal roadways have right-of-way of 54'. All entrance roadways (Street B, C, and G) having 72' right-of-way. Primary access will be via Lytle Creek Road, Curtis Avenue, and Knox Avenue. These three streets form the western, southern, and eastern boundaries of the planned community. All three adjacent streets are designated collector streets with right-of-way width of 68 feet.

Alternatives of roadway improvement beyond the Plan area are identified on Figure 3-2. These alternatives may be required by the City for the purpose of distributing collected traffic onto the adjacent secondary highways and/or primary highways. When roadway right-of-way acquisition becomes necessary, it will be acquired via the City of Fontana or by the developer of Fontana Grandview.

VACANT LAND

TRACT 15841

PROPOSED RESIDENTIAL, COMMERCIAL/OFFICE & PARK
(PROPOSED SUMMIT HEIGHTS COMMUNITY)

LYTLE CREEK ROAD

VACANT LAND

TRACT 15962

AP#226-151-01

RESIDENTIAL - SFD

VACANT LAND

VACANT LAND

VACANT LAND

EXISTING RESIDENTIAL
MALOOF AVENUE

CURTIS AVENUE

EXISTING RESIDENTIAL

EXISTING RESIDENTIAL

KNOX AVENUE

OWNERSHIP SUMMARY
L&L(USA), INC. OWNS 100%

LAND USE SUMMARY

RESIDENTIAL -SFD (7200 sq.ft. min.)

PERIMETER R.O.W.

INTERNAL R.O.W.

(NEIGHBORHOOD CIRCULATION)

LANDSCAPE EASEMENT

ACRES D.U.'S

28.40 157

3.05

7.62

0.81

TOTAL COMMUNITY PLAN

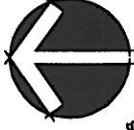
39.88 157

RESIDENTIAL DENSITY 5.53 D.U./ NET ACRE

RESIDENTIAL DENSITY 3.94 D.U./ GROSS ACRE

NOTES:

- Gross Site Area includes area up to center line of perimeter R.O.W.
- Perimeter R.O.W. acreage = 1/2 of R.O.W. of adjacent perimeter street.
- Neighborhood circulation includes all community entry streets and local streets.
- R.O.W. = Right-of-way (road, parkway, and where applicable)



Fontana Grandview
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PAGE 3-2

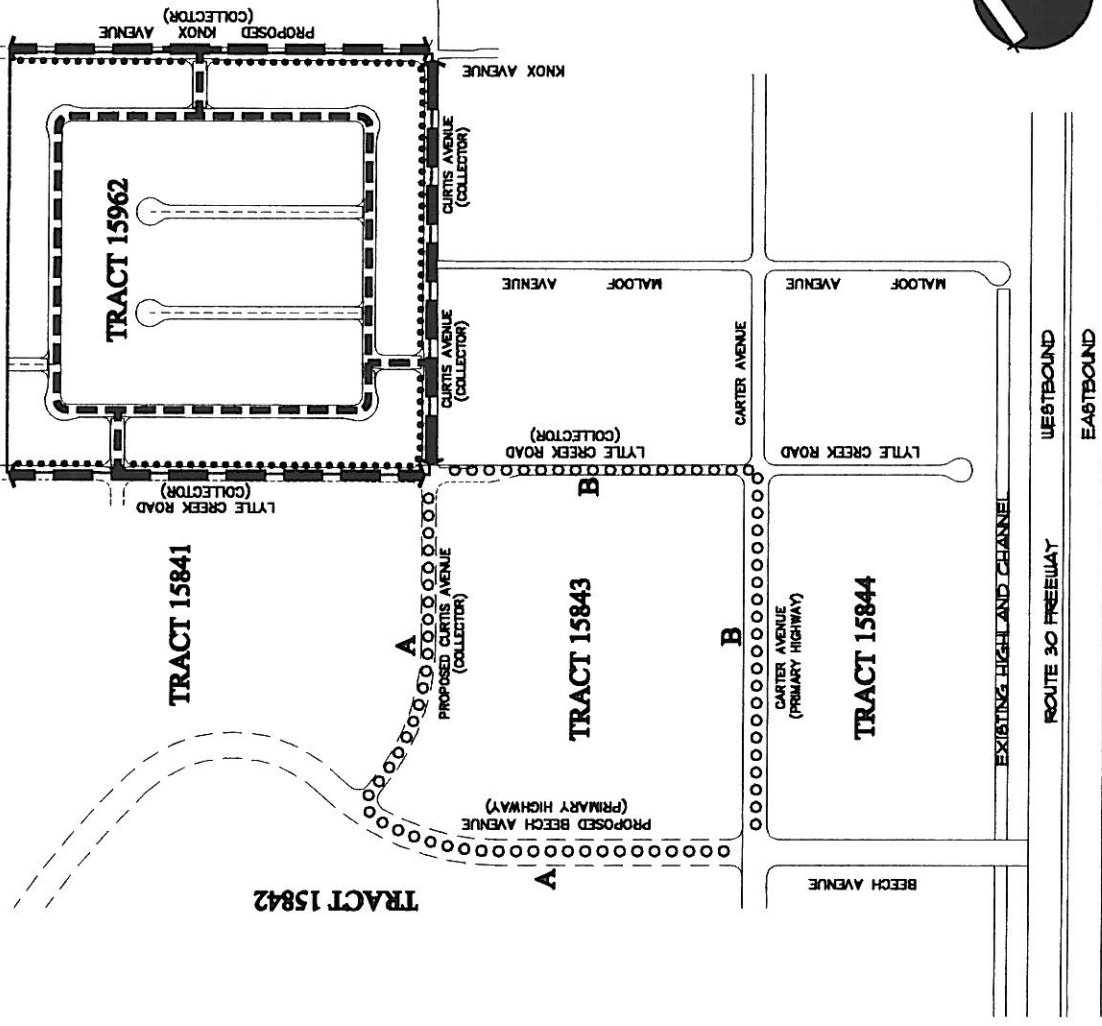
LAND USE PLAN
FIGURE 3-1

NOTE:

- LOCAL STREET LOCATIONS ARE CONCEPTUAL ONLY. EXACT LOCATIONS WILL BE DETERMINED VIA THE TENTATIVE TRACT MAP. SEE FIGURE 3-3, STREET SECTIONS.

LEGEND :

- COLLECTOR STREET
- - - COMMUNITY THROUGH STREET
- - - LOCAL INTERNAL STREET
- OFF-STREET BIKE WAY
- A ALTERNATIVES OF NEEDED STREET IMPROVEMENT AS REQUIRED BY THE CITY



3.3 Landscape Master Plan, Guidelines, and Tree Palette

A. Landscape Master Plan

The Landscape Master Plan is shown on Figure 3-4. The landscape architectural theme for the Fontana Grandview community creates an identifiable "signature" streetscape and community landscape character, along with a hierarchy of landscaped entries and intersection treatments.

B. General Landscape Guidelines

The individuality, as well as the cohesion, between the various land uses in the planned community area will be enhanced by the Landscape Master Plan and design concepts. The overall project identity and character is defined by the continuity of attractive landscaping along publicly visible areas. Conversely, individual parcel identity can be established through variations in landscaping at the major entry point and along smaller streets within the community.

The development of the overall project character and the individual parcels will be controlled and restricted by these guidelines, as well as applicable governmental codes and restrictions. All development plans, landscape plans, and graphic designs shall conform to these guidelines and shall be subject to a review and approval process by the City of Fontana.

- Major circulation corridor shall be emphasized and featured by landscape treatments. The development shall be wrapped in an evergreen "envelope" consisting primarily of broadleaf evergreen trees and pines, accented with deciduous flowering trees.
- Focal points shall be emphasized: especially at entries and key intersections.
- A hierarchy of theme signage, from project monumentation to individual parcel identity, shall be provided.
- Historical agricultural/landscape elements found in the City of Fontana should be integrated into the overall landscape design when ever possible.
- Plant materials shall be selected which will tolerate the local climatic conditions. The tree palette for the Fontana Grandview Community Plan area is in Community Plan Section 3.

- Plant material should be used to integrate the architectural form with the landscape. Expansive horizontal and vertical surfaces should be modulated or interrupted by foliage masses.
- Streetscapes should be designed to promote community character and compliment the form of the various roadways. Trees should be selected from the Tree Palette for each streetscape.
- Landscape setbacks along the site's perimeter should selectively buffer off-site views.
- Entries into Fontana Grandview should be accent points, providing view corridors into developments and introducing the theme and character of the community through use of vertical trees and accent shrub plantings.
- Landscaping details, including plantings, community walls and entry monuments should enhance the theme of the community.

C. Tree Palette

The following is a listing of trees identified for use in the key streets, community entries, and other special areas of Fontana Grandview.

Key: (E) = Evergreen
(D) = Deciduous
(F) = Flowering

Lytle Creek Road

Cinnamomum camphora	Camphor Tree	(E)
Pistachia chinensis	Chinese Pistache	(D)

Curtis Avenue

Pinus pinea	Italian Stone Pine	(E)
Pyrus calleryana "Bradford"	Bradford Pear	(D)(F)

Knox Avenue

Lagerstroemia indica	Crape Myrtle	(D)(F)
Magnolia grandiflora	Southern Magnolia	(E)(F)
Pinus pinea	Italian Stone Pine	(E)

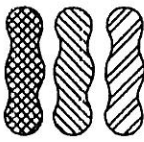
Internal Local Streets

Pinus elderica	Mondell Pine	(E)
Platanus acerifolia	London Plane Tree	(D)
Jacaranda mimosa	Jacaranda	(D)

LANDSCAPE MASTER PLAN

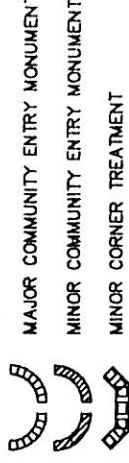
Fontana Grandview

LEGEND



LYTLE CREEK RD. STREETSCAPE TREATMENT - SECTION A-A (FIGURE 3-10)
 STREET TREE: CINNAMOMUM CAMPHORA/PISTACHIA CHINENSIS
 CURTIS AVENUE STREETSCAPE TREATMENT - SECTION B-B (FIGURE 3-11)
 STREET TREES: PINUS PINEA/PYRUS CALLERYANA 'BRADFORD'
 KNOX AVENUE STREETSCAPE TREATMENT - SECTION C-C (FIGURE 3-12)
 STREET TREES: LANGERSTROEMIS INDICA/MAGNOLIA GRANDIFLORA/PINUS PINEA
 INTERNAL LOCAL STREETSCAPE TREATMENT - SECTION D-D (FIGURE 3-13)
 STREET TREES:

PLATANUS ACERIFOLIA
 PINUS ELDERICA

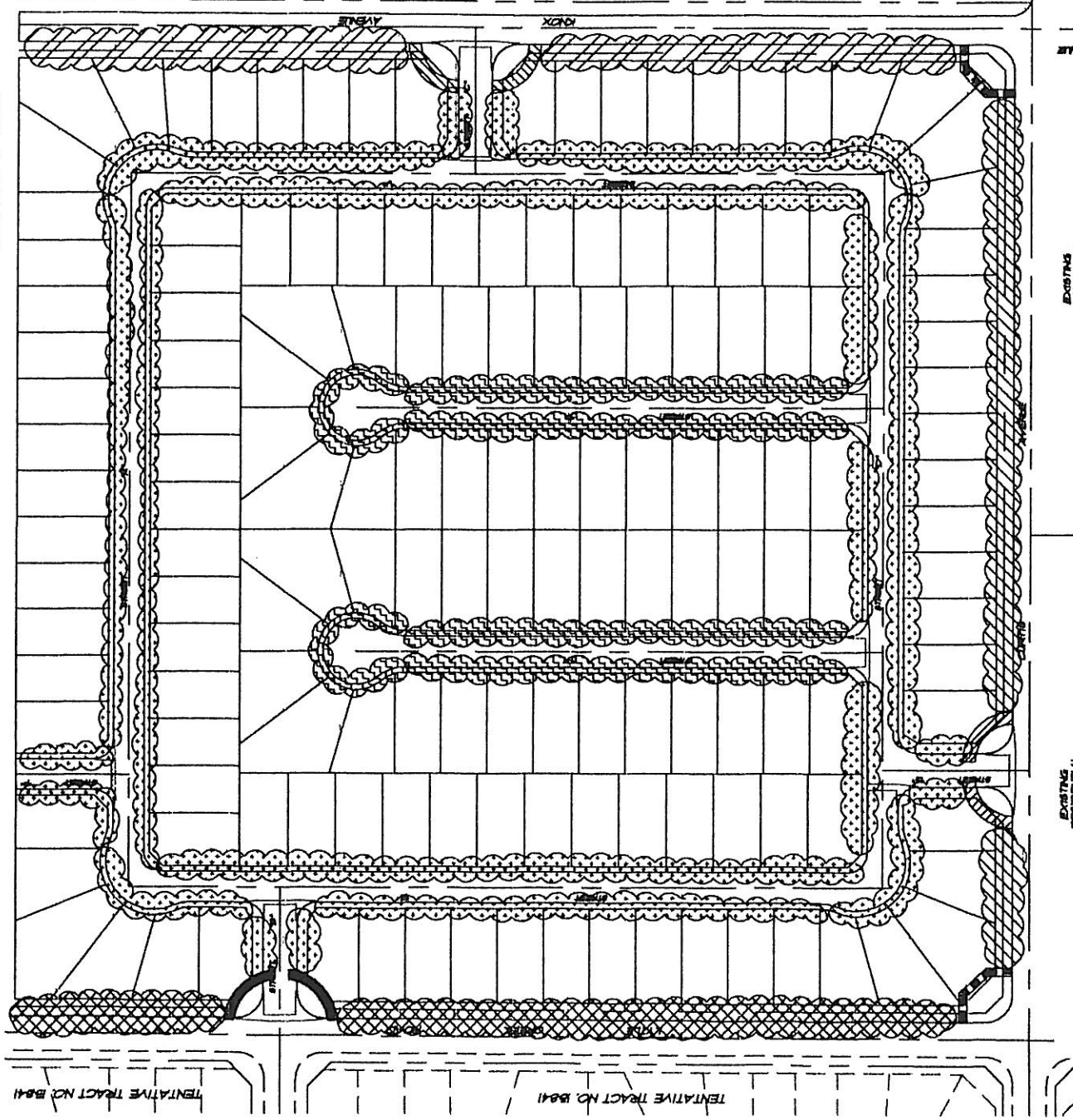


MAJOR COMMUNITY ENTRY MONUMENT
 MINOR COMMUNITY ENTRY MONUMENT
 MINOR CORNER TREATMENT



NORTH

SCALE: 1"=250'



EXISTING

EXISTING

1

Fontana Grandview
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PAGE 3-7

LANDSCAPE MASTER PLAN
 FIGURE 3-4

3.4 Streetscape Design Concept

The streetscape design concepts, as illustrated in Figures 3-5 through 3-8 (Typical Plans and Sections) are the primary streetscape landscape framework for Fontana Grandview. They are intended to unify the project and provide landscaping amenities to enhance the community. The streetscape components consist of 6' & 8' wide sidewalks or 8' wide sidewalk with off-street bike path: an identifying street tree pattern consisting primarily of broadleaf evergreen trees and pines accented with deciduous flowering trees, turf or a low groundcover; and low shrubs and walls where appropriate. The various levels of streetscape categories are:

A. Perimeter Streets

Lytle Creek Road (See Figure 3-5) is designated as a collector and borders the east side of Fontana Grandview. Lytle Creek Road has a landscape R.O.W. of 12' and a landscape easement of 10' totaling 22' of landscape frontage, with parkways which vary from 4'-8' based on the location of the 8' wide meandering sidewalk. This 8 foot meandering, combined sidewalk/off-street bike path is part of the Lytle Creek Road design program.

Lytle Creek Road has a staggered, double row of street trees with Camphor trees, a canopy evergreen tree and Chinese Pistache, a deciduous tree. The Chinese Pistache trees will be combined with turf within the parkway between the curb and the sidewalk, providing fall color. Camphor trees, planted in the parkway between the sidewalk and community wall, combined with shrubs, groundcover and vines, will complete the planting plan.

Curtis Avenue has altering tree types with Italian Stone Pines and Bradford Pears. Each tree type will be located in conjunction with the 8' meandering sidewalk/off street bike path. Each tree type may be located in turf between the curb and sidewalk. Those trees located between the sidewalk and the community wall will be combined with shrubs, ground covers and vines.

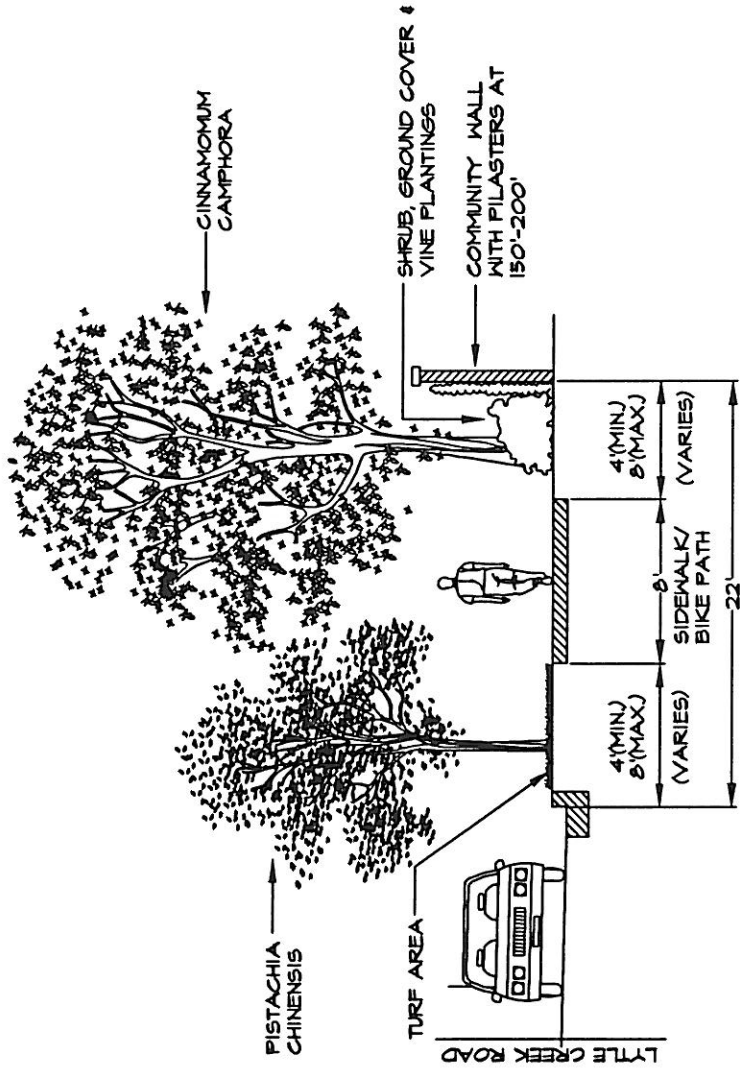
Curtis Avenue (see Figure 3-6) and Knox Avenue (see Figure 3-7) are the south and east collector streets bordering Fontana Grandview. Curtis Avenue is considered a divided modified collector street and has a landscape R.O.W. of 12' and a landscape easement of 10' totaling 22' of landscape frontage with parkways which varies from 4'-8' based on the location of meandering 8' wide sidewalk/off-street bike path. Knox Avenue has a landscape R.O.W. of 12' and a landscape easement of 10' totaling 22' of landscape frontage with parkways which varies from 4'-8' based on the meandering 8' wide sidewalk/off-street bike path location.

Knox Avenue has a three tree planting concept introducing a row of meandering trees Crape Myrtle between the curb and sidewalk and alternating rows of Magnolia and Italian Stone Pines in the parkway within the sidewalk and the community wall. The

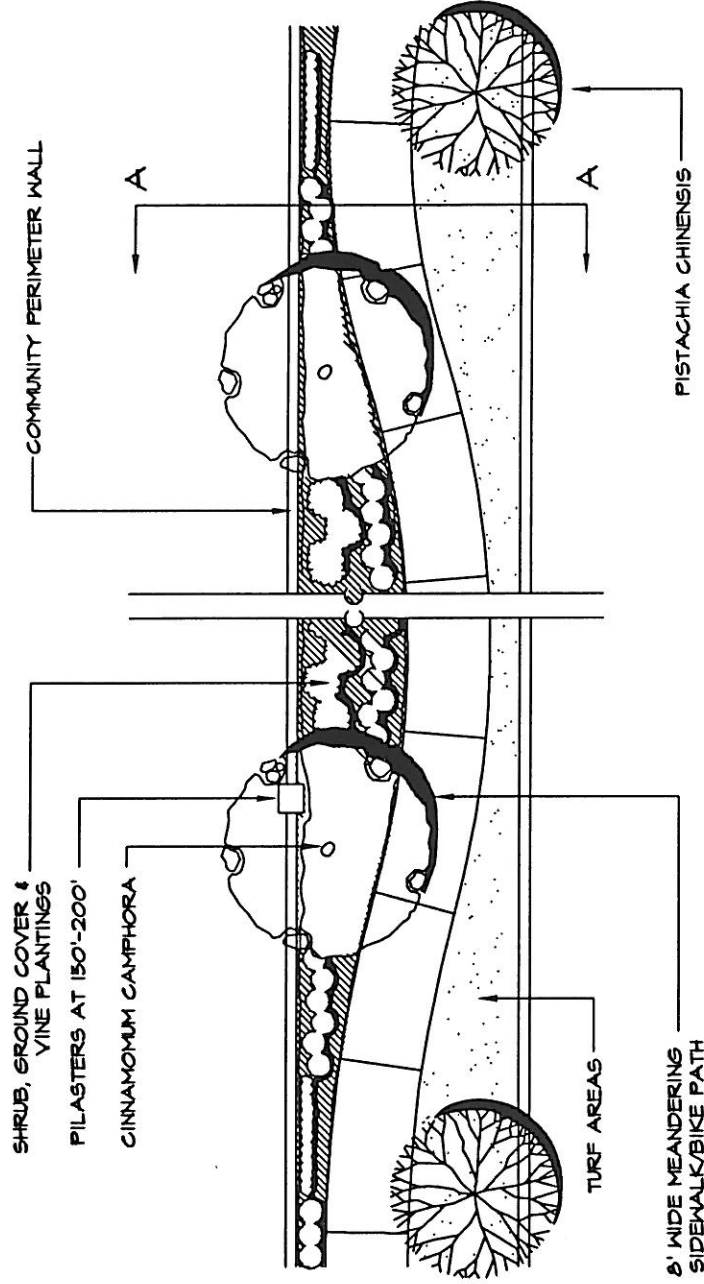
Crape Myrtle trees will be combined with turf within the parkway between the curb and sidewalk. The Magnolia and Italian Stone Pines planted between the sidewalk and the community wall shall be combined with shrubs, ground covers and vines.

B. Local Internal Streets

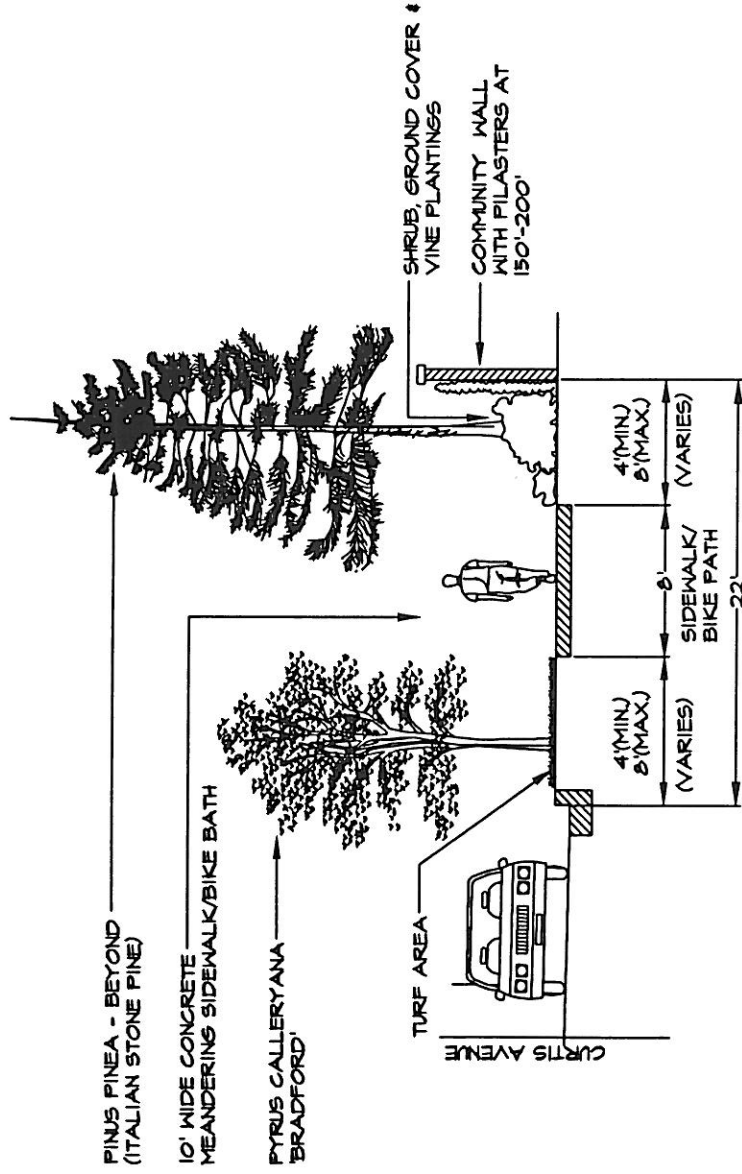
Local streets (See Figure 3-8) with right-of-ways of 54 feet will carry lower volumes of vehicular traffic and be more conducive to pedestrian movement. Lower scale evergreen and deciduous canopy street trees emphasize this condition.



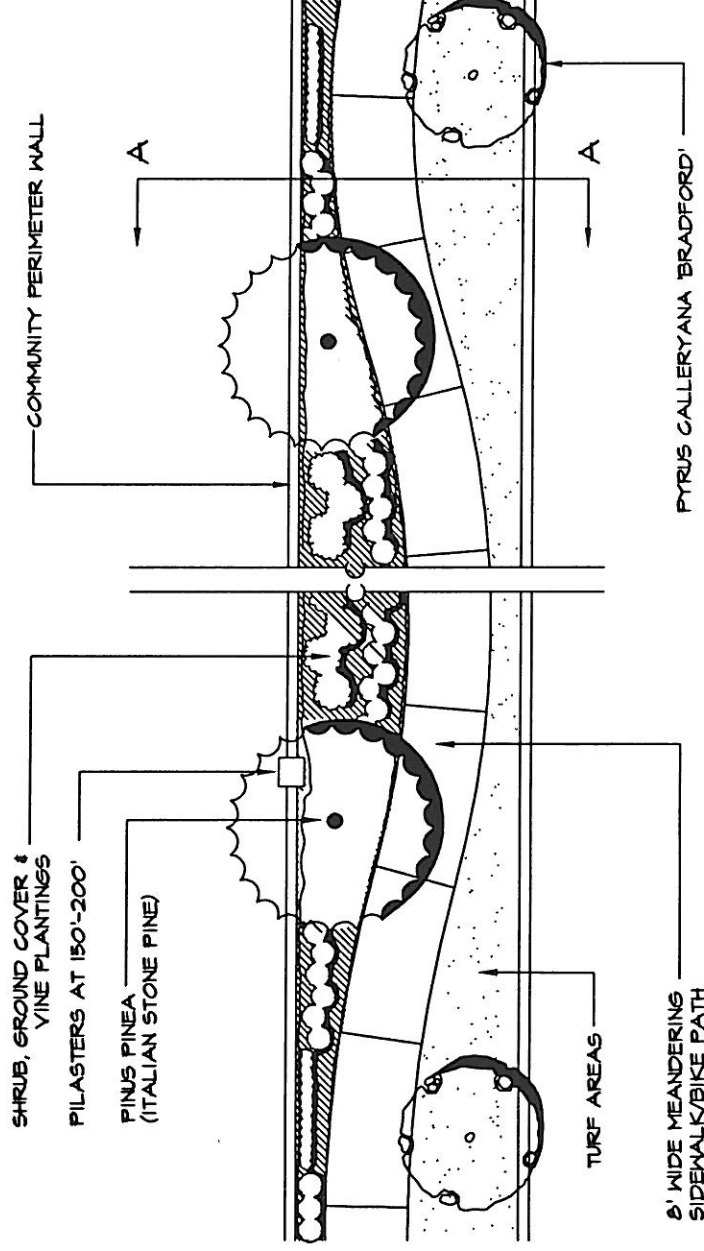
SECTION A - A
NTS



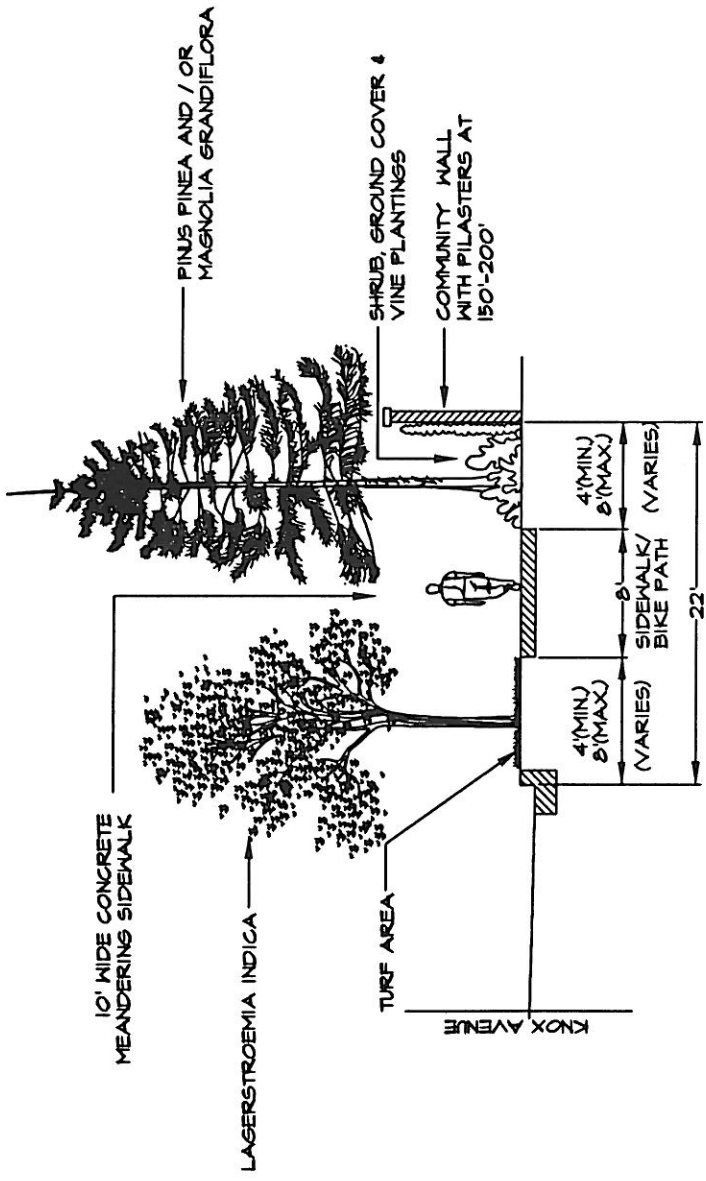
PLAN VIEW
NTS



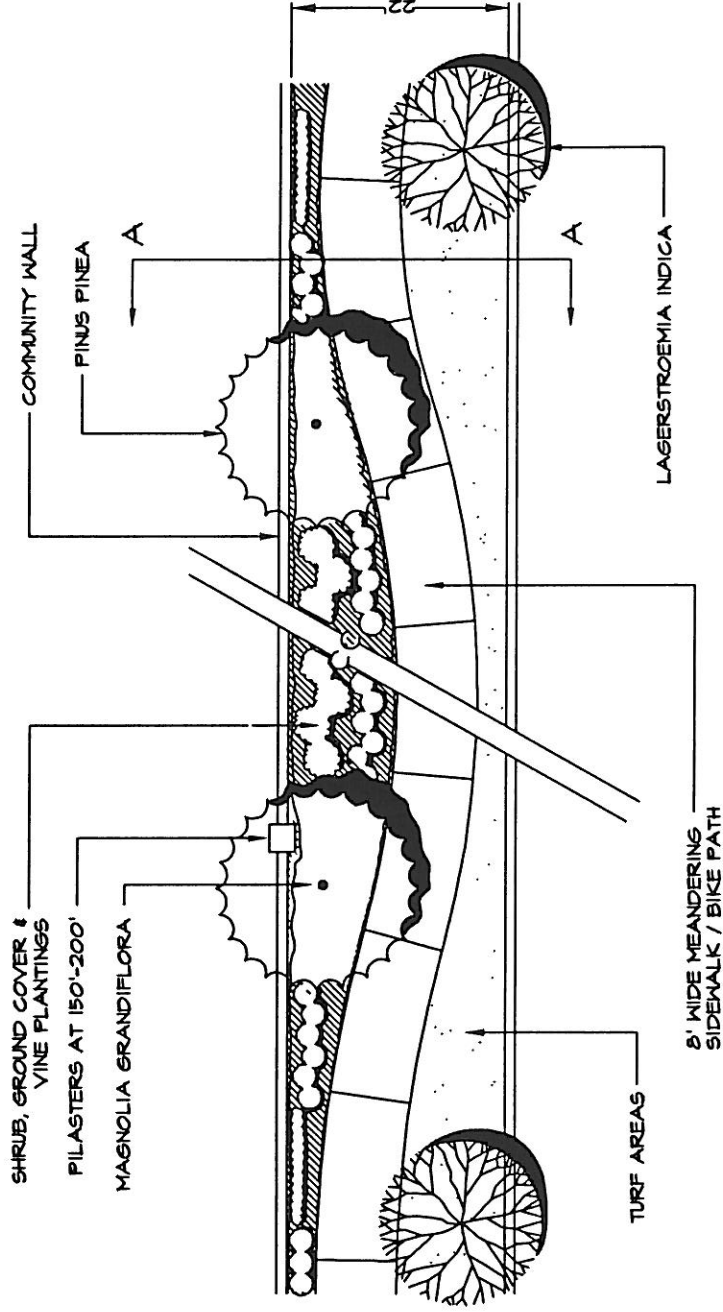
SECTION A - A
NTS



PLAN VIEW
NTS



SECTION A - A
NTS



PLAN VIEW
NTS

3.5 Entry Monumentation & Signage Character

A hierarchy of community entries with generous landscaping, signage, and community walls with wide pilasters is provided a part of the Fontana Grandview Development, reflecting the architectural theme and providing the residents and visitors with beauty and community identification. The Landscape Master Plan, (See Figure 3-4), shows the location of the hierarchy of entries and key intersections. Figures 3-9 through 3-11 illustrate entries in both plan view and elevation view.

A. Major Community Entry: Lytle Creek Road

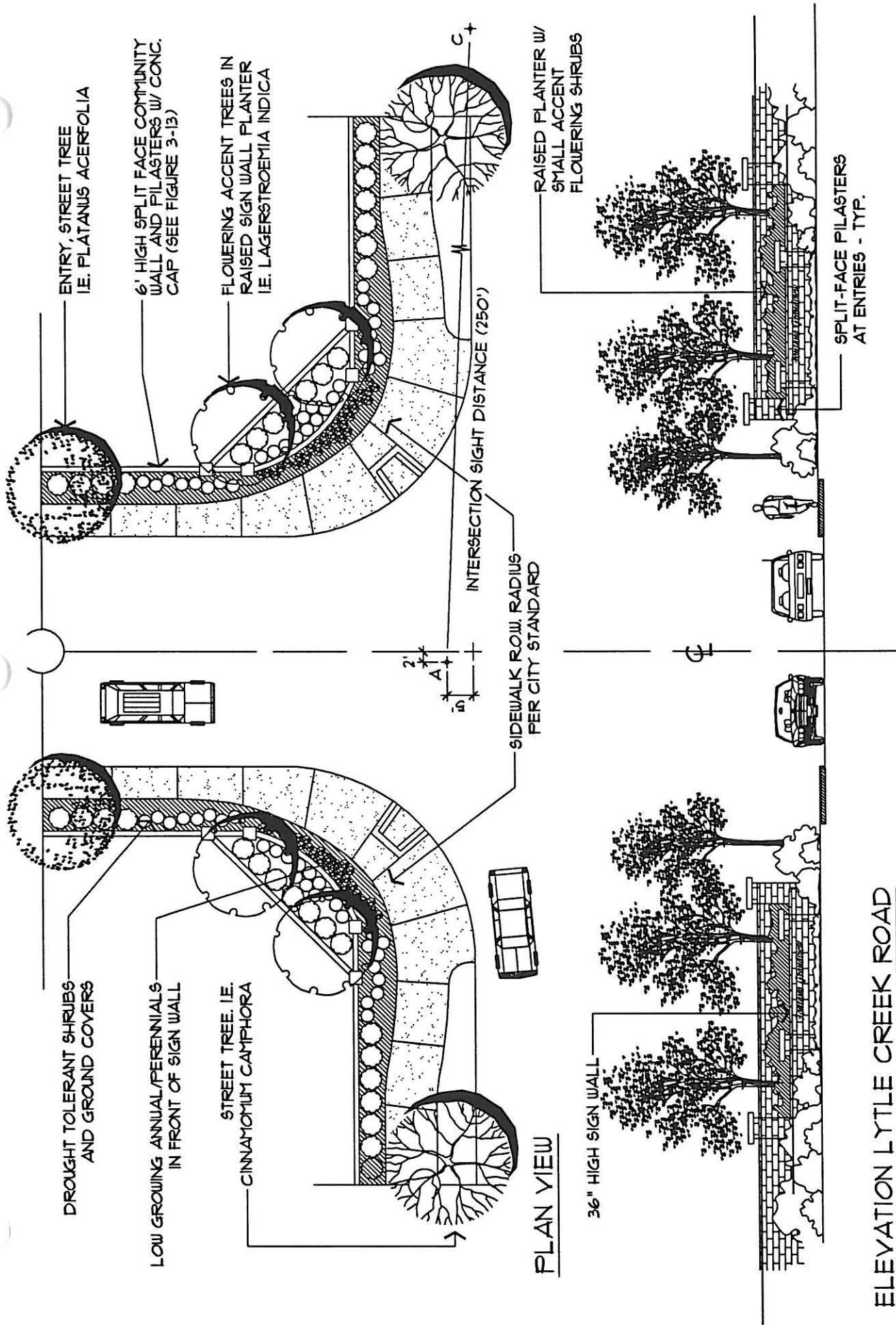
The Major Community Entry at Lytle Creek Road (See Figure 3-9) provides the major gateway into the Fontana Grandview project with accent trees and the open bermed turf areas providing good vehicular intersection visibility. Specimen evergreen and deciduous flowering trees are used to enhance the entry. Low entry walls with wide pilasters accent the entry. The low walls are designed to match the Fontana Grandview community theme walls. Signage identifying the community of Fontana Grandview is located on the curved low wall at the central part of the entry.

B. Minor Community Entry: at Curtis Avenue & at Knox Avenue

The Minor Community Entries at Curtis Avenue and at Knox Avenue (See Figure 3-10) provides the south and west access to the main internal roadway through Fontana Grandview. These Minor Community Entries are a smaller scale version of the Major Community Entry, with a smaller planting area and signage wall.

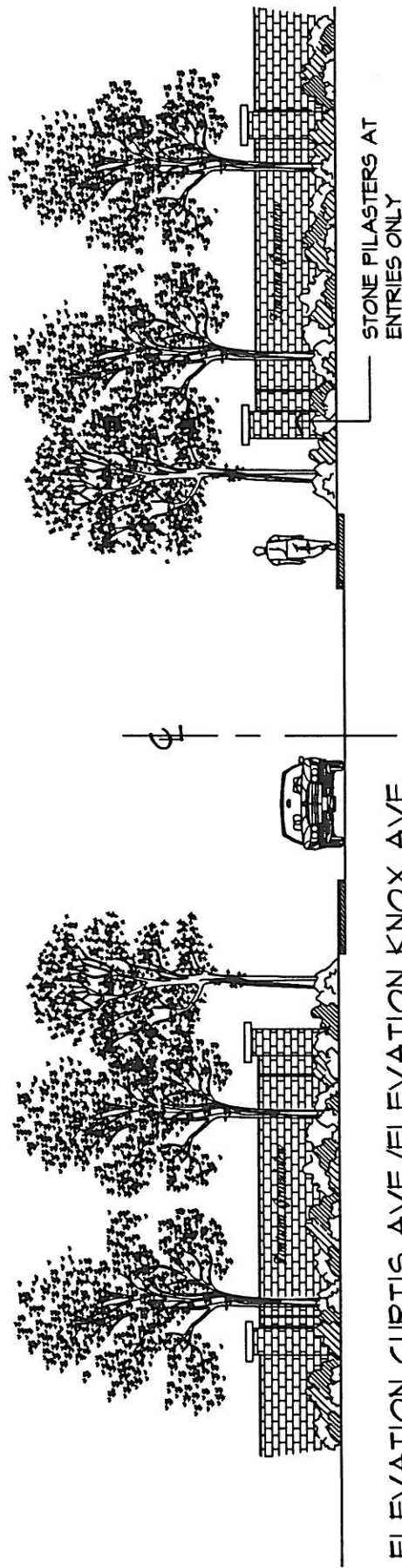
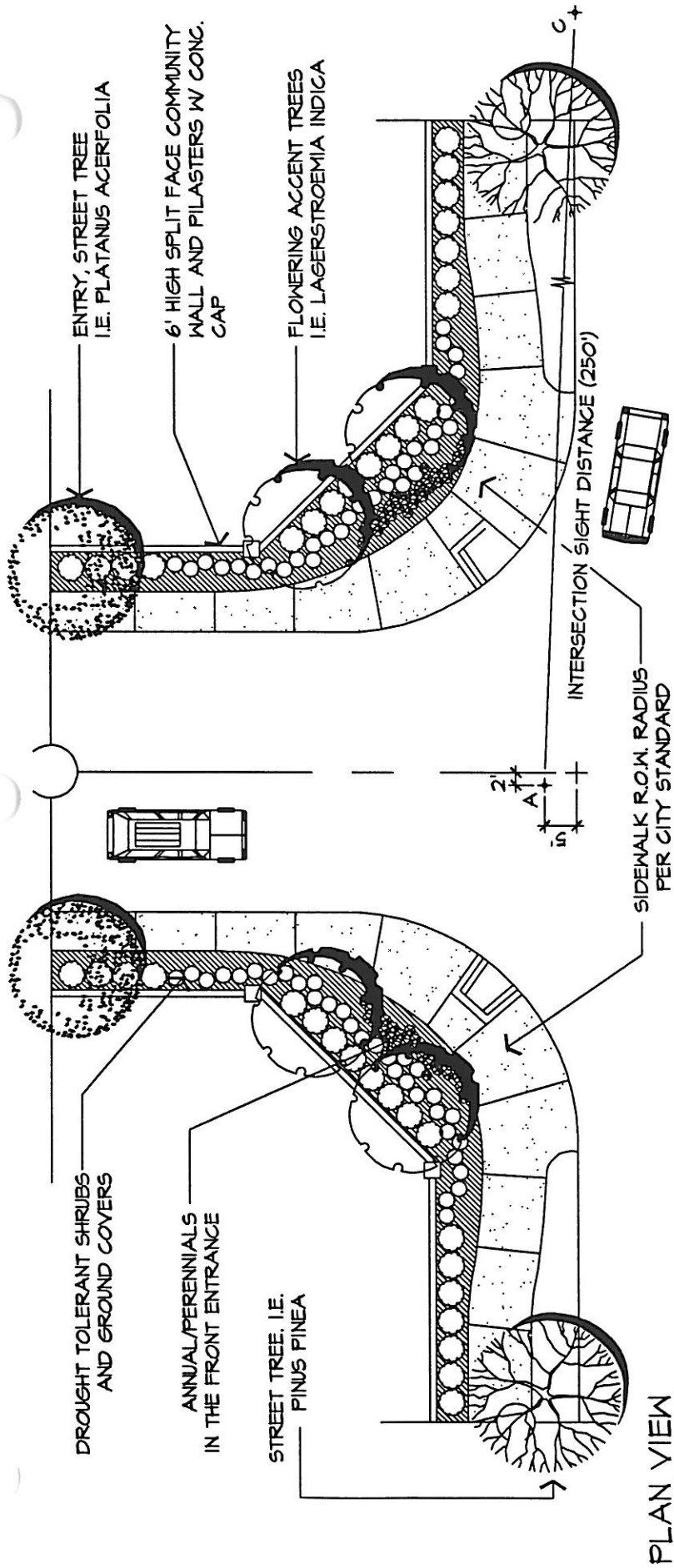
C. Minor Intersection Treatments: Lytle Creek Road & Curtis Avenue/Cdurtis Avenue & Knox Avenue

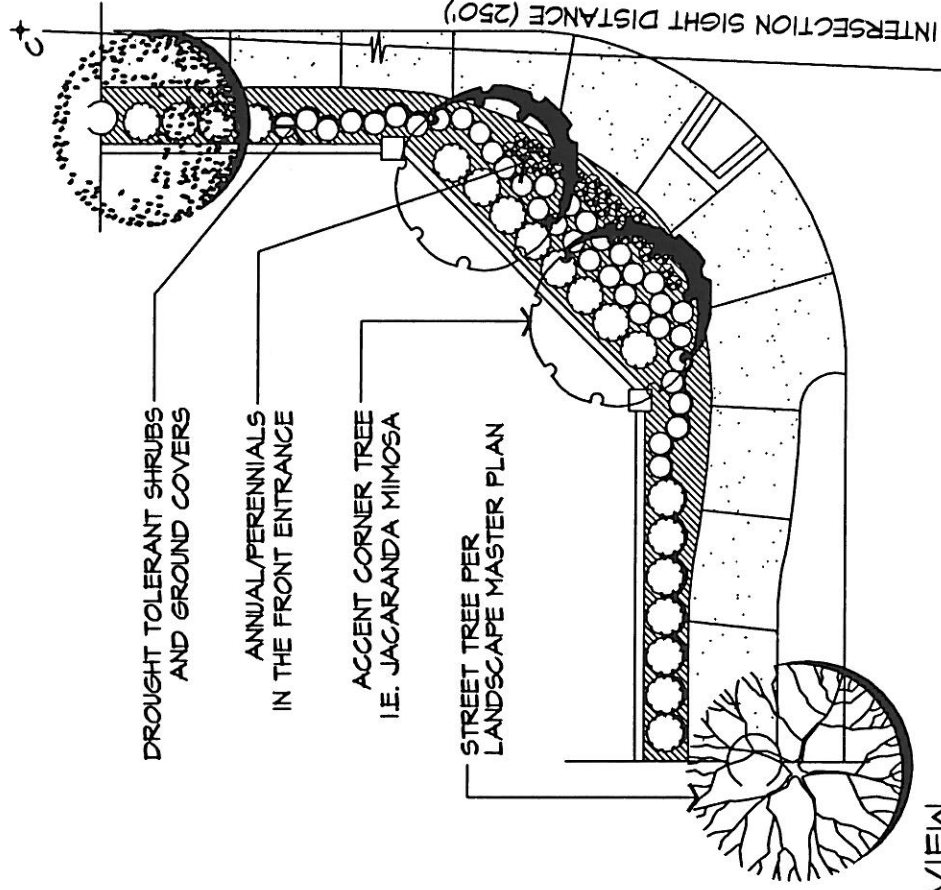
The Minor Intersection Treatment at Lytle Creek Road & Curtis Avenue/Curtis Avenue & Knox Avenue (See Figure 3-11) provides a theme entry at the southwest and southeast corners of Fontana Grandview. The foreground of the landscaped entry consists of several groupings of flowering Grape Myrtle with mounded turf, perennial color flowers, and flowering shrubs. The backdrop consists of Camphor trees and community theme wall (no signage), with pilasters.



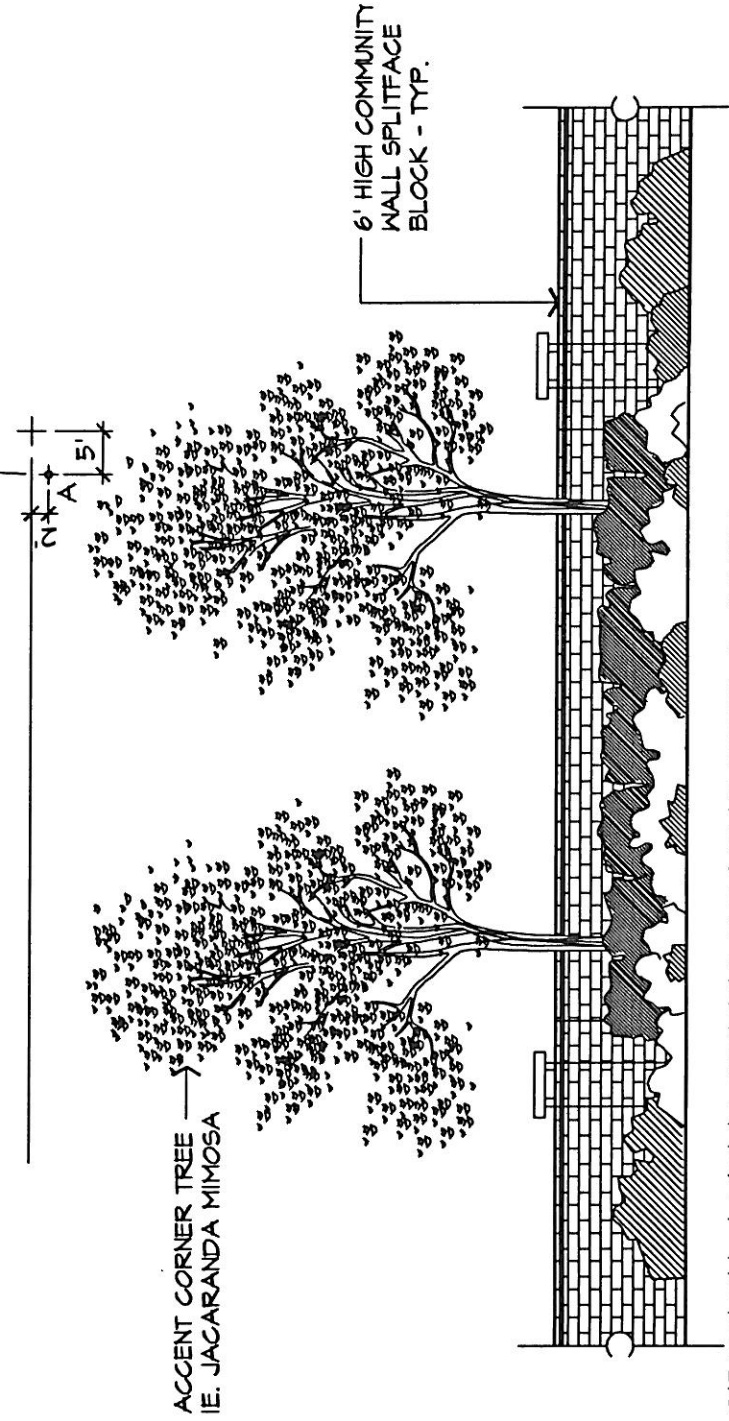
ELEVATION LYTLE CREEK ROAD

Fontana Grandview
L & L (USA), INC.





PLAN VIEW



SECTION: LYTLE CREEK ROAD/CURTIS AVENUE-
CURTIS AVENUE/KNOX AVENUE INTERSECTIONS

3.6 Community Walls

Community walls should be utilized to provide privacy screening and noise buffering for residential land uses, define the outer limits of the entire project, and act as a contributing design element to an overall landscape theme. The Community Wall Plan, (See Figure 3-12), shows the location of a hierarchy of walls used within the planned community. The Community Wall and Pilaster Elevations, (See Figure 3-13), illustrate design detail for each type of wall.

General Wall Guidelines

- Walls should be a minimum six feet high and be 6" minimum split face block with a cap block. Wall pilasters will occur approximately every 150 to 200 feet minimum and be constructed from split face block. Masonry walls will be used in limited locations where not visible from major roadways, as illustrated in Figure 3-13.
- Wall materials and patterns shall be compatible with adjacent building and community development materials.
- Walls shall be treated as extensions of the structures.
- The softening of wall and fence surfaces with vines and other plantings is strongly encouraged. *— required*

3.7 Proposed Infrastructure Plan

The development of the Fontana Grandview Planned Community will include the installation of a number of infrastructure improvements to serve the residential uses:

A. Water

The development of the planned community area will require the installation of water lines to serve the residential areas. It is anticipated that the site will be serviced by the Fontana Water Company.

A six inch water line is existing in Curtis Avenue and Maloof Avenue. This existing 6" water line runs from the east end of the project to Maloof Avenue and turns south along Maloof Avenue. Fontana Water Company has been contacted regarding the future water mains around the project area. Currently, Fontana Water Company has not yet determined the location and size of future water mains. However, the proposed on-site water system is shown on Figure 3-14. Final determination of line sizes and water system design will be determined by final engineering plans and will be based on fire flow and/or domestic requirements.

B. Sewer

The proposed sewer plan is shown in Figure 3-15. The serving agencies are the Inland Empire Utilities Agency (formerly Chino Basin Municipal Water District) and the City of Fontana. Inland Empire Utilities Agency is responsible for the construction and maintenance of the wastewater treatment facilities and the sewer interceptor lines. The City of Fontana is responsible for constructing and maintaining the collection system within the City limits.

A proposed 15" sewer main is located on Lytle Creek Road, which will run from Summit Avenue along Lytle Creek Road to Curtis Avenue, and turn west on Curtis Avenue to Beech Avenue, then run along Beech Avenue towards south. The on-site sewage from the residential planning areas will be collected and conveyed through proposed 8 inch sewer lines to this proposed 15" sewer main at intersection of Curtis Avenue and Lytle Creek Road, the southwest corner of the project. Final engineering will be necessary to determine the exact size of this off-site sewer main. The installation of this line will be required for both the Summit Heights Specific Plan and Fontana Grandview Community Plan. In the event the development of Fontana Grandview proceeds prior to the development of Summit Heights and the entire line is constructed by the developer of Fontana Grandview, a reimbursement agreement with the City will be executed.

The project developer will be responsible for all required in-tract sewer system improvements necessary to serve the proposed project. These improvements are illustrated in Figure 3-15.

C. Drainage

Local drainage systems are the responsibility of the City of Fontana. The proposed drainage system for the project is part of the North Fontana Master Storm Drain Plan. The on-site residential storm runoff will be handled by the combination of internal roadways and new storm drainage system. The project developer will be responsible for all required in-tract storm drain system improvements necessary to serve the proposed project. The exact location and size of the in-tract storm drainage system will be developed at final engineering stage and in accordance with the City of Fontana Standards. The storm drain improvements to be constructed as part of the proposed project are illustrated in Figure 3-16. The street improvements proposed for Lytle Creek Road, Knox Avenue, and Curtis Avenue will serve to convey off-site storm runoff from the northeast to the southwest of the property.

Along with the Route 30 construction, Caltrans is constructing a 60" storm drain within Beech Avenue from the Highland Channel northerly to Carter Avenue. As identified in Summit Height Specific Plan, a 54" storm drain within Beech Avenue from Carter Avenue northerly to Curtis Avenue and a 48" storm drain within Curtis Avenue from Beech Avenue easterly to Lytle Creek Road will be constructed by the Summit Heights developer. The storm run-off from the Fontana Grandview site will then connect to this storm drain system. In the event the development of Fontana Grandview proceeds prior to the development of Summit Heights and these storm drain facilities are constructed by the developer of Fontana Grandview, a reimbursement agreement with the City will be executed.

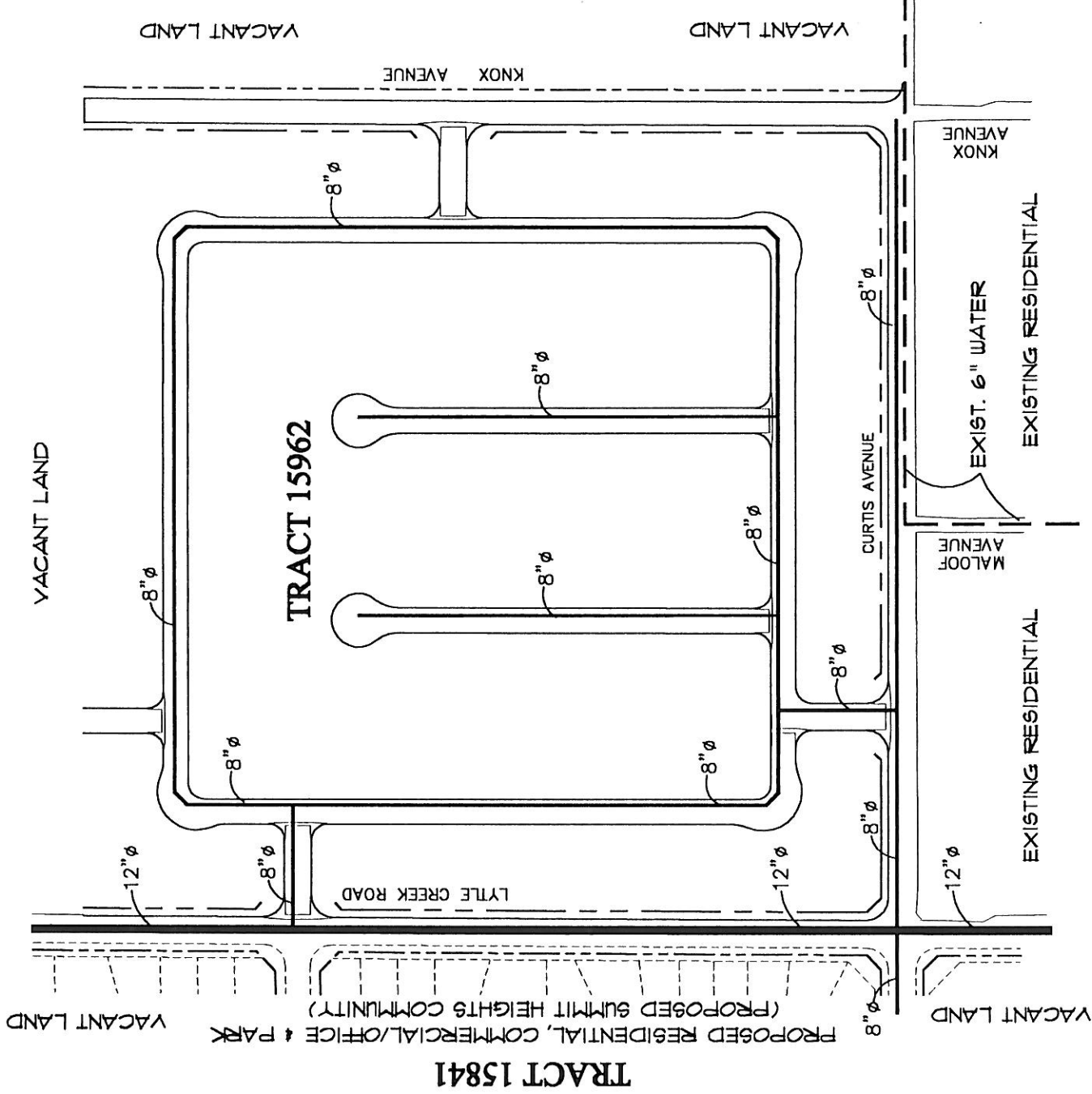
Based on the latest Caltrans Route 30 construction date projections, the Highland Channel should be completed and ready to accept flows in Summer 1999. Coordination shall occur with the San Bernardino County Flood Control District to determine if there is capacity in the San Sevaine Channel for the developed flows from the Fontana Grandview project. Interim detention basin may be required to limit the developed flows from the Fontana Grandview project to an acceptable amount determined by the Flood Control District until such time when improvements are made to San Sevaine Channel to accept total developed flows. The basin would be designed as temporary facilities in accordance with City of Fontana standards. Figure 3-17 shows the potential site for the temporary detention basin.

D. Solid Waste Disposal

The proposed project will require the expansion of an existing waste removal service route to include the planned community area. No offsite landfill construction will be required as a result of the proposed project.

E. Energy Systems

The planned community area will require the extension of electrical, telephone and natural gas service.

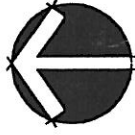


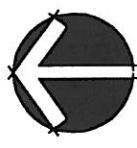
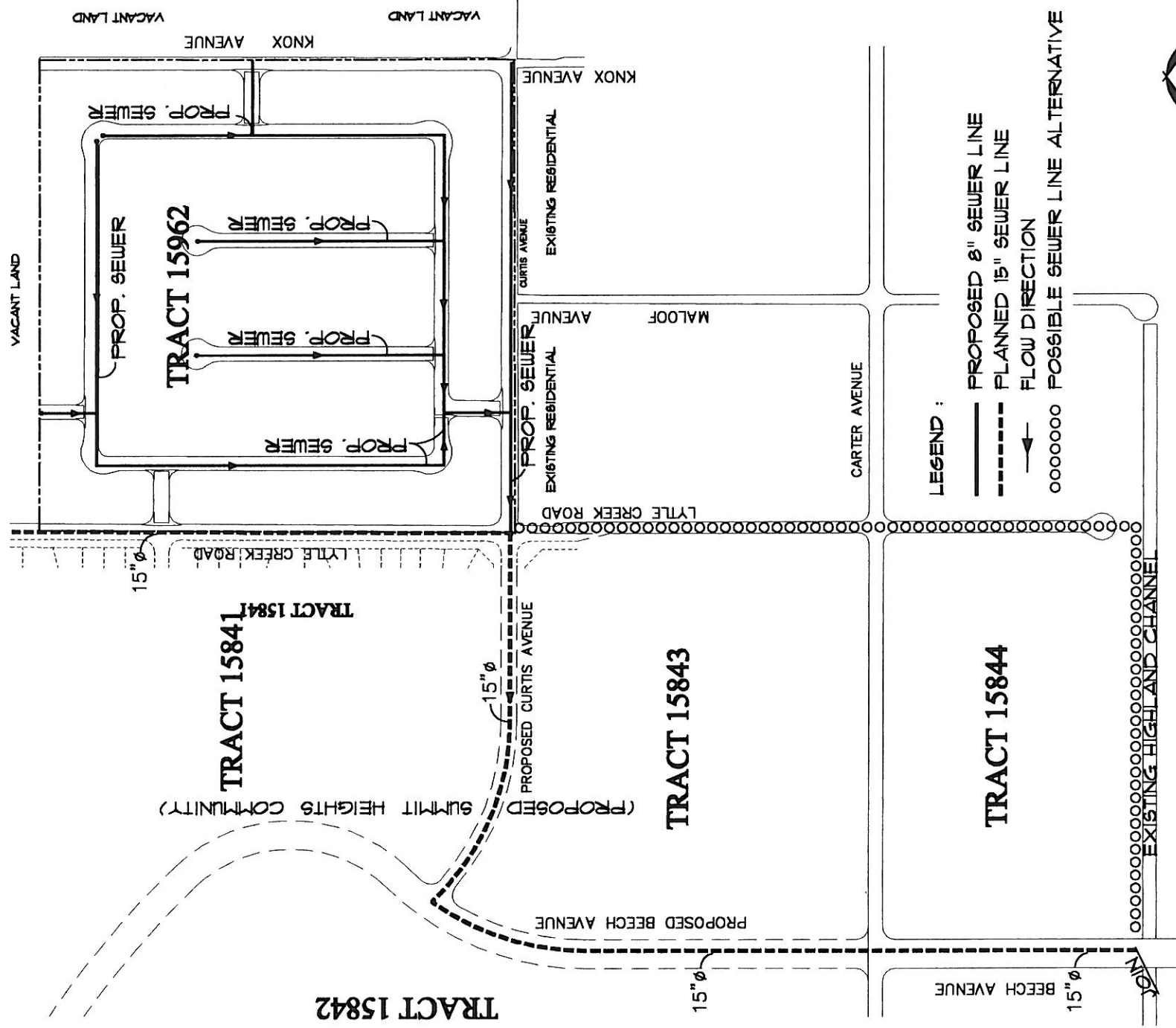
LEGEND :

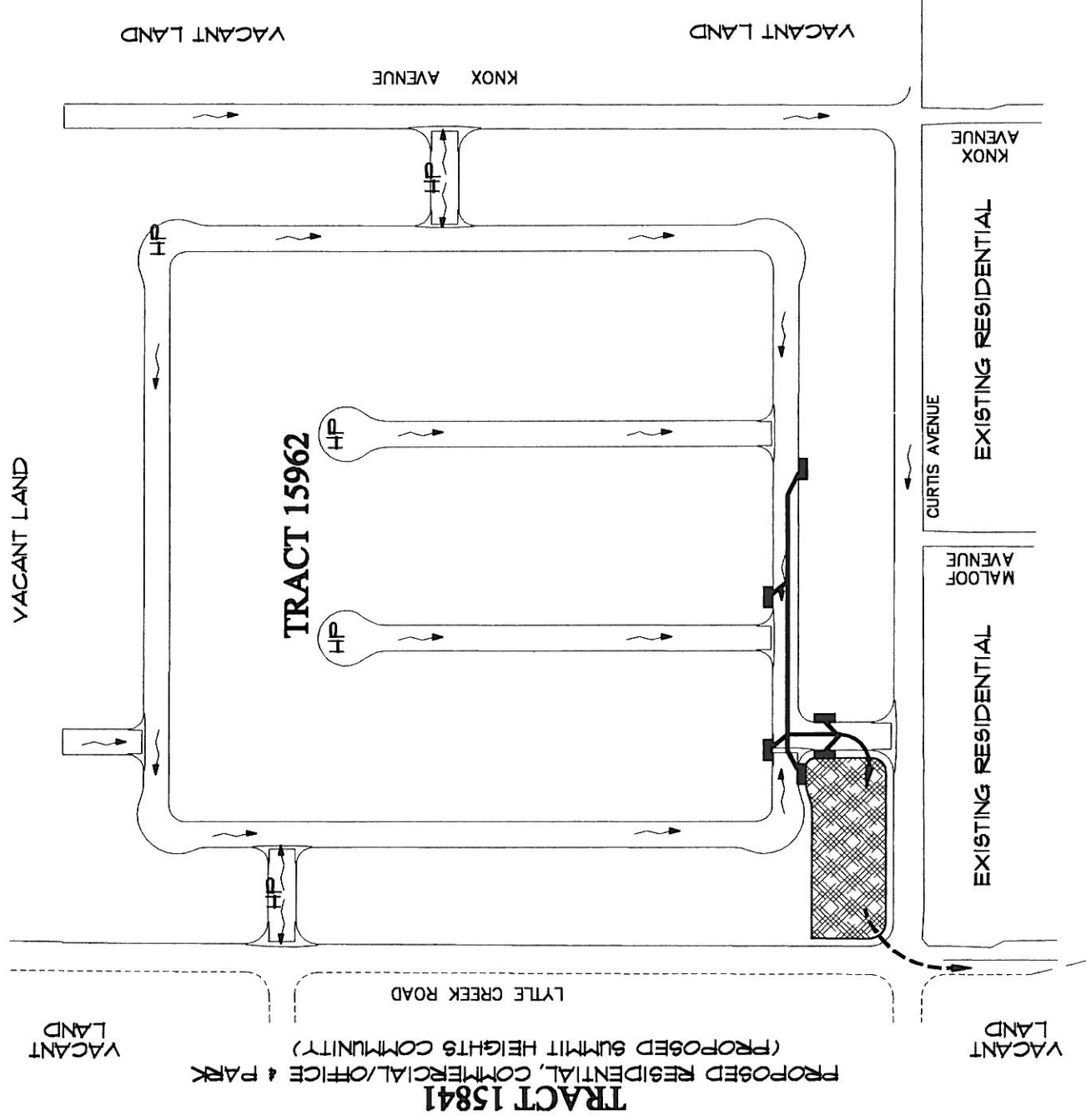
- PROPOSED 12" WATER LINE
- PROPOSED 8" WATER LINE
- - - EXISTING 6" WATER LINE

NOTES:

*: THE EXACT LOCATION AND SIZE OF PROPOSED WATER LINES WILL BE DETERMINED BY FONTANA WATER COMPANY.







LEGEND :



PROPOSED LOCATION OF TEMPORARY STORM WATER
DETENTION BASIN.



INTERIM PIPE TO APPROVED LOCATION.



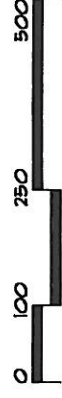
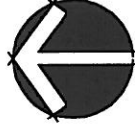
FLOW DIRECTION



HIGH POINT



CATCH BASIN



4.0 General Development, Site Planning, and Architectural Standards

4.0 GENERAL DEVELOPMENT, SITE PLANNING, AND ARCHITECTURAL STANDARDS

4.1 General Development Standards: Community Plan Conformance with the City Development Code

A Community Plan must generally conform to the development regulations of the Fontana Development Code. Therefore, regulations such as allowed uses in each zone; setback requirements; etc., will be per the City Development Code requirements. Additionally, all signage must be in compliance with Chapter 3 of the Municipal code.

Many of the benefits of this Community Plan include:

- All lots will be 7,200 square feet or larger.
- The landscaped parkways on Lytle Creek Road (See Figure 3-5), on Curtis Avenue (See Figure 3-6), and on Knox Avenue (See Figure 3-7).
- The Primary Entry at Lytle Creek Road and the Secondary Entries at Curtis Avenue and Knox Avenue will be upgraded, with landscaping, enhanced paving, and other visual amenities (See Figure 3-4 Through Figure 3-13).

4.2 Site Planning, Architectural/Design Guidelines and Standards

The purpose of this section is to provide site planning and architectural design criteria that will promote quality development and an aesthetically pleasing environment within the Fontana Grandview Community. The guidelines, when combined with the landscape designs presented in this Community Plan, provide the overall framework for establishing a sense of community identity, land use character, scale and environmental sensitivity in the planning and design of development with the Fontana Grandview Community.

The following guidelines express “intent” rather than “absolutes”, thereby allowing flexibility in fulfilling the intended design goals and objectives. Moreover, these guidelines are intended to promote creativity and innovation as well as consistent quality in the implementation of land uses.

A. Site Planning

- (a). Buildings and other improvements should be located to compliment the site on which they are placed.

- (b). 60% percent of the lots will be plotted with houses over 2,000 square feet in size.
- (c). Where feasible, consideration should be given to building elements as they relate to the environment.
- (d). Design should maximize utilization of visual amenities.
- (e). Local street system design should consider ease of auto traffic movement and provide opportunities for pedestrian, bicycle, and other alternative transportation modes.
- (f). Local street layouts should promote compatibility with building sites and lot arrangements to ensure consistent streetscape character.
- (g). The “Dynamic Plotting” criteria which will be applied to this development are provided below:

The following are basic, flexible plotting criteria for development under new Design Reviews. Variation and possibly additional criteria may be added by the Commission to individual Design Reviews based upon Commission consideration of individual circumstances.

1. A floor plan shall not be used consecutively more than three times in a row (whether reversed or not).
2. If the same floor plan is used for adjoining homes, one shall be the reverse of the other.
3. If the same floor plan is used for adjoining homes, one unit shall have a front setback at least three (3) feet greater in depth than the like, adjacent home.
4. No more than 65% of any one floor plan shall be used on any cul-de-sac or along any street between intersecting streets.
5. No two adjacent homes using the same floor plan, whether reversed or not, shall have the same exterior color scheme/treatment.
6. A variety of designs shall be used on garage doors, with no two adjoining homes which have the same floor plan and elevation using the same door pattern. In no case shall three homes of any floor plan have the same garage door pattern in a row.

7. Adjacent homes shall have varying setbacks. Minimum variation shall be two feet. When one and two story homes are adjacent, the two-story home shall have the larger front setback.
8. Homes with one-story features on corner lots shall orient the one story feature adjacent to the side street.
9. At least one in four homes shall have enhanced architectural features along the rear yard elevation. These enhancements may include, but are not limited to, the use of stuccoed pop-outs, wood plant-ons, shutters, color bands, enlarged trim, decorative or arched windows, decorative lighting fixtures, etc.
10. At least one in three homes shall have enhanced architectural features along the front yard elevation as approved by the Planning Commission, including, but not limited to: wood shutters, stone veneer, brick veneer, wood planters or a combination thereof, or such other enhanced architectural features approved by the Planning Commission on a case-by-case basis.
11. When a floor plan is repeated on adjacent lots, one of the homes shall use the enhanced architectural features noted above.
12. Side(s) and rear home elevations visible from any public right-of-way shall carry the architectural features and theme of the front to those visible side(s) or rear elevations.
13. Subtle, discriminating variations in the architecture are encouraged. These variations may include, but are not limited to, the use of stuccoed pop-out, wood plant-ons, shutters, color bands, enlarged trim, decorative or arched windows, decorative lighting fixtures, etc.
14. Floor plan maximum and minimum percentages for each model type shall be established.
15. Any plan type, elevations, color scheme, and veneer treatment shall be switched with another only if it conforms to all of the criteria listed above.
16. The Community Development Director, or his/her designee, shall have the authority for minor architectural changes focusing around items such as window treatments, color combinations, facade treatments, and architectural reliefs. Questions on the interpretation of this provision or changes not clearly within the scope of this provision shall be submitted to the Planning Commission for consideration under a Revision to the Design Review.

B. Architecture

- (a). Exact sizes for the various home plans will be approved at the time of architectural approval of the specific development project. The minimum house square footage shall be 1,600 square foot.
- (b). For each floor plan in residential areas, varying complimentary elevations shall be provided to create visual interest and a varied neighborhood street scene.
- (c). Material, colors and general style should be integrated through each development area to achieve continuity in design.
- (d). The height and bulk of buildings should be approximate in scale to the size, shape and topography of the site and should be harmonious with the setting, verified through grading concept plans and site plan review.
- (e). Two foot projections, no more than five feet in width, shall be permitted into setback areas for fireplaces, chimneys, entertainment alcoves, and other features.
- (f). Roof protrusions such as vents or flashing should be positioned away from the street side of the house or finished to match the roof color in order to minimize visual impact.
- (g). Bare metallic surfaces (vents, pipes, gutters, flashing, etc.) shall be painted or covered from view in a manner harmonious with the general exterior architectural treatment of the building.
- (h). Architectural screens, walls and accessory structures should be compatible in material, color and texture to the main buildings.
- (i). Patio covers, room additions, swimming pools, spas and any other accessory structures attached or detached shall be subject to the requirements in the municipal code.

5.0 Implementation

5.0 IMPLEMENTATION

The following documents shall be prepared for approval by the City at Fontana to ensure that development of the Community plan area proceeds in an orderly manner.

5.1 Environmental Review

An initial study and environmental assessment is included as part of this Community Plan document (Appendix Two). Based upon a review of both documents, it is anticipated that the City of Fontana will issue a negative declaration for the proposed project in accordance with the California Environmental Quality Act (CEQA) Guidelines and Regulations and local guidelines to implement CEQA.

5.2 Community Plan Approval

This Community Plan will be reviewed and approved by the City of Fontana Planning Commission. It is intended to provide land use, design, and other controls for the proposed project in conformance with the City's General Plan, Development Code, and California Government Code Section 65450.

5.3 Tentative Tract Map 15962

Tentative Tract Map 15962 will be reviewed and approved pursuant to applicable provisions of the Subdivision Map Act (Government Code Section 66410 through 66499) and City of Fontana applicable rules and procedures.

5.4 Amendments and Changes

A. Major Changes

The developer/or property owner may initiate an amendment if substantial changes are required in the project during the development process. Any amendment to the Fontana Grandview Community Plan shall be in accordance with City requirements and will be reviewed for approval by the Planning Commission. Revisions to the tentative tract map shall be in accordance with the Subdivision Map Act (Government Code Section 66410 through 66499) and applicable City of Fontana procedures.

B. Minor Changes

Minor revisions and or modifications to approved components of this community Plan may be approved by the Community Development Director. Minor revisions and/or modifications shall include, but are not necessarily limited to the following:

- 1) Minor boundary shifts (lot line adjustments).
- 2) Minor changes in design concepts included within the Community Plan; including but not necessarily limited to access points, streetscape designs, entry designs, design guidelines, etc. The design guidelines within the Community Plan are intended to be conceptual in nature only and are intended to be flexible in implementation.

5.5 Appeals

Appeal(s) from any determination of the Community Development Director shall be made to the Planning Commission and appeal(s) from any determination, decision, or condition of approval by the Planning Commission shall be made to the City Council in accordance to the appeal procedures established by the City of Fontana Municipal Code.

5.6 Maintenance

Maintenance responsibilities with The Fontana Grandview Planned Community area will be divided between the City of Fontana, special districts, service community facilities districts, and individual property owner(s). Covenants, conditions, and restrictions (CC&R's) will be prepared prior to the recordation of the first subdivisions with the project to guarantee maintenance of facilities within the site.

1) Streets:

All streets within the Fontana Grandview Community Plan will be maintained by the City of Fontana.

2) Parkways and Entries:

Maintenance of public parkway landscaping, plantings along public streets (except on local roads), project entry monumentation, landscaping along major and secondary intersections, and the pedestrian/bike access will be by a service community facilities district.

3) Drainage Facilities:

The maintenance and liability for drainage improvements which are defined as “interim” will remain the responsibility of the project sponsor unless specifically accepted by the City of Fontana for maintenance by another agency. The City shall retain, at its sole discretion, the option to accept or not accept for maintenance any improvement initially constructed as interim facilities, but which are to be incorporated into the future permanent drainage system prior to the time such facility is upgraded to permanent status.

Permanent drainage improvements within the Fontana Grandview Planned Community area will be constructed to the standards of the City of Fontana, and will be dedicated to the City for maintenance.

Where it is necessary to construct drainage improvements outside of public rights-of-way, drainage easements will be dedicated to the City of Fontana. Upon dedication, the City will assume responsibility for maintenance of the underground facilities only; maintenance responsibility for surface improvements within drainage easements will not be transferred.

Drainage facilities on private property in the absence of an easement will be considered to be private drains. Maintenance of such private drains will be the sole responsibility of the landowner or the association charged with the general maintenance of the landscaping and other common improvements of the area in question.

4) Water and Sewer:

The City of Fontana will assume responsibility for the maintenance and monitoring of sewer facilities and the Fontana Water Company will assume responsibility for maintenance and monitoring of water facilities constructed within public rights-of-way within Fontana Grandview.

Water and sewer facilities located on private property in the absence of an easement will be considered to be private facilities. Maintenance of such private facilities will be the responsibility of the landowner or tenants charged with the general maintenance of the landscaping and other common improvements.

5) Other Facilities:

The Southern California Gas Company will maintain natural gas lines within the project site. Southern California Edison will maintain onsite electrical facilities. Pacific Bell will maintain telephone facilities.

6.0 Appendix One

6.0 APPENDIX ONE

6.1 Ownership List and Map

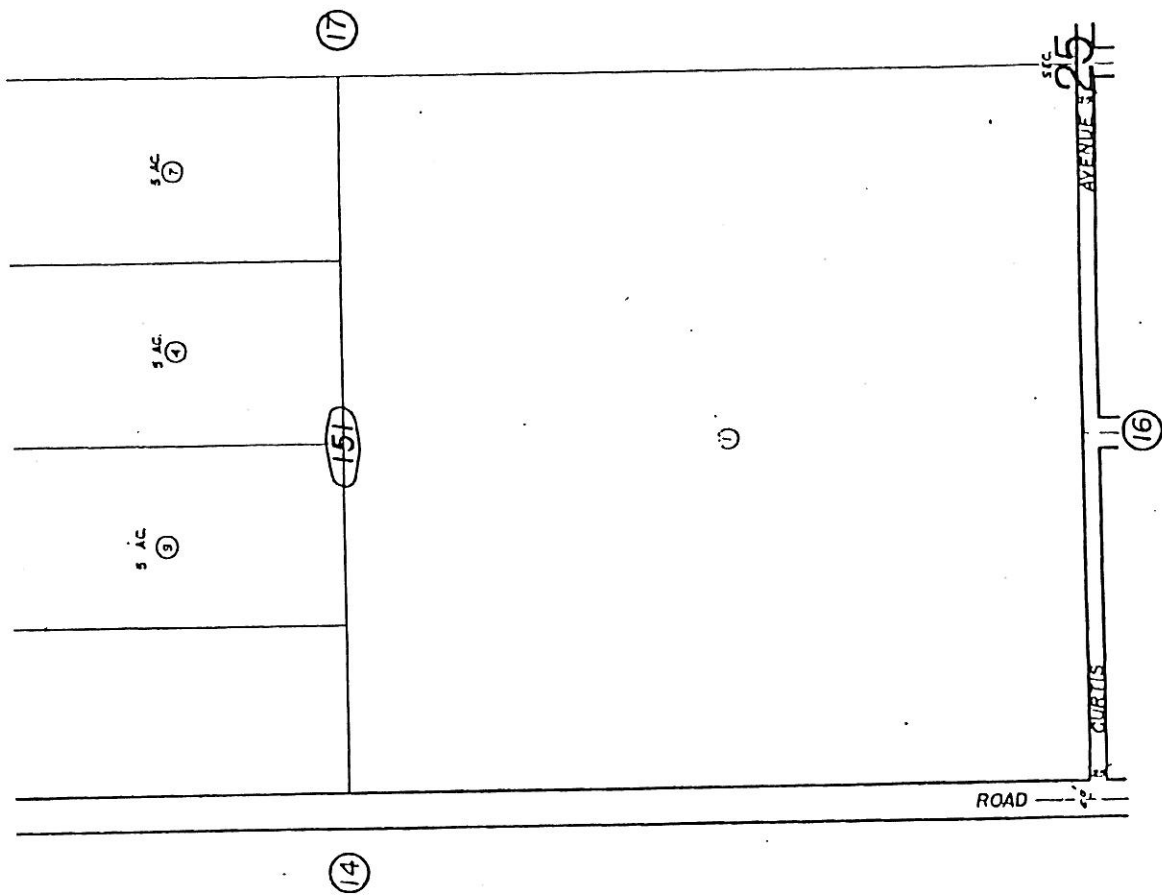
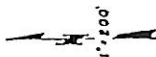
One owner holds title to land within the Fontana Grandview boundary. This owner is identified on the ownership list and keyed to the assessor's parcel map, book 226, page 15, which follows on the next page.

<u>Ownership List</u>	<u>Assessor's Parcel Number</u>
L & L (USA), Inc.	AP #226-151-01

E. 1/2 N. W. 1/4 Sec. 25, T. 1 N., R. 6 W., S. B. B. & M.

Fontana City
Tax Rate Area
10061

226-15



Note-Assessor's Blk. & Lot
Numbers Shown in Circles

Assessor's Map
Book 226 Page 15
San Bernardino County

"Notice: This is neither a plat nor a survey. It is furnished merely as a convenience to aid you in locating the land indicated hereon with reference to streets and other land. No liability is assumed by reason of any reliance thereon."

REVISED
10-13-66
3/27/67

Order: hj1 Description: 226.15 Page 1 of 1 Comment:

**PORTION OF ASSESSOR'S MAP
BOOK 226 PAGE 15
SAN BERNARDINO COUNTY**

6.2 Tentative Tract Map 15962

The Tentative Tract Map will be inserted following this page after it has been approved by the Fontana Planning Commission.

6.3 Approving Resolution

The approving resolution for the Fontana Grandview Community Plan will be inserted behind this page after the resolution receives approval by the Fontana Planning Commission.

7.0 Appendix Two: CEQA Initial Study

7.0 APPENDIX TWO: CEQA INITIAL STUDY

See separate document attached.

■ APPENDIX A ■

INITIAL STUDY CHECKLIST

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

☐	Land Use and Planning	☒	Transportation/Circulation	☒	Public Services
☐	Population and Housing	☐	Biological Resources	☐	Utilities
☐	Earth Resources	☐	Energy and Mineral Resources	☒	Aesthetics
☐	Water	☐	Risk of Upset and Human Health	☒	Cultural Resources
☒	Air Quality	☒	Noise	☐	Recreation
Mandatory Findings of Significance					

DETERMINATION.

On the basis of this initial evaluation:

I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

- X** I find that **although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described in the Initial Study have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared.**

I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

I find that the proposed project **MAY** have a significant effect(s) on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potential significant unless mitigated." **"AN ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, there **WILL NOT** be a significant effect in this case because all potential significant effects (1) have been analyzed adequately in an earlier EIR pursuant to applicable standards and (2) have been avoided or mitigated pursuant to the earlier EIR, including revisions to mitigation measures that are impose upon the project.


Signature

3/22/98
Date

3.2 LAND USE AND PLANNING. Would the project:

	Impact to be Analyzed in EIR	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
a) Conflict with general plan designation or zoning?	☐	☐	☒	☐
b) Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project?	☐	☐	☐	☒
c) Be compatible with existing land use in the vicinity?	☐	☐	☐	☒
d) Affect agricultural resources or operations (e.g. impacts to soils or farmlands, or impacts from incompatible land uses)?	☐	☐	☐	☒
e) Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?	☐	☐	☐	☒

3.3 POPULATION, HOUSING, AND EMPLOYMENT IMPACTS. Would the project:

a) Cumulatively exceed official regional or local population projections?	☐	☐	☒	☐
b) Induce substantial growth in an area either directly or indirectly (e.g. through projects in an undeveloped area or extension of major infrastructure)?	☐	☐	☒	☐
c) Displace existing housing, especially affordable housing?	☐	☐	☐	☒

3.4 EARTH RESOURCES AND SEISMICITY IMPACTS.

Would the project result in or expose people to potential impacts involving:

a) Fault rupture?	☐	☐	☐	☒
b) Seismic ground shaking?	☐	☐	☒	☐
c) Liquefaction	☐	☐	☒	☐
d) Seiche, tsunami, or volcanic hazard?	☐	☐	☐	☒
e) Landslides or mudflows?	☐	☐	☐	☒
f) Erosion, changes in topography or unstable soil conditions from excavation, grading or fill?	☐	☐	☐	☒
g) Subsidence of the land?	☐	☐	☐	☒
h) Expansive soils?	☐	☐	☐	☒
i) Unique geologic or physical features?	☐	☐	☐	☒

3.5 WATER AND HYDROLOGY IMPACTS. *Would the project result in:*

	Impact to be Analyzed in EIR	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
a) Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?	☐	☐	☒	☐
b) Exposure of people or property to water related hazards such as flooding?	☐	☐	☐	☒
c) Discharge into surface waters or other alteration of surface water quality (e.g. temperature, dissolved oxygen or turbidity)?	☐	☐	☒	☐
d) Changes in the amount of surface water in any water body?	☐	☐	☒	☐
e) Changes in currents, or the course or direction of water movements?	☐	☐	☒	☐
f) Changes in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or through substantial loss of groundwater recharge capability?	☐	☐	☒	☐
g) Altered direction or rate of flow of groundwater?	☐	☐	☐	☒
h) Impacts to groundwater quality?	☐	☐	☒	☐
i) Substantial reduction in the amount of groundwater otherwise available for public water supplies?	☐	☐	☒	☐

3.6 AIR QUALITY IMPACTS. *Would the project:*

a) Violate any air quality standard or contribute to an existing or projected air quality violation?	☐	☒	☐	☐
b) Expose sensitive receptors to pollutants?	☐	☐	☐	☒
c) Alter air movement, moisture, or temperature, or cause any change in climate?	☐	☐	☐	☒
d) Create objectionable odors?	☐	☐	☐	☒

3.7 TRANSPORTATION AND CIRCULATION IMPACTS. *Would the project result in:*

a) Increased vehicle trips or traffic congestion?	☐	☒	☐	☐
b) Hazards to safety from design features (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☒	☐	☐

	Impact to be Analyzed in EIR	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
c) Inadequate emergency access or access to nearby uses?	☐	☐	☐	☒
d) Insufficient parking capacity on-site or off-site?	☐	☐	☐	☒
e) Hazards or barriers for pedestrians or bicyclists?	☐	☐	☒	☐
f) Conflicts with adopted policies supporting alternative transportation (e.g. bus turnouts, bicycle racks)?	☐	☐	☐	☒
g) Rail, waterborne or air traffic impacts?	☐	☐	☐	☒
3.8 BIOLOGICAL RESOURCES IMPACTS. Would the project result in impacts to:				
a) Endangered, threatened or rare species or their habitats (including but not limited to plants, fish, insects, animals, and birds)?	☐	☐	☐	☒
b) Locally designated species (e.g. heritage trees)?	☐	☐	☐	☒
c) Locally designated natural communities (e.g. oak forest, coastal habitat, etc.)?	☐	☐	☐	☒
d) Wetland habitat (e.g. marsh, riparian and vernal pool)?	☐	☐	☐	☒
e) Wildlife dispersal or migration corridors?	☐	☐	☐	☒
3.9 ENERGY AND MINERAL RESOURCES. Would the project:				
a) Conflict with adopted energy conservation plans?	☐	☐	☒	☐
b) Use non-renewable resources in a wasteful and inefficient manner?	☐	☐	☒	☐
c) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?	☐	☐	☒	☐
3.10 RISK OF UPSET AND HUMAN HEALTH. Would the project involve:				
a) A risk of accidental explosion or release of hazardous substances (including, but not limited to: oil, pesticides, chemicals or radiation)?	☐	☐	☐	☒
b) Possible interference with an emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
c) The creation of any health hazard or potential health hazards?	☐	☐	☐	☒

d) Exposure of people to existing sources of potential health hazards?

☐ Impact to be Analyzed in EIR ☐ Potentially Significant Unless Mitigated ☐ Less Than Significant Impact ☒ No Impact

e) Increased fire hazard in areas with flammable brush, grass, or trees?

☐ ☐ ☐ ☐ ☒

3.11 NOISE. Would the project result in:

a) Increases in existing noise levels?

☐ ☐ ☐ ☒ ☐

b) Exposure of people to severe noise levels?

☐ ☐ ☒ ☐ ☐

3.12 PUBLIC SERVICES IMPACTS. Would the project have an effect upon, or result in a need for new or altered government services in any of the following areas:

a) Fire protection?

☐ ☐ ☐ ☒ ☐

b) Police protection?

☐ ☐ ☐ ☒ ☐

c) Schools?

☐ ☐ ☐ ☒ ☐

d) Maintenance of public facilities, including roads?

☐ ☐ ☐ ☒ ☐

e) Other governmental services?

☐ ☐ ☒ ☐ ☐

3.13 UTILITIES IMPACTS. Would the project result in a need for new systems or supplies, or substantial alterations to the following utilities:

a) Power or natural gas?

☐ ☐ ☐ ☒ ☐

b) Communications systems?

☐ ☐ ☐ ☐ ☒

c) Local or regional water treatment or distribution facilities?

☐ ☐ ☐ ☒ ☐

d) Sewer or septic tanks?

☐ ☐ ☐ ☒ ☐

e) Storm water drainage?

☐ ☐ ☐ ☒ ☐

f) Solid waste disposal?

☐ ☐ ☐ ☐ ☒

g) Local or regional water supplies?

☐ ☐ ☐ ☐ ☒

3.14 AESTHETICS IMPACTS. Would the project:

a) Affect a scenic vista or scenic highway?

☐ ☐ ☐ ☐ ☒

b) Have a demonstrable negative aesthetic effect?

☐ ☐ ☒ ☐ ☐

c) Create light or glare?

☐ ☐ ☐ ☒ ☐

3.15 CULTURAL RESOURCES IMPACTS. Would the project:

	Impact to be Analyzed in EIR	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
a) Disturb paleontological resources?	☐	☐	☐	☒
b) Disturb archaeological resources?	☐	☒	☐	☐
c) Affect historical resources?	☐	☐	☐	☒
d) Have the potential to cause a physical change which would affect unique ethnic cultural values?	☐	☐	☐	☒
e) Restrict existing religious or sacred uses within the potential impact area?	☐	☐	☐	☒
3.16 RECREATION. Would the project:				
a) Increase the demand for neighborhood or regional parks or other recreational facilities?	☐	☐	☒	☐
b) Affect existing recreational opportunities?	☐	☐	☐	☒

■ APPENDIX B ■

WORKSHEETS

UTILGEN.XLS: Existing Land Use Element

Table 1: Contains the input for calculating consumption and generation rates and output from tables 2-6 are summarized.

Table 2: Calculates electrical consumption

Table 3: Calculates natural gas consumption

Table 4: Calculates water consumption

Table 5: Calculates sewage generation

Table 6: Calculates solid waste generation

Type the project variables (sq.ft.) in the shaded area(s) provided in Table 1.

Factors noted in the shaded areas provided in Table 2-6 may be changed.

Spreadsheet was prepared by Marc Blodgett

Table 1: Project Description

Land Use	Factor	Project
Low Density Res.	No. of Units	157
Low-Medium Dens. Res.	No. of Units	0
Medium Dens. Res.	No. of Units	0
Prof. Admin. Office	Square Feet	0
General Bus. District	Square Feet	0
General Commercial	Square Feet	0
District Center	Square Feet	0
District Center	Units	0
Indust./Resident.	Square Feet	0
Indust./Resident.	Units	0
Multi-Use Corridor	Square Feet	0
Industrial	Square Feet	0
Public/Institutional	Square Feet	0
Open Space	Square Feet	0

Projected Consumption/Generation Rates

Electrical Consumption-kWh/day	2,616
Natural Gas Consumption-cu.ft./day	34,421
Water Consumption-gals./day	48,984
Sewage Generation-gals./day	40,820
Solid Waste Generation-lbs./day	1,570

Table 2: Electrical Consumption				
Project Component	Units of Measure	Generation Factors	Consumption/ Generation	
Low Density Res.	No. of Units 157	kWh/unit/yr 6,081.00	kWh/unit/day 2,616	
Low-Medium Dens. Res.	No. of Units 0	kWh/unit/yr 6,081.00	kWh/unit/day 0	
Medium Dens. Res.	No. of Units 0	kWh/unit/yr 6,081.00	kWh/unit/day 0	
Prof. Admin. Office	Square Feet 0	kWh/sq. ft./yr. 11.80	kWh/sq. ft./day 0	
General Bus. District	Square Feet 0	kWh/sq. ft./yr. 11.87	kWh/sq. ft./day 0	
General Commercial	Square Feet 0	kWh/sq. ft./yr. 11.67	kWh/sq. ft./day 0	
District Center 90% Commercial	Square Feet 0	kWh/sq. ft./yr. 11.67	kWh/sq. ft./day 0	
District Center 10% Residential	Square Feet 0	kWh/unit/yr 6,081.00	kWh/unit/day 0	
Indust./Resident. Commercial	Square Feet 0	kWh/sq. ft./yr. 11.57	kWh/sq. ft./day 0	
Indust./Resident. Residential	Square Feet 0	kWh/unit/yr 6,081.00	kWh/unit/day 0	
Multi-Use Corridor	Square Feet 0	kWh/sq. ft./yr. 11.67	kWh/sq. ft./day 0	
Industrial	Square Feet 0	kWh/sq. ft./yr. 4.70	kWh/sq. ft./day 0	
Public	Square Feet 0	kWh/sq. ft./yr. 10.25	kWh/sq. ft./day 0	
Other	Square Feet 0	kWh/sq. ft./yr. 10.25	kWh/sq. ft./day 0	
Total Daily Electrical Consumption			2,616	
Source: Common Forecasting Methodology VII Demand Forms, Revised December 1989.				

Table 3: Natural Gas Consumption

Project Component	Units of Measure	Generation Factors	Consumption/ Generation
Low Density Res.	No. of Units 157	cu.ft./mo./unit 6865.00	cu.ft./day 34,421
Low-Medium Dens. Res.	No. of Units 0	cu.ft./mo./unit 6865.00	cu.ft./day 0
Medium Dens. Res.	No. of Units 0	cu.ft./mo./unit 4011.50	cu.ft./day 0
Prof. Admin. Office	Square Feet 0	cu.ft./mo./sq.ft. 2.00	cu.ft./day 0
General Bus. District	Square Feet 0	cu.ft./mo./sq.ft. 2.90	cu.ft./day 0
General Commercial	Square Feet 0	cu.ft./mo./sq.ft. 2.90	cu.ft./day 0
District Center 90% Commercial	Square Feet 0	cu.ft./mo./sq.ft. 2.90	cu.ft./day 0
District Center 10% Residential	No. of Units 0	cu.ft./mo./unit 4011.50	cu.ft./day 0
Indust./Resident. Commercial	Square Feet 0	cu.ft./mo./sq.ft. 2.90	cu.ft./day 0
Indust./Resident. Residential	No. of Units 0	cu.ft./mo./unit 4011.50	cu.ft./day 0
Multi-Use Corridor	Square Feet 0	cu.ft./mo./sq.ft. 2.90	cu.ft./day 0
Industrial	Square Feet 0	cu.ft./mo./sq.ft. 2.00	cu.ft./day 0
Public/Institutional	Square Feet 0	cu.ft./mo./sq.ft. 2.90	cu.ft./day 0
Open Space	Square Feet 0	cu.ft./mo./sq.ft. 2.90	cu.ft./day 0
Total Daily Natural Gas Consumption			34,421

Source: SCAQMD Air Quality Handbook for Preparing Environmental Impact Reports, Revised April 1993

Table 4: Water Consumption

Project Component	Units of Measure	Generation Factors	Consumption/Generation
Low Density Res.	No. of Units 157	gals./day/unit 312.00	gals./day 48,984
Low-Medium Dens. Res.	No. of Units 0	gals./day/unit 312.00	gals./day 0
Medium Dens. Res.	No. of Units 0	gals./day/unit 187.00	gals./day 0
Prof. Admin. Office	Square Feet 0	gpd/1,000 sq.ft. 240.00	gals./day 0
General Bus. District	Square Feet 0	gpd/1,000 sq.ft. 180.00	gals./day 0
General Commercial	Square Feet 0	gpd/1,000 sq.ft. 180.00	gals./day 0
District Center 90% Commercial	Square Feet 0	gpd/1,000 sq.ft. 180.00	gals./day 0
District Center 10% Residential	No. of Units 0	gals./day/unit 180.00	gals./day 0
Indust./Resident. Commercial	Square Feet 0	gpd/1,000 sq.ft. 180.00	gals./day 0
Indust./Resident. Residential	No. of Units 0	gals./day/unit 180.00	gals./day 0
Multi-Use Corridor	Square Feet 0	gpd/1,000 sq.ft. 180.00	gals./day 0
Industrial	Square Feet 0	gpd/1,000 sq.ft. 30.00	gals./day 0
Public/Institutional	Square Feet 0	gpd/1,000 sq.ft. 240.00	gals./day 0
Open Space	Square Feet 0	gpd/1,000 sq.ft. 120.00	gals./day 0
Total Daily Water Consumption			48,984

Source: Los Angeles County Sanitation District.

Table 5: Sewage Generation

Project Component	Units of Measure	Generation Factors	Consumption/Generation
Low Density Res.	No. of Units 157	gals./day/unit 260.00	gals./day 40,820
Low-Medium Dens. Res.	No. of Units 0	gals./day/unit 260.00	gals./day 0
Medium Dens. Res.	Square Feet 0	gpd/1,000 sq.ft. 156.00	gals./day 0
Prof. Admin. Office	Square Feet 0	gpd/1,000 sq.ft. 200.00	gals./day 0
General Bus. District	Square Feet 0	gpd/1,000 sq.ft. 160.00	gals./day 0
General Commercial	Square Feet 0	gpd/1,000 sq.ft. 150.00	gals./day 0
District Center 90% Commercial	Square Feet 0	gpd/1,000 sq.ft. 150.00	gals./day 0
District Center 10% Residential	Square Feet 0	gals./day/unit 160.00	gals./day 0
Indust./Resident. Commercial	Square Feet 0	gpd/1,000 sq.ft. 150.00	gals./day 0
Indust./Resident. Residential	Square Feet 0	gals./day/unit 160.00	gals./day 0
Multi-Use Corridor	Square Feet 0	gpd/1,000 sq.ft. 150.00	gals./day 0
Industrial	Square Feet 0	gpd/1,000 sq.ft. 25.00	gals./day 0
Public/Institutional	Square Feet 0	gpd/1,000 sq.ft. 200.00	gals./day 0
Open Space	Square Feet 0	gpd/1,000 sq.ft. 100.00	gals./day 0
Total Daily Sewage Generation			40,820
Source: Los Angeles County Sanitation Districts			

Table 6: Solid Waste Generation

Project Component	Units of Measure	Generation Factors	Consumption/Generation
Low-Density Res.	No. of Units 157	lbs./unit/day 10.00	lbs./day 1,570
Low-Medium Dens. Res.	No. of Units 0	lbs./unit/day 10.00	lbs./day 0
Medium Dens. Res.	No. of Units 0	lbs./unit/day 4.00	lbs./day 0
Prof. Admin. Office	Square Feet 0	lbs./1000 s.f./day 6.00	lbs./day 0
General Bus. District	Square Feet 0	lbs./1000 s.f./day 5.00	lbs./day 0
General Commercial	Square Feet 0	lbs./1000 s.f./day 5.00	lbs./day 0
District Center 90% Commercial	Square Feet 0	lbs./1000 s.f./day 5.00	lbs./day 0
District Center 10% Residential	Square Feet 0	lbs./unit/day 5.00	lbs./day 0
Indust./Resident. Commercial	Square Feet 0	lbs./1000 s.f./day 5.00	lbs./day 0
Indust./Resident. Residential	Square Feet 0	lbs./unit/day 5.00	lbs./day 0
Multi-Use Corridor	Square Feet 0	lbs./1000 s.f./day 5.00	lbs./day 0
Industrial	Square Feet 0	lbs./1000 s.f./day 5.00	lbs./day 0
Public/Institutional	Square Feet 0	lbs./1000 s.f./day 7.00	lbs./day 0
Open Space	Square Feet 0	lbs./1000 s.f./day 2.00	lbs./day 0
Total Daily Solid Waste Generation			1,570

Source: City of Los Angeles Average Solid Waste Generation Rates
April 1981

Table 2 Traffic Assignment

Total Number of Units: 157		Total ADT: 2,355	
Roadway Segment	% Trips	# Trips	
Highland Ave. W/O Lytle Creek Rd.	10%	236	
Highland Ave. E/O Lytle Creek Rd.	90%	2,120	
Highland Ave. E/O Citrus Ave.	10%	236	
Citrus Ave. S/O Highland Ave.	80%	1,884	
Citrus Ave. S/O Baseline Rd.	70%	1,649	
Citrus Ave. S/O Foothill Blvd.	10%	236	
Citrus Ave. N/O I-10 Freeway	10%	236	
Baseline Rd. E/O Citrus Ave.	10%	236	
Baseline Rd. E/O Sierra Ave.	10%	236	
Foothill Blvd. E/O Citrus Ave.	50%	1,178	
Foothill Blvd. W/O Citrus Ave.	10%	236	

Table 3 Traffic Impacts

Total Number of Units: 157		Total ADT: 2,365		
Roadway Segment	Project Trips	Existing ADT's	Future (Existing + Project)	% Change
Highland Ave. W/O Lytle Creek Rd.	236	13,000	13,236	1.8%
Highland Ave. E/O Lytle Creek Rd.	2,120	13,000	15,120	16.3%
Highland Ave. E/O Citrus Ave.	236	13,000	13,236	1.8%
Citrus Ave. S/O Highland Ave.	1,884	4,800	6,684	39.3%
Citrus Ave. S/O Baseline Rd.	1,649	9,900	11,549	16.7%
Citrus Ave. S/O Foothill Blvd.	236	19,500	19,736	1.2%
Citrus Ave. N/O I-10 Freeway	236	25,800	26,036	0.9%
Baseline Rd. E/O Citrus Ave.	236	12,700	12,936	1.9%
Baseline Rd. E/O Sierra Ave.	236	14,800	15,036	1.6%
Foothill Blvd. E/O Citrus Ave.	1,178	39,800	40,978	3.0%
Foothill Blvd. W/O Citrus Ave.	236	43,300	43,536	0.5%

Fontana Grandview

SUMMARY OF TRIP GENERATION CALCULATION

FOR 157 DWELLING UNITS OF SINGLE FAMILY DWELLINGS

10/30/98

	AVERAGE RATE	STANDARD DEVIATION	ADJUSTMENT FACTOR	DRIVE WAY VOLUME
AVG WKDY 2-WAY VOL	9.55	3.66	1.00	1499
7-9 AM PK HR ENTER	0.19	0.00	1.00	30
7-9 AM PK HR EXIT	0.55	0.00	1.00	86
7-9 AM PK HR TOTAL	0.74	0.90	1.00	116
4-6 PM PK HR ENTER	0.66	0.00	1.00	103
4-6 PM PK HR EXIT	0.35	0.00	1.00	55
4-6 PM PK HR TOTAL	1.01	1.05	1.00	159
AM GEN PK HR ENTER	0.20	0.00	1.00	31
AM GEN PK HR EXIT	0.56	0.00	1.00	88
AM GEN PK HR TOTAL	0.76	0.91	1.00	119
PM GEN PK HR ENTER	0.66	0.00	1.00	104
PM GEN PK HR EXIT	0.36	0.00	1.00	56
PM GEN PK HR TOTAL	1.02	1.05	1.00	160
SATURDAY 2-WAY VOL	10.19	3.65	1.00	1600
PK HR ENTER	0.52	0.00	1.00	81
PK HR EXIT	0.44	0.00	1.00	69
PK HR TOTAL	0.96	1.00	1.00	151
SUNDAY 2-WAY VOL	8.78	3.36	1.00	1378
PK HR ENTER	0.44	0.00	1.00	70
PK HR EXIT	0.44	0.00	1.00	70
PK HR TOTAL	0.89	0.96	1.00	140

Note: A zero rate indicates no rate data available
Source: Institute of Transportation Engineers
Trip Generation, 5th Edition, 1991.

Fontana Gradview

SUMMARY OF TRIP GENERATION CALCULATION

FOR 157 DWELLING UNITS OF SINGLE FAMILY DWELLINGS

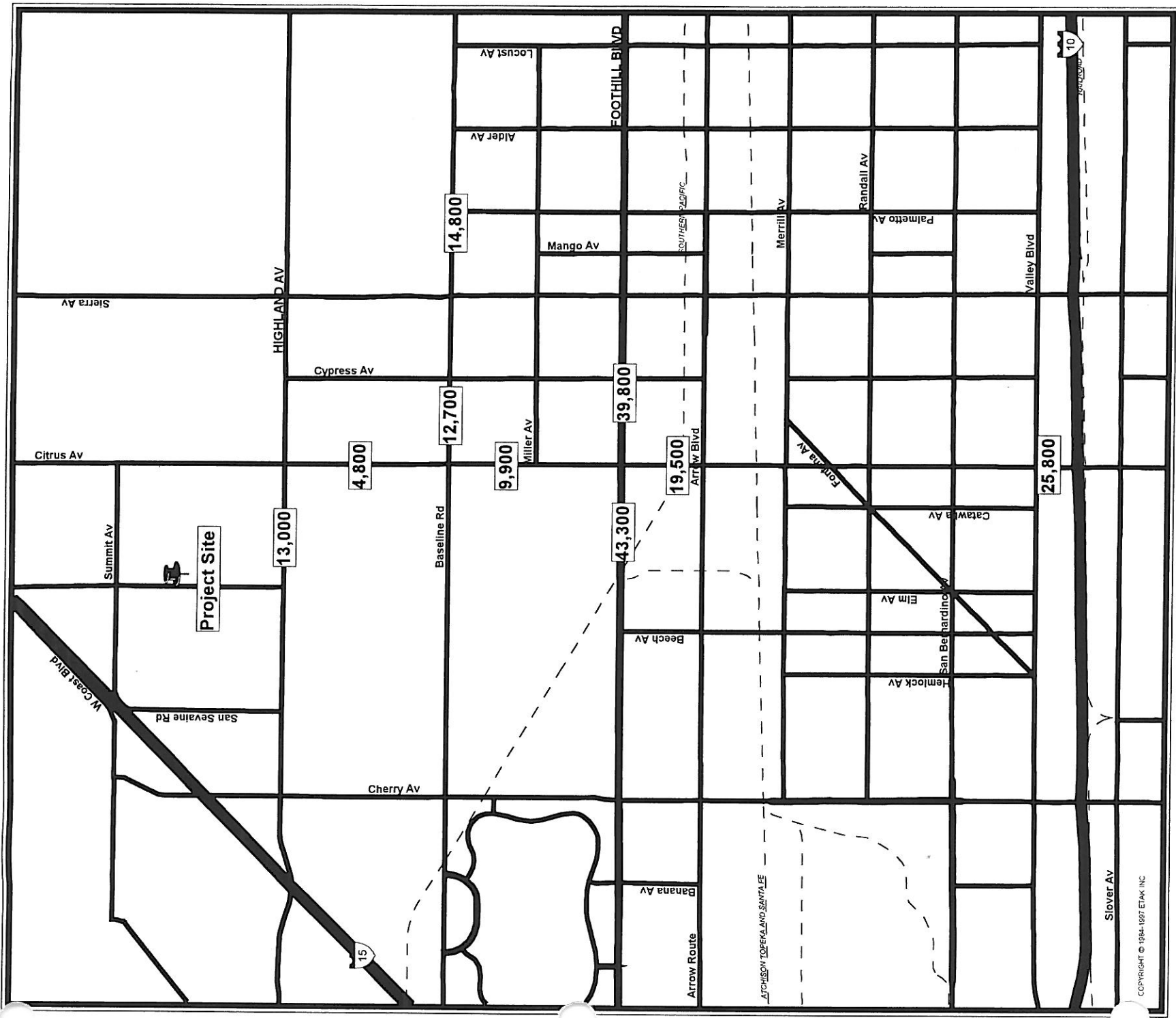
10/30/98

	AVERAGE RATE	STANDARD DEVIATION	ADJUSTMENT FACTOR	DRIVE WAY VOLUME
AVG WKDY 2-WAY VOL	9.55	3.66	1.00	1499
7-9 AM PK HR ENTER	0.19	0.00	1.00	30
7-9 AM PK HR EXIT	0.55	0.00	1.00	86
7-9 AM PK HR TOTAL	0.74	0.90	1.00	116
4-6 PM PK HR ENTER	0.66	0.00	1.00	103
4-6 PM PK HR EXIT	0.35	0.00	1.00	55
4-6 PM PK HR TOTAL	1.01	1.05	1.00	159
SATURDAY 2-WAY VOL	10.19	3.65	1.00	1600
PK HR ENTER	0.52	0.00	1.00	81
PK HR EXIT	0.44	0.00	1.00	69
PK HR TOTAL	0.96	1.00	1.00	151
SUNDAY 2-WAY VOL	8.78	3.36	1.00	1378
PK HR ENTER	0.44	0.00	1.00	70
PK HR EXIT	0.44	0.00	1.00	70
PK HR TOTAL	0.89	0.96	1.00	140

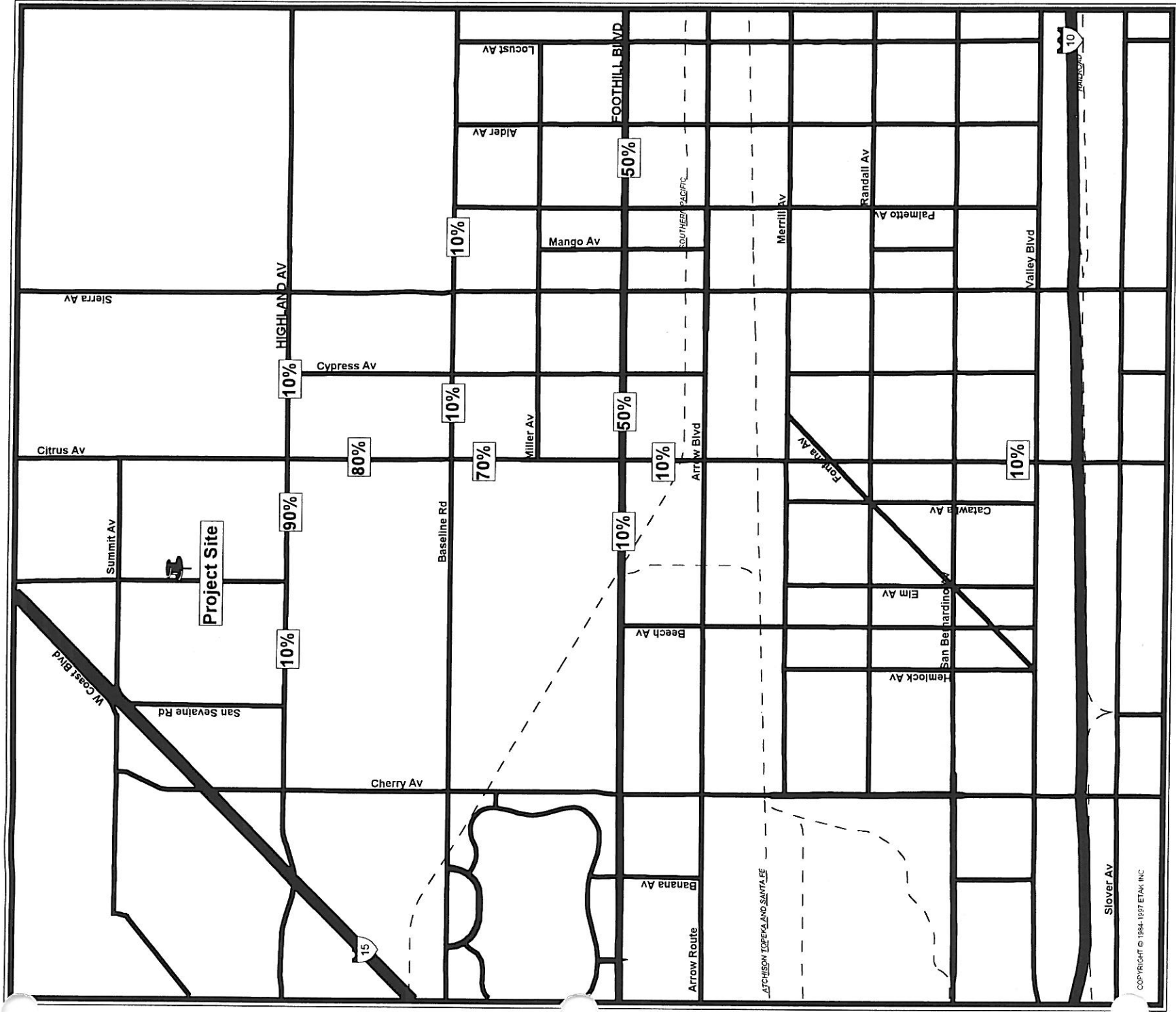
Note: A zero rate indicates no rate data available
Source: Institute of Transportation Engineers
Trip Generation, 5th Edition, 1991.

TRIP GENERATION BY MICROTRANS

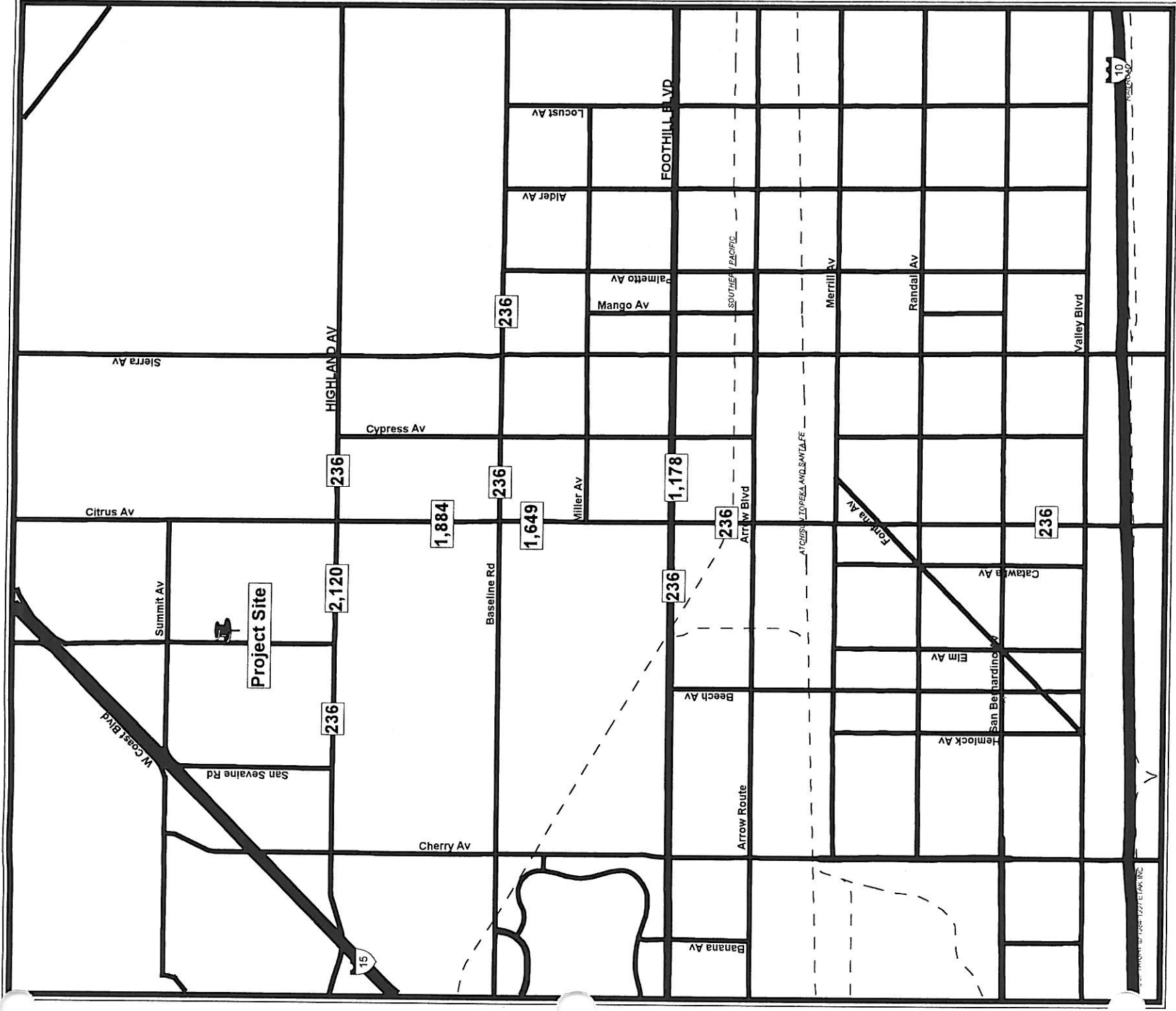
Existing Volumes



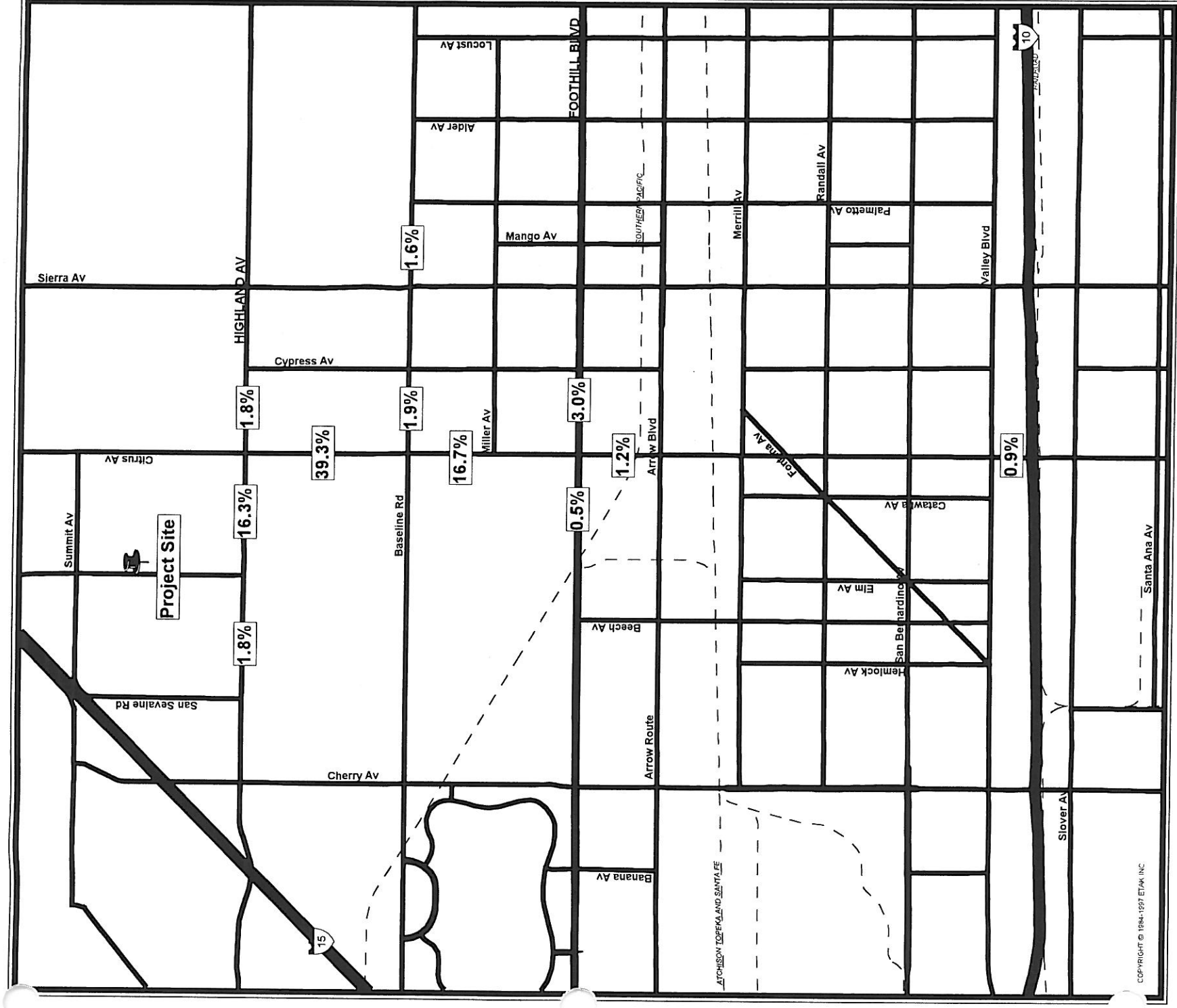
Project Traffic Assignment



Project Volumes



Project + Existing Traffic Volumes - % Change



PROJECT NAME: Fontana Grandview Date: 03-24-1999

Project Area: South Coast (LA Region)

Analysis Year: 2000 Temperature (F): 75 Season: Summer

EMFAC Version: Emfac7f1.1(12/93)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Tot Trips
Single Family Housing	15.0/Unit	157	2355

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Duty Autos	72.3	1.2	98.6	0.3
Light Duty Trucks	16.3	0.2	99.5	0.3
Medium Duty Trucks	5.4	1.0	99.0	0.0
Heavy Duty Trucks	2.4	19.6	80.4	N/A
Heavy Duty Trucks	0.8	N/A	N/A	100.0
Motorcycles	2.8	100.0	N/A	N/A

Travel Conditions:

	Residential		Commercial	
	Home-Work	Home-Shop	Work	Non-Work
1 Trip Length	8.8	3.2	8.1	5.5
% Started Cold	88.7	40.5	78.0	27.8
Trip Speed	25	25	25	25
Percent Trip	27.3	21.2	51.5	

Project Emissions Report in Lb/Day:

Unit Type	TOG	CO	NOx
Single Family Housing	33.44	228.35	26.19
TOTALS	33.44	228.35	26.19

Project Emissions Report in Lb/Day (Continued)

Unit Type	FUEL (Gal.)	PM10	SOx
Single Family Housing	635.4	3.16	2.05
TOTALS	635.4	3.16	2.05

STAEMI.XLS - Stationary Emissions Calculations

This spreadsheet calculates the emissions associated with electrical and natural gas consumption. Spreadsheet was prepared by Marc Blodgett.

Project Name: FONTANA GRANDVIEW

Project Location: FONTANA

Stationary Emissions from Electrical Consumption

Enter daily electrical consumption rates in the shaded area in Table 1. Consumption factors are indicated in Table 2. Projected emissions associated with a worse-case scenario are shown in Table 3. The worst-case scenario assumes that 100% of the power generation will occur from oil and gas fired plants located in the South Coast Air Basin (SCAB). Table 4's figures assume that 20% of the power will be generated in the SCAB.

For an average day, power plant generation sources include the following:

1. oil and gas fired plants in the SCAB (20%); 2. coal fired plants located outside the SCAB (Intermountain Power, Utah - (25%), Navajo Power, Arizona - (12%); Mojave Power - (12%);
3. nuclear power from Palo Verde, Arizona (10%); and hydroelectric power, Hoover Dam-(5%), Los Angeles Aqueduct generators (5%), and Pacific northwest hydroelectric power (10%)

Table 1	
Electrical Consumption	
kWH/day	
2,599	

Table 2: Emissions Factors				
(in lbs./mega-watt hours)				
CO	ROC	NO _x	SO _x	PM ¹⁰
0.20	0.01	1.15	0.12	0.04

Table 3: Worst-Case Emissions Scenario				
Emissions (in lbs./day)				
CO	ROC	NO _x	SO _x	PM ¹⁰
0.52	0.03	2.99	0.31	0.10

Table 4: Average Day Emissions Scenario				
Emissions (in lbs./day)				
CO	ROC	NO _x	SO _x	PM ¹⁰
0.10	0.01	0.60	0.06	0.02

Sources: CEQA Air Quality Handbook, SCAQMD. 1993
Southern California Edison

Stationary Emissions from Natural Gas Consumption

Enter daily natural gas consumption rates in the shaded area in Table 5. Emissions with emissions factors are indicated in Table 6. Projected emissions associated with natural gas consumption are shown in Table 7.

Table 5	
Natural Gas Consump.	
Cubic Feet/day	
Residential Consump.	
34,202	
Nonresidential Consump.	
0	

Sources: CEQA Air Quality Handbook, SCAQMD. 1993
Southern California Gas Co.

Table 6: Emissions Factors				
(in lbs./million cu.ft.)				
CO	ROC	NO _x	SO _x	PM ¹⁰
Residential Emissions Factors				
20.00	5.30	80.00	Negl.	0.20
Nonresidential Emissions Factors				
20.00	5.30	120.00	Negl.	0.20

Table 7: Projected Emissions				
(in lbs./day)				
CO	ROC	NO _x	SO _x	PM ¹⁰
Residential Emissions				
0.68	0.18	2.74	Negl.	0.01
Nonresidential Emissions				
0.00	0.00	0.00	Negl.	0.00

PM¹⁰.XLS - Particulate Emissions

This spreadsheet calculates the PM¹⁰ generation resulting from construction and demolition activities.

Project Name: **FONTANA GRANDVIEW-FONT001**

Table 1 - Particulate Emissions Due to Construction Activities

This spreadsheet calculates the PM¹⁰ generation resulting from construction and demolition. The emissions are noted in the first column entitled "Source Type." The variable that will be used in the calculations is identified in the column entitled "variable." The emissions factors used in the calculations are shown in the column entitled "Factor." The variable used to calculate the emissions should be entered in the shaded portions of the fourth column entitled "Input."

The projected PM¹⁰ emissions are noted in the far right column.

Source Type	Variable	Factor	Input	Emissions
Vehicles-Unpaved Roads	VMT*	5.56 lbs./mile	0.0	0
Trucks-Unpaved Roads	VMT	23.0 lbs./mile	0.0	0
Vehicles on Unpaved Lots	No. of Vehicles	5.56 lbs./vehicle	0.0	0
Trucks on Unpaved Lots	No. of Trucks	23.0 lbs./truck	0.0	0
Dirt or Debris Pushing	Hrs. of Grading	21.8 lbs./hour	0.0	0
Truck Dumping	Tons/day	.009075 lbs./ton	0.0	0
Truck Loading	Tons/day	.02205 lbs./day	0.0	0
Demolition	Cu.Ft. of Building	.00042 lbs./cu.ft.	0.0	0
Grading	Acres Graded	26.4 lbs/day/ac.	40.0	1,056
Total Projected PM ¹⁰ Emissions:				1,056

Source: SCAQMD CEQA Air Quality Handbook, 1993

VMT refers to total vehicle miles travelled

TABLE 1: SCREENING TABLE FOR TOTAL CONSTRUCTION EMISSIONS

Land Use	Floor Area (sq.ft.)	Const.Per. (days)	Emissions (in lbs./day)			
			ROG	NOX	CO	PM10
Residential						
Single-Family Res.	75,000	240	7.7	113.0	24.6	8.0
Multiple-Family Res.	0	100	0.0	0.0	0.0	0.0
Condominiums	0	30	0.0	0.0	0.0	0.0
Mobile Homes	0	30	0.0	0.0	0.0	0.0
Education						
Schools	0	30	0.0	0.0	0.0	0.0
Commercial						
Business Park	0	30	0.0	0.0	0.0	0.0
Day Care Center	0	30	0.0	0.0	0.0	0.0
Discount Store	0	30	0.0	0.0	0.0	0.0
Fast Food	0	30	0.0	0.0	0.0	0.0
Govt. Office	0	30	0.0	0.0	0.0	0.0
Hardware Store	0	30	0.0	0.0	0.0	0.0
Hotel	0	30	0.0	0.0	0.0	0.0
Medical Office	0	30	0.0	0.0	0.0	0.0
Motel	0	30	0.0	0.0	0.0	0.0
Movie Theater	0	60	0.0	0.0	0.0	0.0
Office	0	30	0.0	0.0	0.0	0.0
Resort Hotel	0	180	0.0	0.0	0.0	0.0
Restaurant	0	30	0.0	0.0	0.0	0.0
Retail	0	180	0.0	0.0	0.0	0.0
Supermarket	0	30	0.0	0.0	0.0	0.0
Industrial						
Industrial	0	90	0.0	0.0	0.0	0.0
Total Emissions			7.7	113.0	24.6	8.0
NOTES: Factors used in emissions calculations:						
Land Use	Independent Variable	Emissions (in lbs.)				
		ROG	NOX	CO	PM10	
Residential						
Single-Family Res.	1,000 sq. ft./ Floor Area	23.66	347.74	75.62	24.69	
Multiple-Family Res.	1,000 sq. ft./ Floor Area	21.97	322.90	70.22	22.93	
Condominiums	1,000 sq. ft./ Floor Area	21.30	312.97	68.06	22.22	
Mobile Homes	1,000 sq. ft./ Floor Area	21.30	312.97	68.06	22.22	
Education						
Schools	1,000 sq. ft./ Floor Area	46.99	690.52	150.16	49.03	
Commercial						
Business Park	1,000 sq. ft./ Floor Area	55.44	814.72	177.17	57.85	
Day Care Center	1,000 sq. ft./ Floor Area	31.87	466.97	101.55	33.16	
Discount Store	1,000 sq. ft./ Floor Area	31.87	466.97	101.55	33.16	
Fast Food	1,000 sq. ft./ Floor Area	31.87	466.97	101.55	33.16	
Govt. Office	1,000 sq. ft./ Floor Area	55.44	814.72	177.17	57.85	
Hardware Store	1,000 sq. ft./ Floor Area	31.87	466.97	101.55	33.16	
Hotel	1,000 sq. ft./ Floor Area	41.58	611.04	132.87	43.39	
Medical Office	1,000 sq. ft./ Floor Area	55.44	814.72	177.17	57.85	
Motel	1,000 sq. ft./ Floor Area	41.58	611.04	132.87	43.39	
Movie Theater	1,000 sq. ft./ Floor Area	31.87	466.97	101.55	33.16	
Office	1,000 sq. ft./ Floor Area	55.44	814.72	177.17	57.85	
Resort Hotel	1,000 sq. ft./ Floor Area	41.58	611.04	132.87	43.39	
Restaurant	1,000 sq. ft./ Floor Area	31.87	466.97	101.55	33.16	
Shopping Center	1,000 sq. ft./ Floor Area	31.87	466.97	101.55	33.16	
Supermarket	1,000 sq. ft./ Floor Area	31.87	466.97	101.55	33.16	
Industrial						
Industrial	1,000 sq. ft./ Floor Area	32.79	481.88	104.79	34.22	

Source: CEQA Air Quality Handbook. SCAQMD, 1993

Source: CEQA Air Quality Handbook, SCAQMD, 1993

TABLE 1
FHWA ROADWAY NOISE LEVEL ANALYSIS

DATE: 10/30/98
ROADWAY SEGMENT: LYTLE CREEK ROAD
NOTES: EXISTING

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10000 SPEED (MPH): 35 GRADE: 0

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 20 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNELL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.97

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	107.7	228.8

TABLE 2
FHWA ROADWAY NOISE LEVEL ANALYSIS

RCN DATE: 10/30/98
ROADWAY SEGMENT: LYTLE CREEK ROAD
NOTES: FUTURE

* * ASSUMPTIONS * *				
AVERAGE DAILY TRAFFIC:	10490	SPEED (MPH):	35	GRADE: 0
TRAFFIC DISTRIBUTION PERCENTAGES				
DAY	EVENING	NIGHT		
---	-----	-----		
AUTOS				
75.51	12.57	9.34		
M-TRUCKS				
1.56	0.09	0.19		
H-TRUCKS				
0.64	0.02	0.08		
ACTIVE HALF-WIDTH (FT):	20	SITE CHARACTERISTICS:	SOFT	

* * CALCULATED NOISE LEVELS * *				
C L AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.18				
DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL				
70 CNEL	65 CNEL	60 CNEL	55 CNEL	
-----	-----	-----	-----	
0.0	54.5	111.0	236.1	

TABLE 3
FHWA ROADWAY NOISE LEVEL ANALYSIS

DATE: 10/30/98
ROADWAY SEGMENT: CURTIS AVENUE
NOTES: EXISTING

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5000 SPEED (MPH): 35 GRADE: 0

TRAFFIC DISTRIBUTION PERCENTAGES

DAY EVENING NIGHT

--- ----- -----

AUTOS 75.51 12.57 9.34

M-TRUCKS 1.56 0.09 0.19

H-TRUCKS 0.64 0.02 0.08

ACTIVE HALF-WIDTH (FT): 20 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

 L AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 59.96

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL 65 CNEL 60 CNEL 55 CNEL

----- ----- ----- -----

0.0 0.0 69.6 144.9

TABLE 4
FHWA ROADWAY NOISE LEVEL ANALYSIS

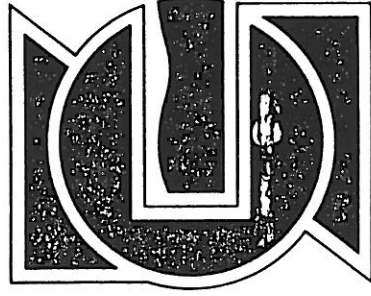
DATE: 10/30/98
ROADWAY SEGMENT: CURTIS AVENUE
NOTES: FUTURE

* * ASSUMPTIONS * *				
AVERAGE DAILY TRAFFIC:	5490	SPEED (MPH):	35	GRADE: 0
TRAFFIC DISTRIBUTION PERCENTAGES				
DAY	EVENING	NIGHT		
---	-----	-----		
AUTOS	75.51	12.57	9.34	
M-TRUCKS	1.56	0.09	0.19	
H-TRUCKS	0.64	0.02	0.08	
ACTIVE HALF-WIDTH (FT):		20 SITE CHARACTERISTICS: SOFT		

* * CALCULATED NOISE LEVELS * *				
AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.37				
DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL				
70 CNEL	65 CNEL	60 CNEL	55 CNEL	
-----	-----	-----	-----	
0.0	0.0	73.7	154.1	

8.0 APPENDIX THREE: SOILS ENGINEERING REPORT

PRELIMINARY GEOTECHNICAL INVESTIGATION
40-ACRE RESIDENTIAL/COMMERCIAL SITE
NORTHEAST CORNER OF
LYTLE CREEK ROAD
AND
CURTIS AVENUE
FONTANA, CALIFORNIA



ZEISER

GEOTECHNICAL, INC.



September 21, 1998

PN 97005-00

Mr. Eric Chang
URSI Consultants, Inc.
10702 Weaver Ave., Suite No. 1
South El Monte, CA 91733

Subject: Preliminary Geotechnical Investigation Report Update

Reference: Preliminary Geotechnical Investigation Report, 40-Acre Residential/
Commercial Site, Northeast Corner of Lytle Creek Road and Curtis
Avenue, Fontana, California, dated March 22, 1991, prepared by Zeiser
Geotechnical, Inland Empire, Inc.

Dear Mr. Chang:

Per your request and authorization Zeiser Kling Consultant, Inc. is pleased to submit this Report Update to our referenced report. The original report had been prepared by our branch office Zeiser Geotechnical, Inland Empire, Inc.

Our present scope of work included a brief site reconnaissance performed on September 21, 1998 and the preparation of this report.

It was observed during the reconnaissance that the ground surface had been recently scarified to depths of approximately 12 inches for weed abatement purposes, and the amount of live weed growth was very sparse. No other changes in the site description from those presented in the referenced report were observed.

Based on the existing site condition and changes in the state-of-the-art, we provide the attached revised Table of Contents, Conclusions and Recommendations sections to the referenced report.

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1221 E. Dyer Road ▪ Suite 105 ▪ Santa Ana, CA 92705 ▪ (714) 755-1355 ▪ Fax (714) 755-1366

▪ Geotechnical Engineering ▪ Engineering Geology ▪ Materials Testing and Inspection

Thank you for the opportunity to provide our geotechnical services. Should you have any questions regarding the report update please contact our office.

Respectfully submitted,

ZEISER KLING CONSULTANTS, INC.

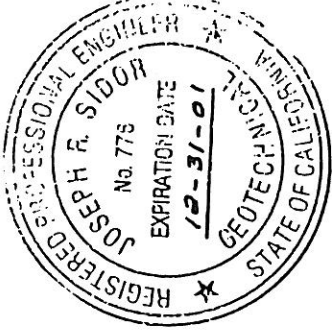


Joseph R. Sidor, R.G.E.
Project Manager

Dist.: (2) Addressee

Attachment: Revised Conclusions and Recommendations

JRS:ms



6.0 CONCLUSIONS

Based on our investigation, it is our opinion that the subject site may be developed for its intended use, from a geotechnical engineering viewpoint. However, the upper natural soils are in a variable loose to dense state and will require removal, subexcavation and recompaction to provide a uniform, less compressible and higher strength building foundation subgrade.

7.0 RECOMMENDATIONS

7.1 General Site Grading

All grading should be performed in accordance with the General Earthwork and Grading Specifications, Appendix C, except as modified in the text of this report, and with the applicable portions of the latest adopted version of the Uniform Building Code or applicable local ordinances.

7.2 Site Preparation

All vegetation and deleterious or otherwise unsuitable material should be removed and wasted from the site.

All existing artificial fills should be completely removed and, after being cleaned of organic and other deleterious materials, may be reused as compacted fill. Any existing irrigation lines should be removed or crushed in place.

Cavities created by removal of any man-made features, and by the exploratory trenches utilized during this investigation, should be thoroughly cleaned of loose soil, organic matter and other deleterious materials, shaped to provide access for construction equipment, and replaced with properly compacted fill.

The upper existing soils are considered unsuitable in their present state for support of structures, slabs-on-grade, hardscape, pavements and structural fills. Removals should be made to a minimum depth of twelve inches below the existing surface and, in the case of structures, to at least five feet laterally beyond the structure perimeters. Removal of soil will also assist in locating any buried man-made features, including artificial fill, that will also require removal. Actual depths and extent of removals should be determined by the soil engineer during grading. Removed soil, free of oversized rock and concentration of vegetation or other deleterious materials, may be reused as compacted fill.

7.3 Preparation Fill Areas

After site preparation and removals and prior to placing fill, the surfaces of all areas to receive fill should be scarified to a depth of at least 12 inches. The scarified soils should be brought to near optimum moisture content and recompact to a relative compaction of at least 90 percent of maximum as determined by ASTM Standard D1557-91.

7.4 Preparation of Footing Area

All building and retaining wall footings should rest upon at least 12 inches of properly compacted fill material. Where this will not be accomplished by design fills, the footing areas should be subexcavated to a depth of at least 12 inches below the proposed footing base grade, to a distance of at least five feet beyond the footing lines. The bottom of this excavation, to a depth of at least 12 inches, should then be moisture conditioned and recompact to 90 percent or more of the laboratory maximum dry density, as determined by ASTM D1557-91, prior to refilling the excavation to grade as properly compacted fill.

7.5 Compacted Fill

The on-site soils should serve as adequate quality fill material provided they are free from oversized rock and concentrations of organic matter and other deleterious materials.

All fill material should be moisture conditioned to near optimum moisture and compacted to 90 percent or more of the ASTM D1557-91 maximum dry density. Unless approved by the geotechnical engineer, rock with maximum dimension greater than 12 inches (oversize) should not be buried or placed in fills.

Based on the relative compaction of the native soils determined during this investigation and the relative compaction anticipated for compacted fill soils, we estimate a compaction shrinkage of approximately 15 percent. Therefore, 1.15 cubic yards of in-place soil material would be necessary to yield one cubic yard of compacted fill material. In, addition, we would anticipate a subsidence of approximately 0.15 feet. These values are exclusive of losses due to stripping or the removal of other subsurface features and may very due to differing conditions within the project boundaries and the limitation of this investigation.

The above shrinkage and subsidence factors are rough estimates intended to aid in calculation of yardage. They should not be used to design precise balance of grading. If more accurate shrinkage and subsidence factors are required, focused field and laboratory testing for that purpose should be performed.

7.6 Expansive Soils

Since the soils encountered during this investigation were granular and considered to be non-critically expansive, specialized design and construction methods to specifically resist expansive soil forces are not anticipated. This should be verified with testing and evaluation during the grading operation.

7.7 Foundation Design

The proposed structures may be supported on continuous and/or isolated spread footings founded at least 12 inches below the lowest adjacent final grade for one-story structures and having a minimum width of 12 inches. Footings for two-story structures should be founded at least 18 inches below the lowest adjacent final grade. Footing may be designed for an allowable soil bearing pressure of 2,000 pounds per square foot. This bearing value may be increased by one-third for wind and seismic loading.

The above bearing value is applicable for continuous footings exerting not greater than 4 kips per linear foot, live and dead load, and column footings exerting not greater than 30 kips, live and dead load. If greater loads are anticipated this firm should be contacted for additional design recommendations.

A passive earth pressure value of 300 pounds per square foot per foot of depth may be used for the sides of the footings. A friction coefficient of 0.4 may be assumed between the soil and concrete.

Total settlement of the proposed structures due to structural loads is estimated to be on the order of 3/4 inch. Differential settlement between equally loaded footings can be expected at 1/2 to 3/4 of the total settlement. Due to the granular nature of the site soils, much of the anticipated settlement is expected to occur during construction.

7.8 Floor Slabs

Floor slabs should bear on a minimum of 12 inches of soil compacted to at least 90 percent of maximum density as determined by ASTM Standard D1557-91. Floor slabs should be a minimum of 3½ inches in actual thickness and, in areas to receive floor coverings, should be underlain by a 2 inch minimum thickness sand base and a plastic membrane of at least 6 mil thickness. Slab thickness and reinforcement requirements for heavy floor loading should be as specified by the architect or structural engineer.

7.9 Retaining Walls

Earth retaining structures such as retaining walls should be designed to resist the soil pressure imposed by the surrounding soil mass. Walls which are unrestrained at the top may be designed for an assumed earth pressure equivalent to that exerted by a fluid weighing not less than 35 pounds per cubic foot for existing site soils.

Any applicable construction and seismic surcharges should be added to the above pressures. If imported soil backfills, inclined backfills or restrained walls are proposed, the soil engineer should be contacted to develop applicable lateral pressure parameters. At least twelve inches in width of granular material with a sand equivalent of 30 or greater should be used for the backfill behind the walls. Water pressure should be mitigated from build-up behind retaining walls by employment of slotted weep holes, outlet drain pipes through the walls, or any approved back-drain system. The upper eighteen inches of retaining wall backfill should consist of relatively impervious soil.

7.10 Slopes

Project slopes should be surficially and grossly stable at gradients of 2:1 or flatter provided they are properly maintained and planted with deep-rooted vegetation and an approved ground cover to prevent soil erosion. During construction, special compaction procedures may be necessary to achieve the specified compaction out to the fill slope face. Special procedures may include sheeps-foot backrolling of the slope during the placement of each fill lift, overfilling and cutting back to the compacted core and/or other proven methods.

7.11 Utility Installations

The method of trench backfill should be reviewed by the geotechnical consultant prior to backfilling. Backfill should be compacted in thin lifts by mechanical means to at least 90 percent of its laboratory maximum dry density as determined by ASTM Standard D1557-91.

In order to provide a smooth, firm and uniform foundation for underground utilities, it is recommended that utilities be bedded in imported sandy soil having a sand equivalent not less than 30.

7.12 Grading Observation and Testing

Grading observation and testing should be performed by this firm at the following stages:

- During clearing of the site.
- During grading of the site.
- After footing trench excavation and prior to placement of concrete.
- During placement of backfill for utility trenches and behind retaining walls.

7.13 Foundation and Grading Plan Review

It is recommended that the final foundation and grading plans be reviewed by the geotechnical consultant in order to verify that the geotechnical recommendations and considerations presented herein have been suitably incorporated into the design. This proposed review would verify the appropriate utilization of design parameters and would not be intended to verify the adequacy of any structural or civil engineering design considerations.



PRELIMINARY GEOTECHNICAL INVESTIGATION
40-ACRE RESIDENTIAL/COMMERCIAL SITE
NORTHEAST CORNER OF
LYTLE CREEK ROAD
AND
CURTIS AVENUE
FONTANA, CALIFORNIA

March 22, 1991
PN 91139-00

Prepared For:

L.A. Chanco, Inc.
22632 Golden Springs Road, Suite 250
Diamond Bar, California 91765



ZEISER
GEOTECHNICAL, INC.

March 22, 1991

PN 91139-00

L.A. Chanco, Inc.
22632 Golden Springs Road, Suite 250
Diamond Bar, California 91765

Attention: Ms. Rita Salazar

Subject: Preliminary Geotechnical Investigation, 40-Acre
Residential/Commercial Site, Northeast Corner of Lytle
Creek Road and Curtis Avenue, Fontana, California.

Dear Ms. Salazar:

Zeiser Geotechnical Inland Empire, Inc. is pleased to submit the results of our preliminary geotechnical investigation for the proposed 40-acre residential/commercial building site to be located on the northeast corner of Lytle Creek Road and Curtis Avenue in Fontana, California.

This report presents our findings, conclusions, and geotechnical recommendations. We conclude that the site is geotechnically feasible for the proposed development and that the geotechnical constraints discussed in this report can be suitably mitigated.

We appreciate the opportunity to work with you on this project. If you have any questions regarding this report, please do not hesitate to call our office.

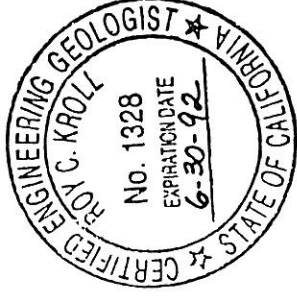
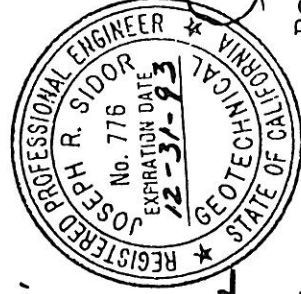
Respectfully submitted,

ZEISER GEOTECHNICAL
INLAND EMPIRE, INC.

Joseph R. Sidor, R.G.E.
Vice President

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1.0 INTRODUCTION

1.1 Purpose and Scope

In accordance with your request, this firm has prepared a Preliminary Geotechnical Investigation report for a 40-acre building site located northeast of the intersection of Lytle Creek Road and Curtis Avenue in Fontana, California. The purpose of the investigation was to explore and evaluate the geotechnical conditions at the site and to provide recommendations for site grading and foundation design. Used as reference during our study were four alternate, reduced scale site plans prepared by David Evans and Associates, Inc.

The report was based on the scope of services outlined in our proposal dated February 5, 1991. The location of the site is shown on Figure 1, Site Index Map. The results of our investigations, together with our conclusions and recommendations, are presented in this report.

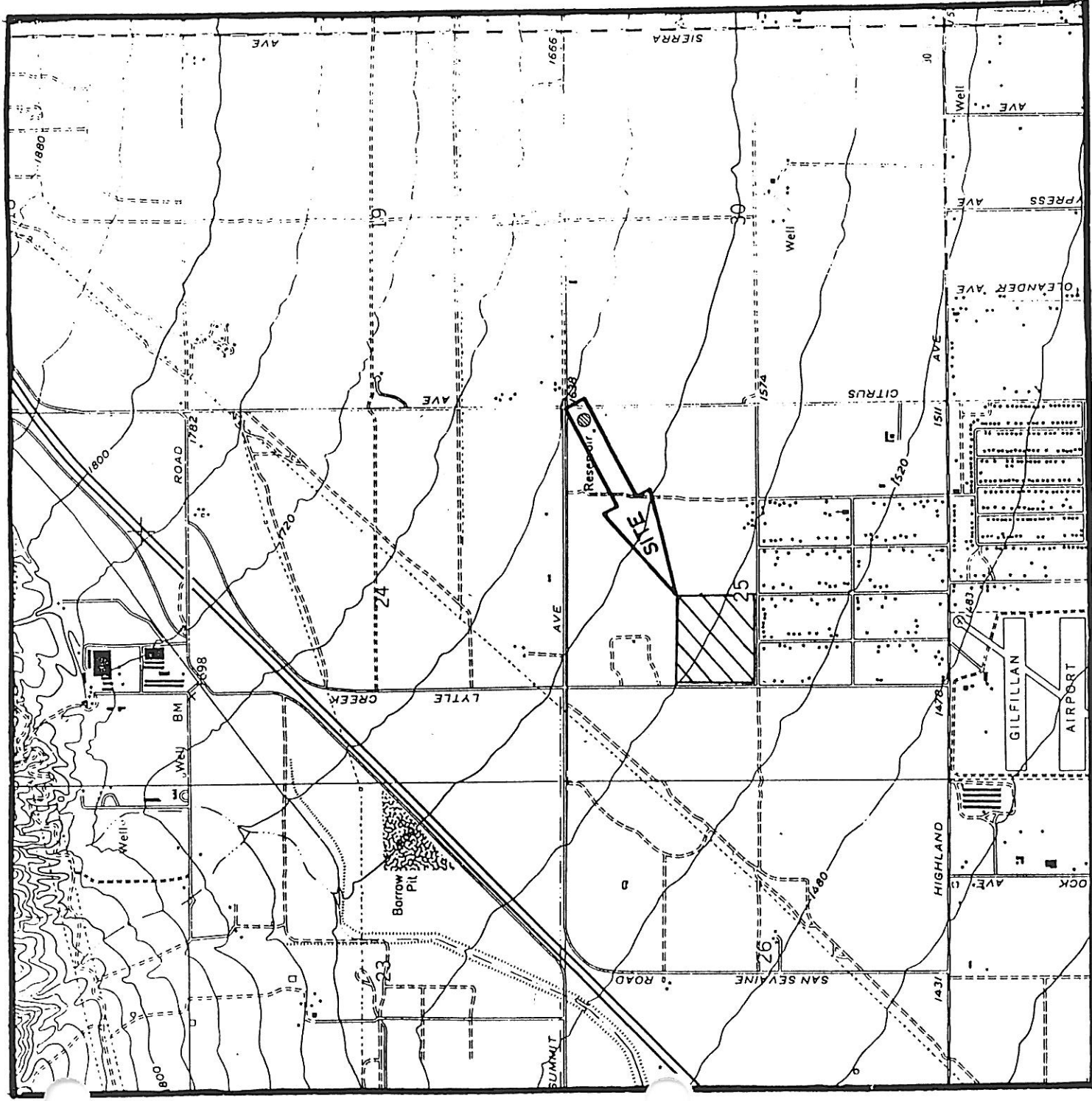
1.2 PROPOSED DEVELOPMENT

It is understood that the site will contain approximately 130 to 150 residential lots and possibly a 4-acre commercial lot and a one to three acre park. Light to moderate foundation loads are anticipated.

At the time of our study, no grading plan for the site was available. However, based on the site topography, depths of design cuts and fills will probably not exceed five feet.

1.3 SITE DESCRIPTION

The subject site is bordered on the north, east, and west by vacant undeveloped land. The site is separated from the land to the west and south by asphalt paved Lytle Creek Road and Curtis Avenue, respectively. Several single family residential homes exist immediately south of Curtis Avenue along the southeastern one-half of the property. The topography is irregular with relatively flat areas and one to four foot deep gently rolling ridges and gullies throughout the property. Generally, the surface of the property roughly slopes to the southwest at a grade of approximately two to three percent.



0 2000 4000
 scale feet

Source, U.S.G.S. Topographic
 Maps: Devore Quadrangle (7.5')
 Photorevised 1988



FIGURE 1
 SITE INDEX MAP

L.A. CHANCO
 FONTANA, SAN BERNARDINO COUNTY

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 INLAND EMPIRE

DATE 3/22/91 PN 91139-00



The potential for intense ground shaking must be considered because of the proximity to the Cucamonga, San Jacinto, and San Andreas Faults. The approximate distances to these major faults are two, eight, and seven miles respectively (Reference 1).

2.4 Seismicity

The ground shaking potential, within the subject area, has been rated as moderate to high, which is similar to most of Southern California. However, the effects of ground shaking can be satisfactorily mitigated by implementation of the seismic design requirements and procedures outlined in the latest Uniform Building Code, adopted by the County of San Bernardino.

A maximum probable earthquake of moment magnitude 8.2 along the San Andreas (southern portion) should be expected during the design life of the structures proposed. Large earthquakes could occur on other faults in the general areas, but because of their greater distance and/or lesser probability of occurrence, they are considered less significant to the site from a ground motion standpoint.

Active faults, such as ones discussed above, are typical of the Southern California area. It is reasonable, therefore, to expect a strong ground motion seismic event to occur during the lifetime of any proposed development of this site (See Table I below).

TABLE I
DATA RELATED TO FAULT SYSTEMS
IN
CLOSE PROXIMITY TO THE SUBJECT
SITE AREA *

FAULT	(miles)	MAXIMUM CREDIBLE EVENT (Moment Magnitude)	PEAK ROCK ACCELER- ATIONS (g's)	REPEATABLE GROUND ACCELER- ATIONS (g's)	DURA- TION OF SHAKING (sec.)	PRE- DOM- INATE PERIOD (sec.)
San Andreas	7	8.2	.70	.45	35	.41
Cucamonga	2	7.5	.73	.47	33	.36
San Jacinto	8	7.5	.45	.29	31	.36

* References: 4,5,6,7,8,9.



At the time of our investigation the subject site was vacant. Approximately 90 percent of the property was covered by a thick growth of wild grasses up to ten inches high and occasional weeds up to two feet high. The remaining areas had only a sparse growth of weeds and grasses.

2.0 GEOLOGIC FINDINGS

2.1 Regional Geology

The site is located within the geomorphic province known as the Perris Block. The Perris Block underlies the Chino Basin and is considered relatively stable; however, it is bounded on the northeast by the San Jacinto Fault, on the north by the Cucamonga Fault-San Gabriel Mountains, and on the southwest by the Elsinore Fault Zone-Santa Ana Mountains. The Chino Basin, in which the site is situated, is a sedimentary basin bounded by major faults and resistant hills (Reference 1, Appendix D).

2.2 Surficial Deposit

2.2.1 Alluvium

Recent alluvium is present over the entire subject site. The alluvium has formed from alluvial fan deposits which originated from Lytle Creek to the northeast. These deposits consist of silty sand with a slight amount of gravel which were fine to medium grained, medium brown, moist at upper 0-2' interval and sandy gravel/gravelly sand which were light brown, moist at lower 1'-12' interval. The lower sandy gravel/gravelly sand interval contains various amounts of gravel and cobble. Typically the upper 0-2' interval of silty sand was found to be loose.

2.3 Faulting

No active or potentially active faults are known to exist at the subject site, based on our review of the referenced literature (Appendix D). Therefore, it is highly unlikely that ground surface displacement from fault rupture would occur within the project area. It is also considered of low probability at this time that geologic inspection during future site grading would reveal the presence of any faults. Therefore, no special fault investigation is considered necessary.



5.0 SOIL CONDITIONS

Field and laboratory data obtained from our investigation indicate that the upper one to two feet of soil contain roots and rootlets and consist of silty sand containing slight to moderate amounts of gravel and cobbles. Results of drive sample blow counts indicate that these soils are in a loose state.

The underlying material, to the maximum depths penetrated (12 feet), consist of poorly graded sand, gravel and cobbles. The cobbles were found to make up approximately 20 to 35 percent of the material and to be up to approximately 12 inches in maximum cross sectional dimension. Results of in-place density tests indicate that these materials are in a medium dense to dense state.

The on-site soils are generally granular and are considered to exhibit insignificant expansion potential.

Based on the results of laboratory direct shear testing, the site soils were found to exhibit a moderately high shear strength after being densified.

6.0 CONCLUSIONS

Based on our investigation, it is our opinion that the subject site may be developed for its intended use, from a geotechnical engineering viewpoint. However, the upper natural soils are in a variably loose to dense state and will require subexcavation and recompaction to provide a uniform, less compressible and higher strength building foundation subgrade.

7.0 RECOMMENDATIONS

7.1 General Site Grading

All grading should be performed in accordance with the General Earthwork and Grading Specifications, Appendix C, except as modified in the text of this report, and with the applicable portions of Chapter 70 of the Uniform Building Code or applicable local ordinances.



2.5 Groundwater

Evidence of groundwater was not observed during the investigation to the depths explored, and is not anticipated to be encountered during site development. The depth to groundwater under the site is estimated to be at approximately 450 feet (Reference 3).

3.0 FIELD INVESTIGATION

The subsurface investigation of the site was performed with eight exploratory trenches excavated with a backhoe to depths of 12 feet. The approximate locations of the trenches are shown on Figure 2, Exploratory Trench Location Map.

Continuous logging of the subsurface conditions in the borings was performed by a staff geologist. Undisturbed ring samples (2.5 inch I.D.) were obtained in the finer grained soils near the surface by driving a split-barrel sampler with a 140 pound hammer dropped 30 inches. The number of hammer blow counts necessary to advance the sampler every six inches was recorded on the trench logs. In-place density tests were performed in the deeper soils which contained larger proportions of gravel and cobbles. The in-place density tests were performed using the ASTM Method D1556, modified with the use of a 12-inch diameter sand cone and plate. The soil in-place density and moisture obtained from the sand cone tests are also recorded on the trench logs. The trench logs are presented in Appendix A. The undisturbed ring samples, along with representative bulk soil samples, were transported to the laboratory in moisture tight containers for subsequent examination and testing.

4.0 LABORATORY TESTING

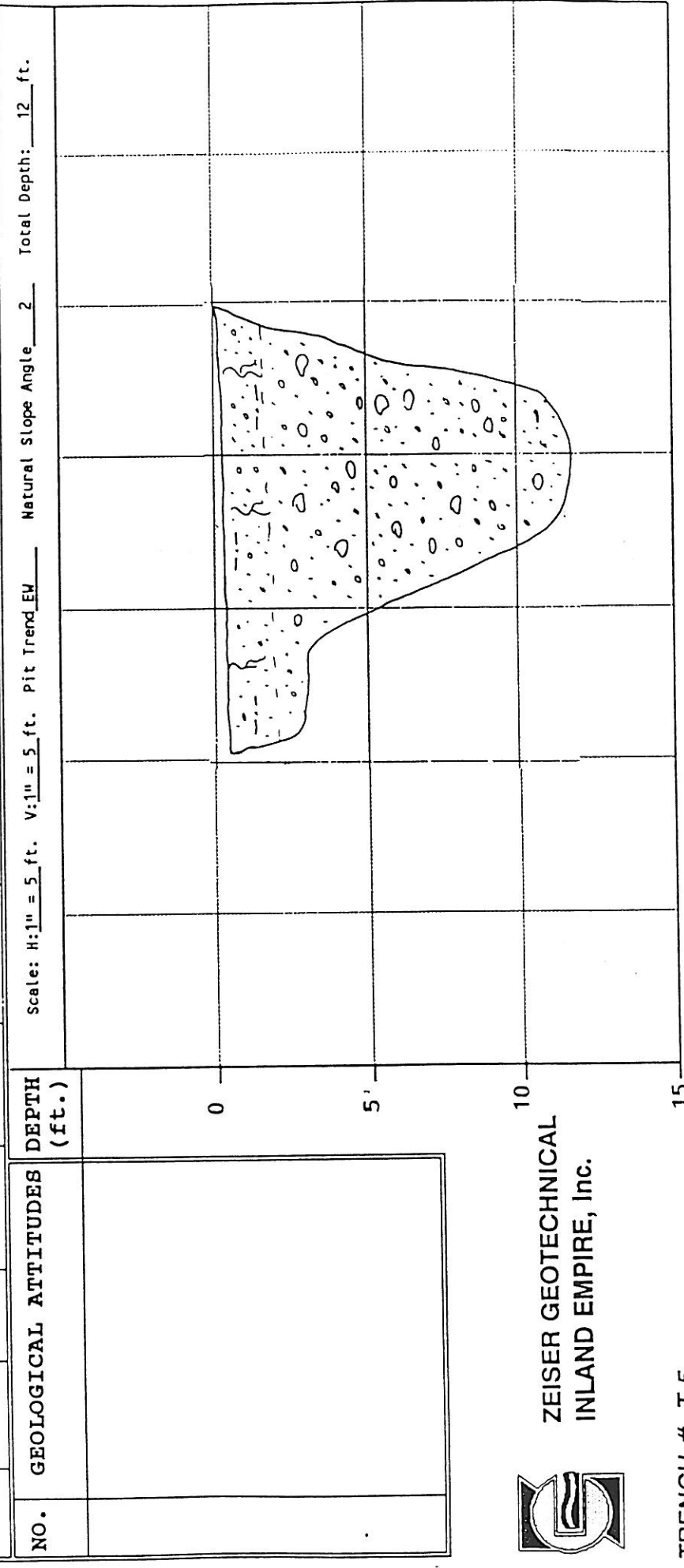
Selected soil samples were also tested in the laboratory for in-place density and moisture, maximum density, optimum moisture, and direct shear strength. The in-place density and moisture tests were performed on relatively undisturbed samples obtained in the field by driving the split-barrel sampler. The in-place density and moisture test results are shown on the trench logs. A summary of the other test results and the laboratory test procedures are presented in Appendix B.

CLIENT <u>L.A. Chanco</u>		PROJECT NO. <u>91139-00</u>	
TRENCH NO. <u>T-5</u>		ELEVATION <u> </u> FT.	
LOGGED BY <u>KP</u>		DATE <u>03/12/91</u>	

DEPTH (ft.)	SAMPLE NUMBER	BLOW COUNT	DRY DENSITY (pcf)	% MOIST CONTENT	USCS CLASS
5	S106"	1/2/3	100	7	SM
10		@ 3'	130	4	GP/SP
15					

Alluvium
 0 - 2': Silty fine to medium sand, with slight amount of gravel up to 3", medium brown, moist, with roots and rootlets
 2 - 12': Medium to coarse sand matrix with heavy amount of gravel (20%) up to 3", cobble (20%) up to 12", light brown, moist

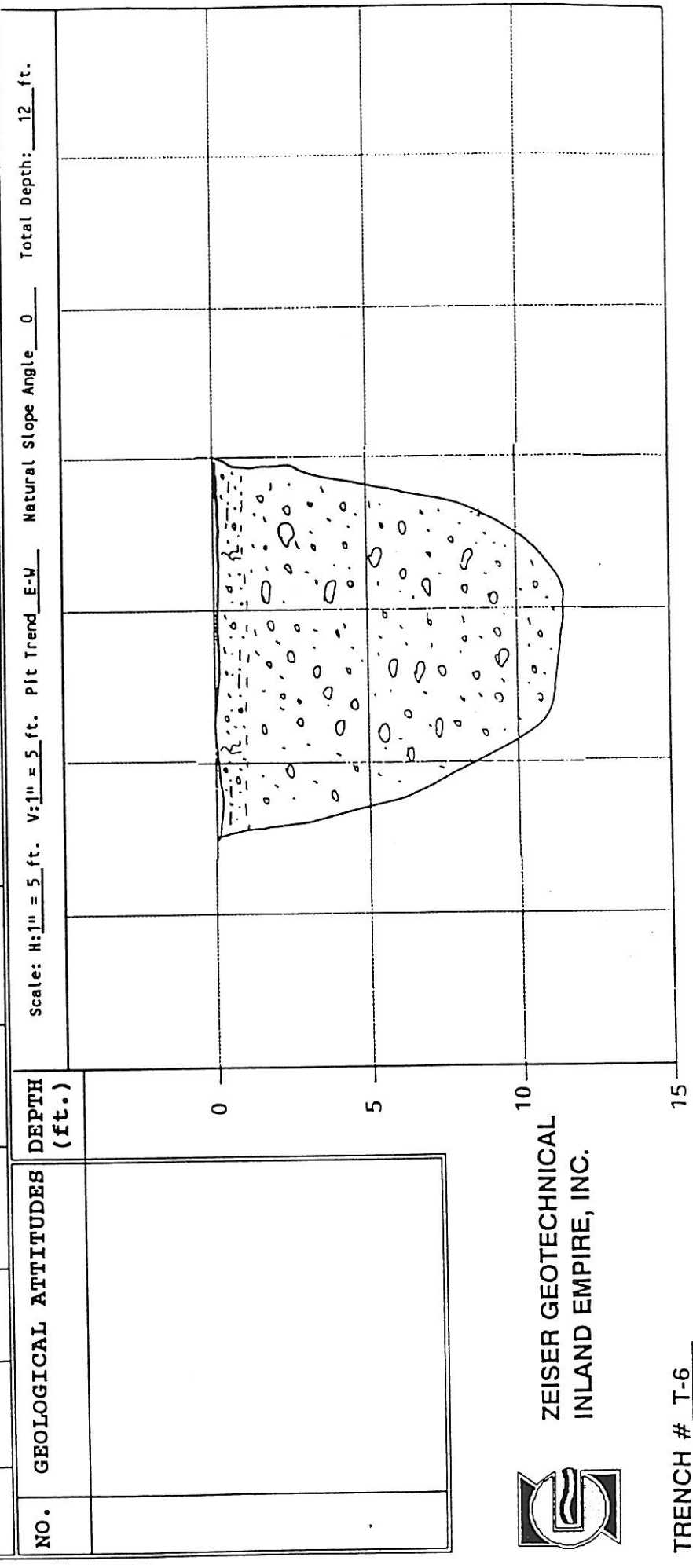
Note: No water; moderate caving (2'-6')



CLIENT <u>L.A. Chanco</u>		PROJECT NO. <u>91139-00</u>	
TRENCH NO. <u>T-6</u>		ELEVATION <u> </u> FT.	
LOGGED BY <u>KP</u>		DATE <u>03/12/91</u>	

DEPTH (ft.)	SAMPLE NUMBER	BLOW COUNT	DRY DENSITY (pcf)	% MOIST CONTENT	USCS CLASS	Alluvium 0 - 1.5': Silty fine to medium Sand, with slight amount of gravel up to 3", medium brown, moist, with roots and rootlets 1.5'-12': Medium to coarse Sand matrix with heavy amount of gravel (35%) up to 3", cobble (20%) up to 12", light brown, moist
5					SM	
10					GP/SP	
15						

Note: No water; slight caving (1'-4')



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CLIENT L.A. Chanco PROJECT NO. 91139-00
TRENCH NO. T-7 ELEVATION FT.
LOGGED BY KP DATE 03/12/91

Alluvium
0 - 1': Silty fine to medium sand with moderate amount of gravel up to 3", and cobble up to 6", medium brown, moist, with roots and rootlets
1 - 12': Medium to coarse sand matrix with heavy amount of gravel (30%) up to 3", cobble (25%) up to 12", light brown, moist

Note: No water; moderate caving (1'-9')

Scale: H:1" = 5 ft. V:1" = 5 ft. Pit Trend E-W Natural Slope Angle 0 Total Depth: 12 ft.

DEPTH (ft.)

GEOLOGICAL ATTITUDES

NO.

0

5

10

15



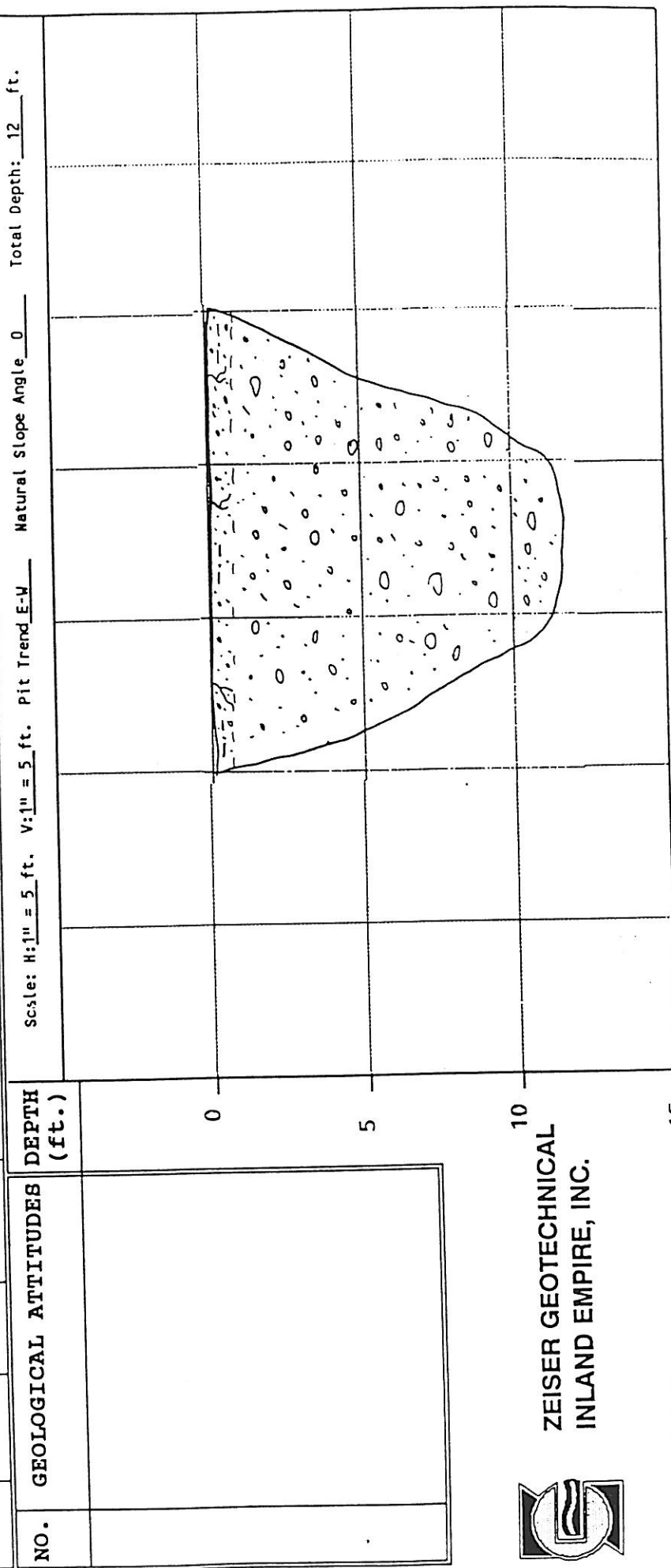
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TRENCH # T-7

DEPTH (ft.)	SAMPLE NUMBER	BLOW COUNT	DRY DENSITY (pcf)	% MOIST CONTENT	USCS CLASS	CLIENT <u>L.A. Chanco</u> TRENCH NO. <u>T-8</u> LOGGED BY <u>KP</u>	PROJECT NO. <u>91139-00</u> ELEVATION _____ FT. DATE <u>03/12/91</u>
-------------	---------------	------------	-------------------	-----------------	------------	---	--

5					SM	Alluvium 0 - 1': Silty fine to medium Sand with slight to moderate amount of gravel up to 3", medium brown, moist, with roots and rootlets 1'-12': Medium to coarse Sand matrix with heavy amount of gravel (25%) up to 3", cobble (20%) up to 10", light brown, moist
10					GP/SP	
15						

Note: No water; moderate caving (1'-6')



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INLAND EMPIRE, INC.**





PN 91139-00

APPENDIX B
LABORATORY TEST PROCEDURES & RESULTS



SUMMARY OF LABORATORY TEST PROCEDURES AND METHODS

MAXIMUM DENSITY TEST

The maximum dry density and optimum moisture content of typical materials were determined in accordance with ASTM D1557-78 (Five layers).

DIRECT SHEAR TESTS

Direct shear testing was performed on a selected remolded sample which was pre-soaked for a minimum of 24 hours. The sample was then tested under various normal loads; a different specimen being used for each normal load. The samples were then sheared in a motor driven, strain-controlled direct shear testing apparatus at a strain rate of 0.05 in. per minute.



PN 91139-00

LABORATORY TEST RESULTS

MAXIMUM DENSITY/OPTIMUM MOISTURE CONTENT

TYPE	LOCATION	DEPTH (FT.)	CLASSIFICATION	MAXIMUM DRY DENSITY (LB/CU. FT.)	OPTIMUM MOISTURE (%)
1	T-5	0-2	Silty fine Sand, dark brown, (SM)	126.0	10.0
2	T-3	2-5	Silty sand and gravel, light brown (SP/GP)	136.0	7.0

DIRECT SHEAR *

LOCATION/ SPECIMEN NO.	DEPTH (FT.)	NORMAL STRESS (PSF)	STRESS (PSF)	PEAK SHEAR DISPLACEMENT INCHES	SHEAR STRESS AT 0.25 IN. DISPLACEMENT (PSF)
T3/A	2-5	1000	980	.059	819
T3/B	2-5	2000	1597	.197	1523
T3/C	2-5	4000	3174	.101	2895

Angle of Internal friction = 36 degrees, cohesion = 100 psf.

* Remolded to 90 % relative compaction per ASTM D-1557-78 and tested in submerged condition.



PN 91139-00

APPENDIX C
GENERAL EARTHWORK AND GRADING SPECIFICATIONS



GENERAL EARTHWORK AND GRADING SPECIFICATIONS

1.0 GENERAL INTENT

These specifications present general procedures and requirements for grading and earthwork as shown on the approved grading plans, including preparation of areas to be filled, placement of fill, installation of subdrains, and excavations. The recommendations contained in the geotechnical report are a part of the earthwork and grading specifications and shall supersede the provisions contained hereinafter in the case of conflict. Evaluations performed by the consultant during the course of grading may result in new specifications or the recommendations of the geotechnical report.

2.0 EARTHWORK OBSERVATION AND TESTING

Prior to the commencement of grading, a qualified geotechnical consultant (soils engineer and engineering geologist, and their representatives) shall be employed for the purpose of observing earthwork procedures and testing the fills for conformance with the recommendations of the geotechnical report and these specifications. It will be necessary that the consultant provide adequate testing and observation so that he may determine that the work was accomplished as specified. It shall be the responsibility of the contractor to assist the consultant and keep him apprised of work schedules and changes so that he may schedule his personnel accordingly.

It shall be the sole responsibility of the contractor to provide adequate equipment and methods to accomplish the work in accordance with applicable grading codes or grading plans. If, in the opinion of the consultant, unsatisfactory conditions, such as questionable soil, poor moisture condition, inadequate compaction, adverse weather, etc., are resulting in the quality of work less than required in these specifications, the consultant will be empowered to reject the work and recommend that construction be stopped until the conditions are rectified.

Maximum dry density tests used to determine the degree of compaction will be performed in accordance with the American Society for Testing and Materials test method ASTM D1557-78.

3.0 PREPARATION OF AREA TO BE FILLED

3.1 Clearing and Grubbing

All brush, vegetation and debris shall be removed or piled and otherwise disposed of.



3.2 Processing

The existing ground which is determined to be satisfactory for support of fill shall be scarified to a minimum depth of 6 inches. Existing ground which is not satisfactory shall be overexcavated as specified in the following section. Scarification shall continue until the soils are broken down and free of large clay lumps or clods and until the working surface is reasonably uniform and free of uneven features which would inhibit uniform compaction.

3.3 Overexcavation

Soft, dry, spongy, highly fractured or otherwise unsuitable ground, extending to such a depth that surface processing cannot adequately improve the condition, shall be overexcavated down to firm ground, approved by the consultant.

3.4 Moisture Conditioning

Overexcavated and processed soils shall be watered, dried-back, blended, and/or mixed as required to attain a uniform moisture content near optimum.

3.5 Recompanction

Overexcavated and processed soils which have been properly mixed and moisture-conditioned shall be recompacted to a minimum relative compaction of 90 percent.

3.6 Benching

Where fills are to be placed on ground with slopes steeper than 5:1 (horizontal:vertical units), the ground shall be stepped or benched. The lowest bench shall be a minimum of 15 feet wide, shall be at least 2 feet deep, shall expose firm material, and shall be approved by the consultant. Other benches shall be excavated in firm material for a minimum width of 4 feet. Ground sloping flatter than 5:1 shall be benched or otherwise overexcavated when considered necessary by the consultant.

3.7 Approval

All areas to receive fill, including processed areas, removal areas and toe-of-fill benches shall be approved by the consultant prior to fill placement.



4.0 FILL MATERIAL

4.1 General

Material to be placed as fill shall be free of organic matter and other deleterious substances, and shall be approved by the consultant. Soils of poor gradation, expansion, or strength characteristics shall be placed in areas designated by the consultant or shall be mixed with other soils to serve as satisfactory fill material.

4.2 Oversize Material

Oversize material defined as rock, or other irreducible material with a maximum dimension greater than 12 inches, shall not be buried or placed in fills, unless the location, materials, and disposal methods are specifically approved by the consultant. Oversized disposal operations shall be such that nesting of oversize material does not occur, and such that the oversize material is completely surrounded by compacted or densified fill. Oversize material shall not be placed within 10 feet vertically of finish grade or construction, unless specifically approved by the consultant.

4.3 Import

If importing of fill material is required for grading, the import material shall meet the requirements of Section 4.1.

5.0 FILL PLACEMENT AND COMPACTION

5.1 Fill Lifts

Approved fill material shall be placed in areas prepared to receive fill in near-horizontal layers not exceeding 6 inches in compacted thickness. The consultant may approve thicker lifts if testing indicates the grading procedures are such that adequate compaction is being achieved with lifts of greater thickness. Each layer shall be spread evenly and shall be thoroughly mixed during spreading to attain uniformity of material and moisture in each layer.

5.2 Fill Moisture

Fill layers at a moisture content less than optimum shall be watered and mixed, and wet fill layers shall be aerated by scarification or shall be blended with drier material. Moisture-conditioning and mixing of fill layers shall continue until the fill material is at a uniform moisture content at or near optimum.



5.3 Fill Compaction

After each layer has been evenly spread, moisture-conditioned, and mixed, it shall be uniformly compacted to not less than 90 percent of maximum dry density. Compaction equipment shall be adequately sized and shall be either specifically designed for soil compaction or of proven reliability, to efficiently achieve the specified degree of compaction.

5.4 Fill Slopes

Compacting of slopes shall be accomplished, in addition to normal compacting procedures, by backrolling of slopes with sheepfoot rollers at frequent increments of 2 to 3 feet in fill elevation gain, or by other methods producing satisfactory results. At the completion of grading, the relative compaction of the slope out to the slope face shall be at least 90 percent.

5.5 Compaction Testing

Field tests to check the fill moisture and degree of compaction will be performed by the consultant. The location and frequency of tests shall be at the consultant's discretion. In general, the tests will be taken at an interval not exceeding 2 feet in vertical rise and/or 1,000 yards of embankment.

6.0 SUBDRAIN INSTALLATION

Subdrain systems, if required, shall be installed in approved ground to conform to the approximate alignment and details shown on the plans or herein. The subdrain location or materials shall not be changed or modified without the approval of the consultant. The consultant, however, may recommend and direct upon approval, changes in subdrain line, grade or material. All subdrains should be surveyed for line and grade after installation and sufficient time shall be allowed for the surveys, prior to commencement of filling over the subdrains.

7.0 EXCAVATION

Excavation and cut slopes will be examined during grading. If directed by the consultant, further excavation or overexcavation and refilling of cut areas shall be performed, and/or remedial grading of cut slopes shall be performed. Where fill-over-cut slopes are to be graded, unless otherwise approved, the cut portion of the slope shall be made and approved by the consultant prior to placement of materials for construction of the fill portion of the slope.



7.2 Site Preparation

All vegetation and deleterious or otherwise unsuitable material should be removed and wasted from the site.

All existing artificial fills should be completely removed and, after being cleaned of organic and other deleterious materials, may be reused as compacted fill.

Cavities created by removal of any man-made features, and by the exploratory trenches utilized during this investigation, should be thoroughly cleaned of loose soil, organic matter and other deleterious materials, shaped to provide access for construction equipment, and replaced with properly compacted fill.

7.3 Preparation Fill Areas

After site preparation and prior to placing fill, the surfaces of all areas to receive fill should be scarified to a depth of at least 12 inches. The scarified soils should be brought to near optimum moisture content and recompact to a relative compaction of at least 90 percent of maximum as determined by ASTM Standard D1557-78.

7.4 Preparation of Footing Area

All building and retaining wall footings should rest upon at least 12 inches of properly compacted fill material. Where this will not be accomplished by design fills, the footing areas should be subexcavated to a depth of at least 12 inches below the proposed footing base grade, to a distance of at least five feet beyond the footing lines. The bottom of this excavation, to a depth of at least 12 inches, should then be moisture conditioned and recompact to 90 percent or more of the laboratory maximum dry density, as determined by ASTM D1557-78, prior to refilling the excavation to grade as properly compacted fill.

7.5 Compacted Fill

The on-site soils should serve as adequate fill material provided they are free from concentrations of organic matter and other deleterious materials.



All fill material should be moisture conditioned to near optimum moisture and compacted to 90 percent or more of the ASTM D1557-78 maximum dry density. Unless approved by the geotechnical engineer, rock with maximum dimension greater than 12 inches should not be buried or placed in fills.

Based on the relative compaction of the native soils determined during this investigation and the relative compaction anticipated for compacted fill soils, we estimate a compaction shrinkage of approximately 15 percent. Therefore, 1.15 cubic yards of in-place soil material would be necessary to yield one cubic yard of compacted fill material. In, addition, we would anticipate a subsidence of approximately 0.15 feet. These values are exclusive of losses due to stripping or the removal of other subsurface features.

7.6 Expansive Soils

Since the soils encountered during this investigation were granular and considered to be non-critically expansive, specialized design and construction methods to specifically resist expansive soil forces are not anticipated. This should be verified with testing and evaluation during the grading operation.

7.7 Foundation Design

The proposed structures may be supported on continuous and/or isolated spread footings founded at least 12 inches below the lowest adjacent final grade for one-story structures and having a minimum width of 12 inches. Footings for two-story structures should be founded at least 18 inches below the lowest adjacent final grade. Footing may be designed for an allowable soil bearing pressure of 2,000 pounds per square foot. This bearing value may be increased by one-third for wind and seismic loading.

The above bearing value is applicable for continuous footings exerting not greater than 4 kips per linear foot, live and dead load, and column footings exerting not greater than 30 kips, live and dead load. If greater loads are anticipated this firm should be contacted for additional design recommendations.

A passive earth pressure value of 300 pounds per square foot per foot of depth may be used for the sides of the footings. A friction coefficient of 0.4 may be assumed between the soil and concrete.



ALTERNATIVE 3

Minimum Lot Size = 7,200 Sq. Ft.
131 Total Lots
Commercial = 2.81 Acres

T-8

LEGEND

Approximate Location of
Exploratory Trench

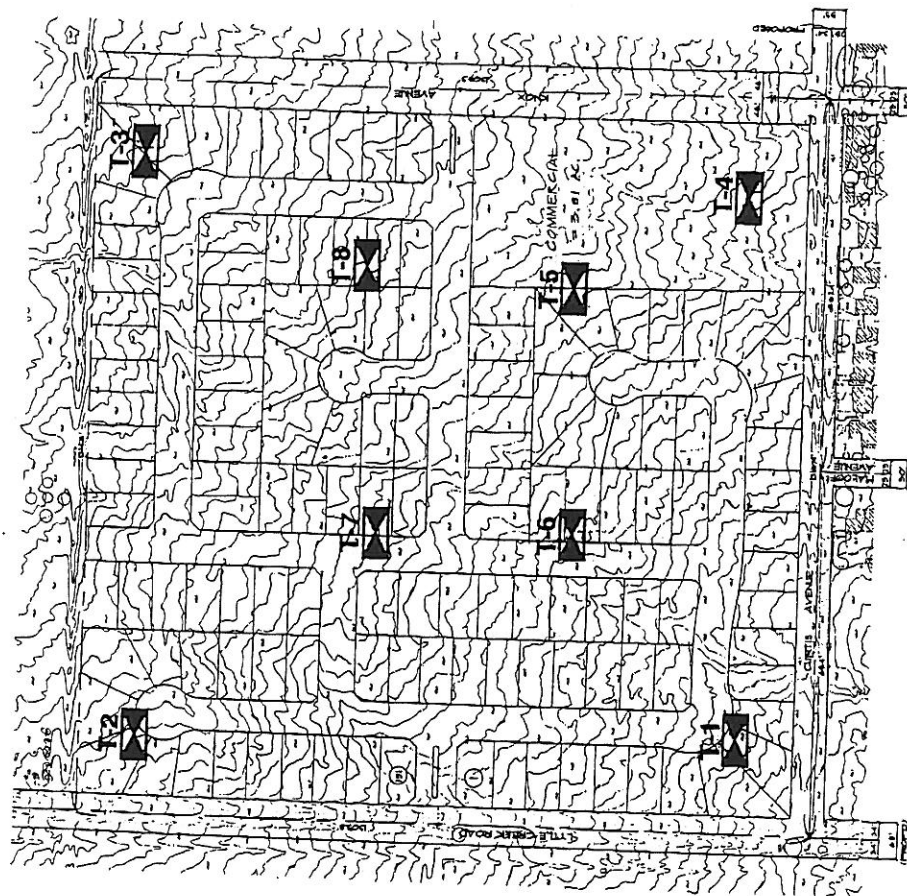


FIGURE 2
EXPLORATORY TRENCH
LOCATION MAP

Zeiser Geotechnical, Inc.
Inland Empire

PN 91139-00 3/22/95

PACIFIC MIRAGE

SPECIFIC GATEWAY COMMUNITIES
26432 GOLDEN SPRINGS ROAD, STE. 130

ALAMOND BLVD, CALIFORNIA 91763
TEL(PHONIC) (714) 841-1307



inconnco
INCORPORATED
852-2511 • 2511-8525
中英開發集團公司

DAVID EVANS AND ASSOCIATES, INC.
ENGINEERS, SURVEYORS, LANDSCAPE ARCHITECTS, SCULPTORS

1000 WEST 10TH AVE. SUITE 100
DENVER, CO 80202
(303) 733-4444

(d)

DATE	2-20-23
TIME	11:41
LOCATION	1000000000
NAME	1000000000
ADDRESS	1000000000
CITY	1000000000
STATE	1000000000
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WEBSITE	1000000000
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140

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Total settlement of the proposed structures due to structural loads is estimated to be on the order of $3/4$ inch. Differential settlement between equally loaded footings can be expected at $1/2$ to $3/4$ of the total settlement. Due to the granular nature of the site soils, much of the anticipated settlement is expected to occur during construction.

7.8 Floor Slabs

Floor slabs should bear on a minimum of 12 inches of soil compacted to at least 90 percent of maximum density as determined by ASTM Standard D1557-78. Floor slabs should be a minimum of $3\frac{1}{4}$ inches in actual thickness and, in areas to receive floor coverings, should be underlain by a 2 inch minimum thickness sand base and a plastic membrane of at least 6 mil thickness. Slab thickness and reinforcement requirements for heavy floor loading should be as specified by the architect or structural engineer.

7.9 Retaining Walls

Earth retaining structures such as retaining walls should be designed to resist the soil pressure imposed by the surrounding soil mass. Walls which are unrestrained at the top may be designed for an assumed earth pressure equivalent to that exerted by a fluid weighing not less than 35 pounds per cubic foot for existing site soils.

Any applicable construction and seismic surcharges should be added to the above pressures. If imported soil backfills, inclined backfills or restrained walls are proposed, the soil engineer should be contacted to develop applicable lateral pressure parameters. At least twelve inches in width of granular material with a sand equivalent of 30 or greater should be used for the backfill behind the walls. Water pressure should be mitigated from build-up behind retaining walls by employment of slotted weep holes, outlet drain pipes through the walls, or any approved back-drain system. The upper eighteen inches of retaining wall backfill should consist of relatively impervious soil.



7.10 Slopes

Project slopes should be surficially and grossly stable at gradients of 2:1 or flatter provided they are properly maintained and planted with deep-rooted vegetation and an approved ground cover to prevent soil erosion. During construction, special compaction procedures may be necessary to achieve the specified compaction out to the fill slope face. Special procedures may include sheeps-foot backrolling of the slope during the placement of each fill lift, overfilling and cutting back to the compacted core and/or other proven methods.

7.11 Utility Installations

The method of trench backfill should be reviewed by the geotechnical consultant prior to backfilling. Backfill should be compacted in thin lifts by mechanical means to at least 90 percent of its laboratory maximum dry density as determined by ASTM Standard D1557-78.

7.12 Grading Observation and Testing

Grading observation and testing should be performed by this firm at the following stages:

- o During clearing of the site.
- o During grading of the site.
- o After tooting trench excavation and prior to placement of concrete;
- o During placement of backfill for utility trenches and behind retaining walls, and;



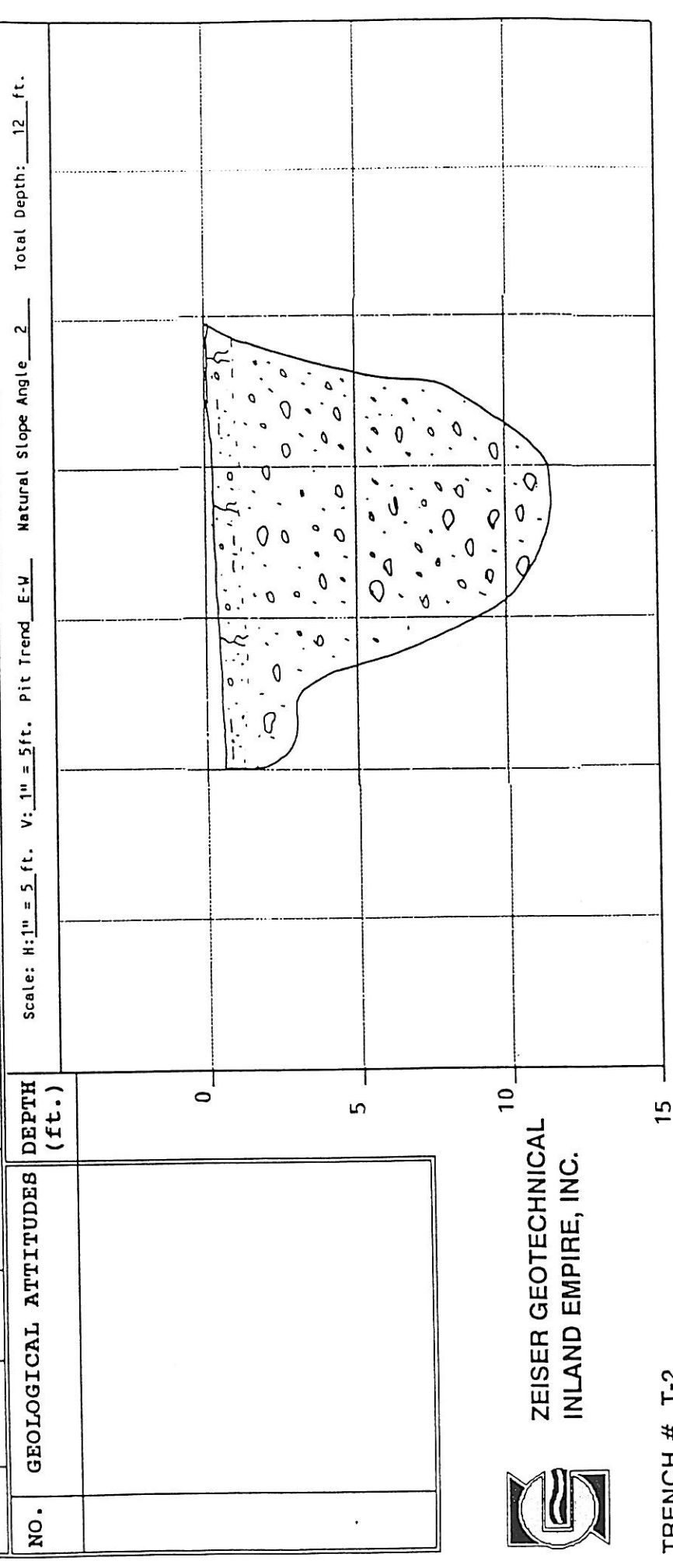
PN 91139-00

APPENDIX A
EXPLORATORY TRENCHES

CLIENT <u>L.A. Chanco</u>				PROJECT NO. <u>91139-00</u>	
TRENCH NO. <u>T-2</u>				ELEVATION <u> </u> FT.	
LOGGED BY <u>KP</u>				DATE <u>03/12/91</u>	
DEPTH (ft.)	SAMPLE NUMBER	BLOW COUNT	DRY DENSITY (pcf)	% MOIST CONTENT	USCS CLASS
5	S1@6"	1/3 for 3"	107	10	SM
10					GP/SP
15					

Alluvium
0 - 1.5': Silty fine to medium Sand with slight to moderate amounts of gravel up to 3" medium brown, moist, with roots and rootlets
1.5'-12': Medium to coarse Sand matrix with heavy amounts of gravel (30%) up to 3", cobble (30%) up to 12", light brown, moist
S1-@ 6": Rock encountered @9", progress of sampler stopped

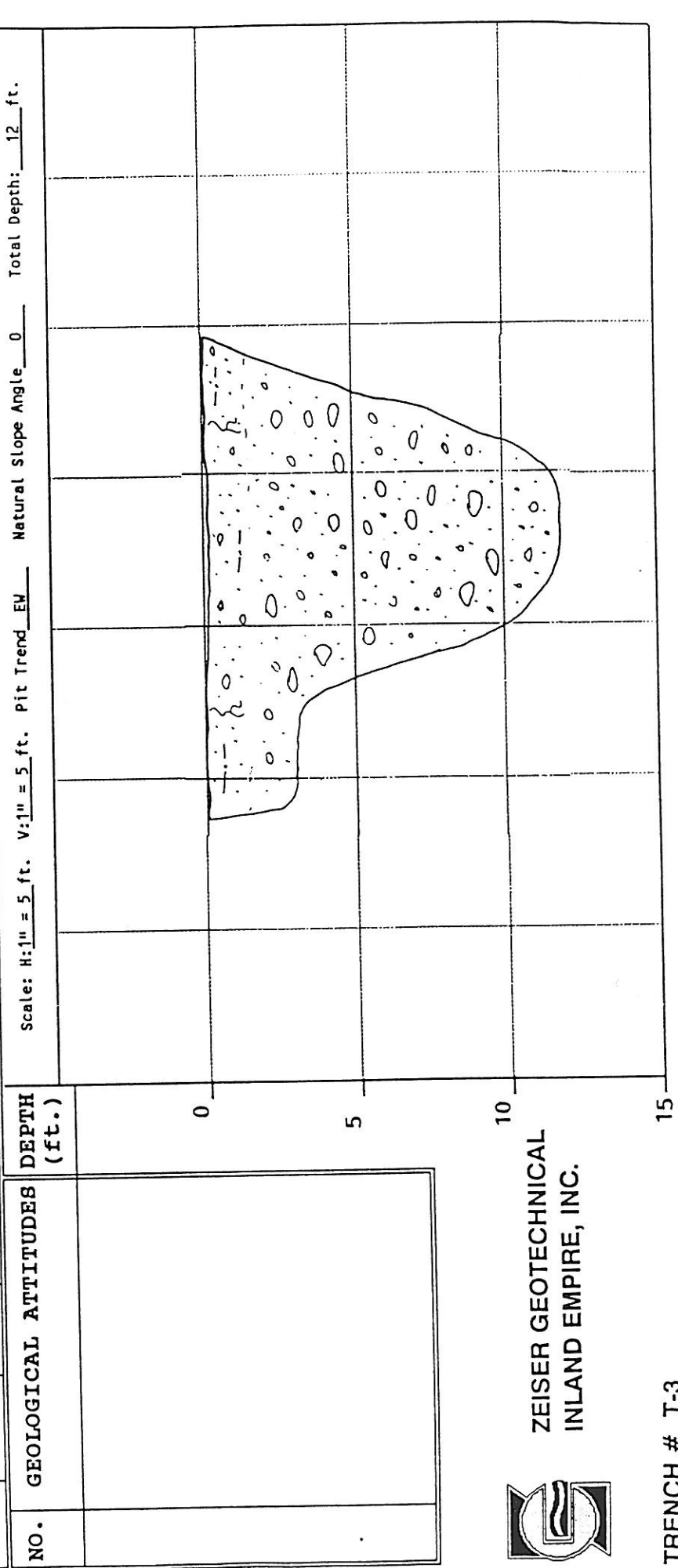
Note: No water; slight caving (2'-12')



ZEISER GEOTECHNICAL
INLAND EMPIRE, INC.



DEPTH (ft.)		SAMPLE NUMBER	BLOW COUNT	DRY DENSITY (pcf)	% MOIST CONTENT	USCS CLASS	CLIENT <u>L.A. Chanco</u> TRENCH NO. <u>T-3</u> LOGGED BY <u>KP</u>		PROJECT NO. <u>91139-00</u> ELEVATION <u> </u> FT. DATE <u>03/12/91</u>
5	S106"	1/4 Rpt @ 4"	98	8	SM	Alluvium 0 - 2': Silty fine to medium Sand, with slight amount of gravel up to 3", medium brown, moist, with roots and rootlets 2' - 12': Medium to coarse Sand matrix with heavy amounts of gravel (35%) up to 3", cobble (35%) up to 12", light brown, moist			
10						S1 @ 1': rock encountered, progress of sampler stopped			
15						Note: No water; slight caving (4'-12')			

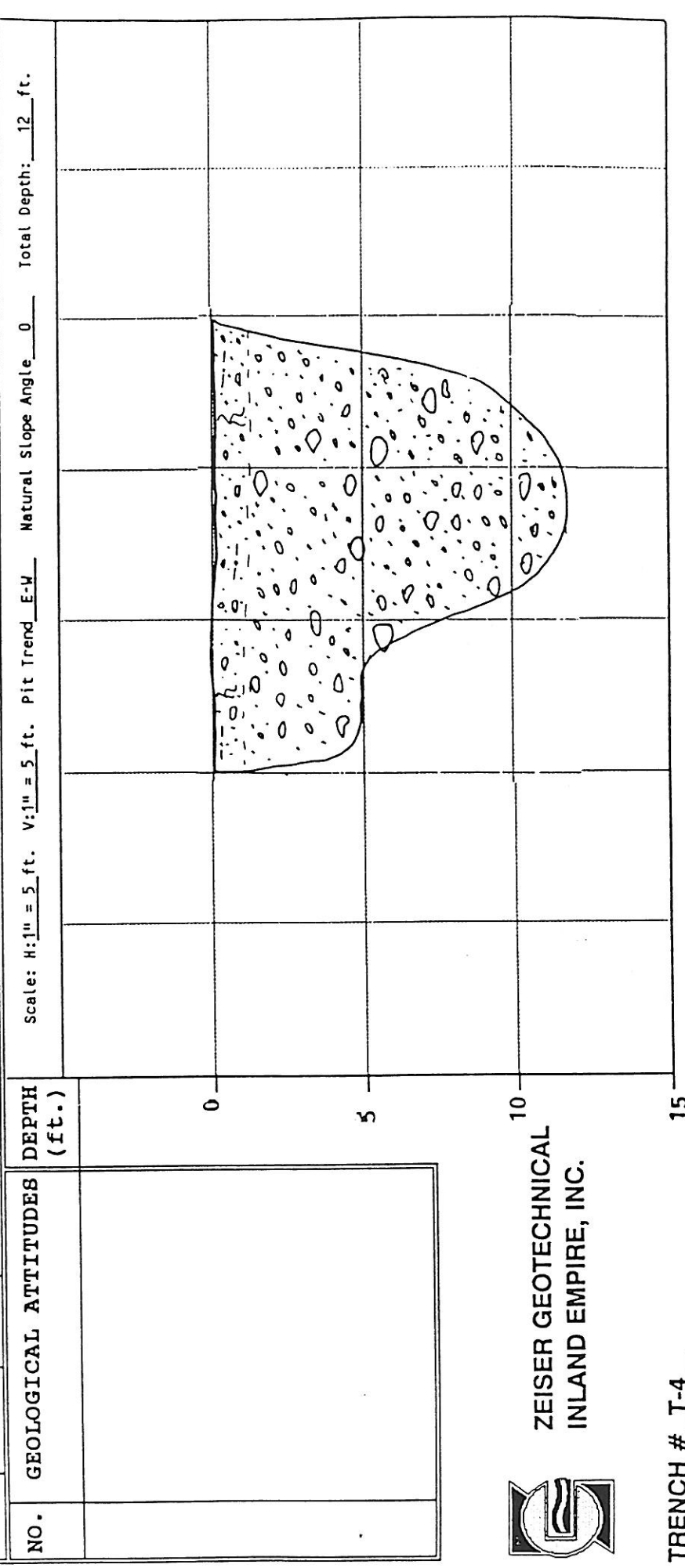


ZEISER GEOTECHNICAL
INLAND EMPIRE, INC.

CLIENT <u>L.A. Chanco</u>		PROJECT NO. <u>91139-00</u>	
TRENCH NO. <u>T-4</u>		ELEVATION <u> </u> FT.	
LOGGED BY <u>KP</u>		DATE <u>03/12/91</u>	

DEPTH (ft.)	SAMPLE NUMBER	BLOW COUNT	DRY DENSITY (pcf)	% MOIST CONTENT	USCS CLASS	DESCRIPTION
5					SM	0-1.5': Silty fine to medium sand, with moderate amount of gravel up to 3", medium brown, moist, with rootlets, slight amount of cobble present up to 6"
10					GP/SP	1.5'-12': Medium to coarse sand matrix with heavy amount of gravel (40%) up to 3", cobble (30%) up to 12", light brown, moist
15						

Note: No water; heavy to moderate caving (0-6')



ZEISER GEOTECHNICAL
INLAND EMPIRE, INC.

COMMUNITY WALL PLAN

Fontana Grandview

LEGEND

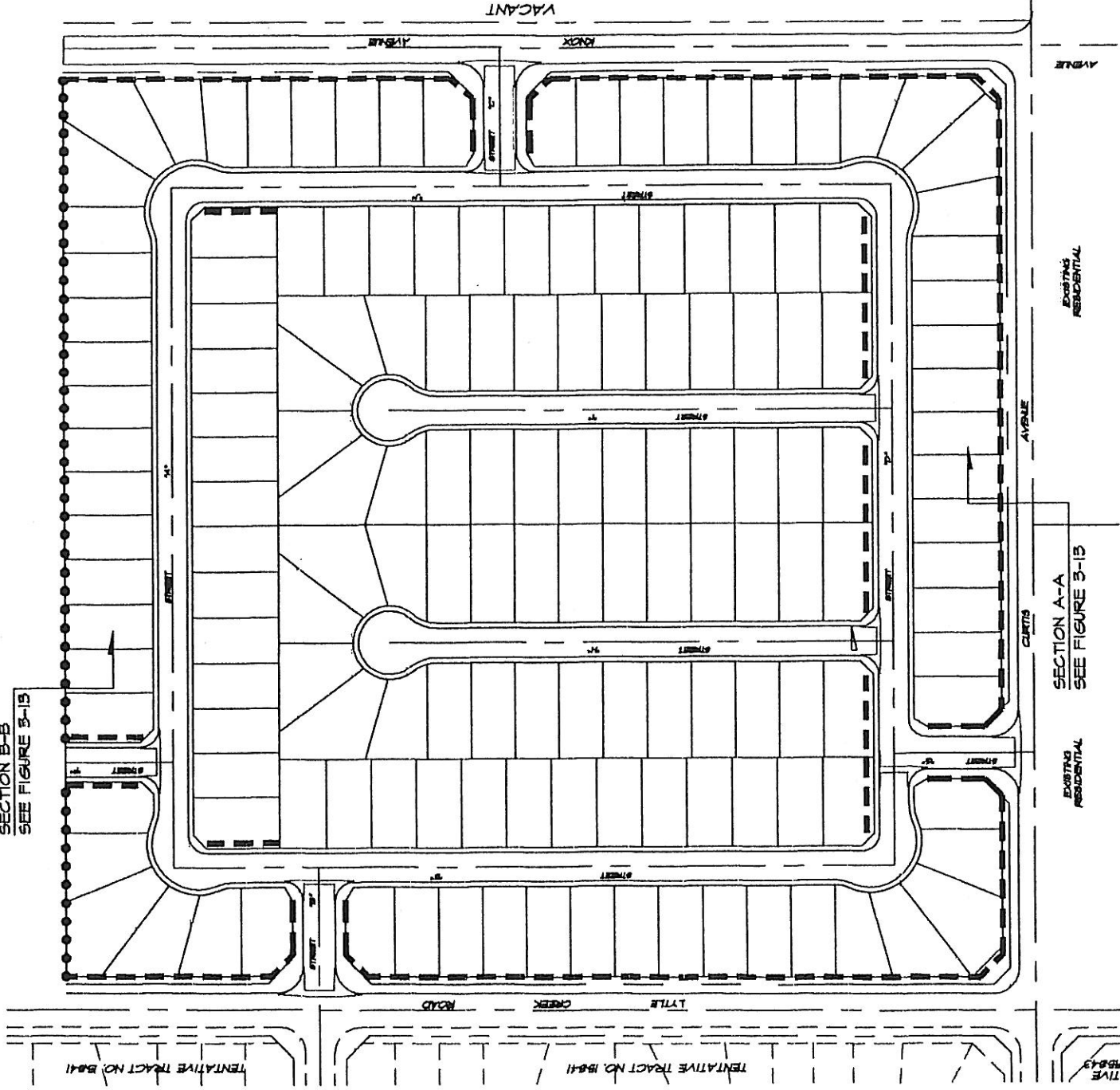


NORTH

□ □ □ □ COMMUNITY PERIMETER MASONRY WALLS (AND INTERIOR COMMON WALLS)
SPIT-FACE BLOCK WALL

● ● ● ● MASONRY WALL - PRECISION BLOCK

SECTION B-B
SEE FIGURE 3-13



SECTION A-A
SEE FIGURE 3-15

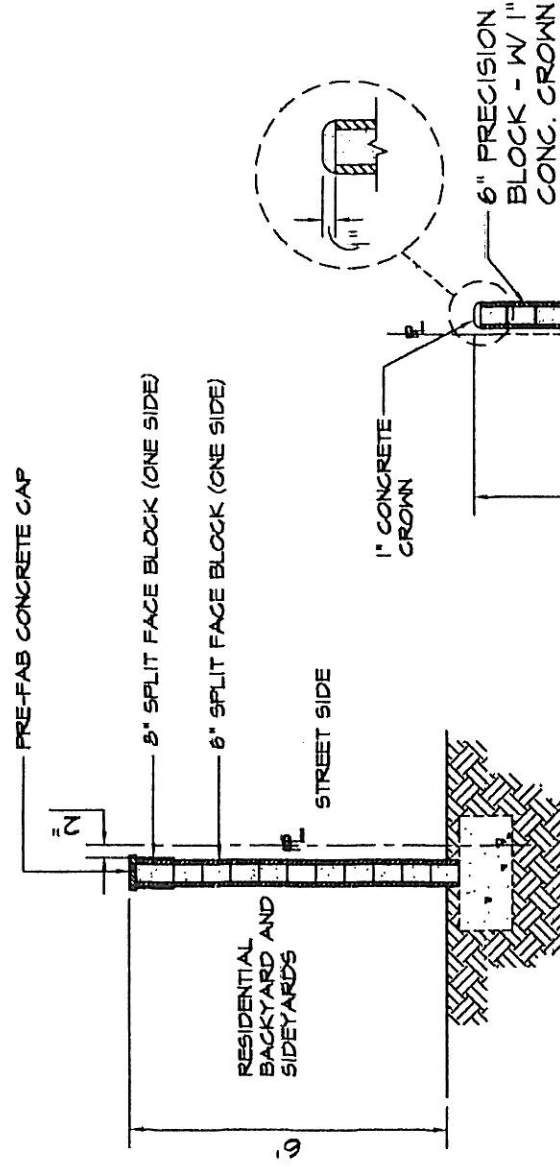
EXISTING
RESIDENTIAL

EXISTING
RESIDENTIAL

Fontana Grandview
L & L (USA), INC.

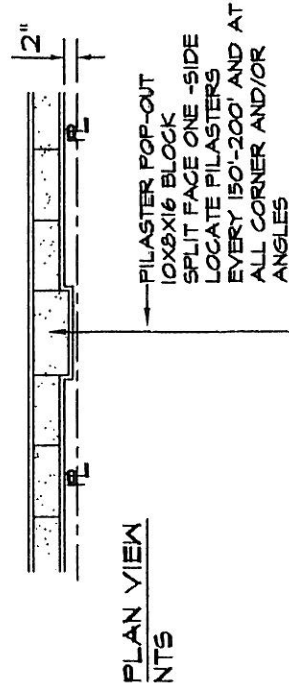
PAGE 3-19

COMMUNITY WALL PLAN
FIGURE 3-12



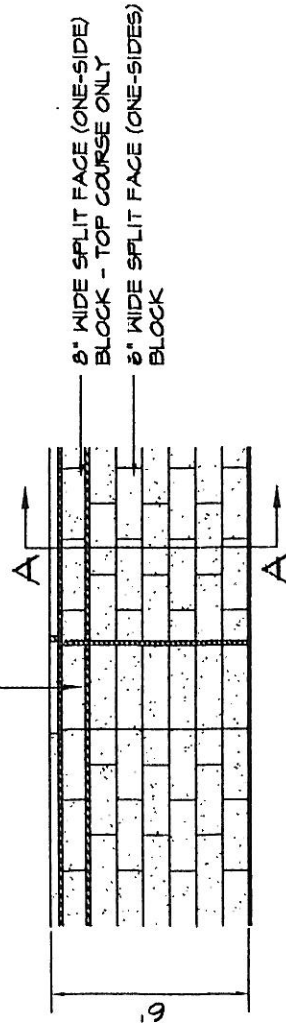
SECTION A-A
NTS

SECTION B-B
NTS



PLAN VIEW
NTS

TYPICAL PRECISION BLOCK WALL



ELEVATION
NTS

TYPICAL SPLITFACE WALL



PN 91139-00

APPENDIX D REFERENCES



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9. Committee on Earthquake Engineering, 1985, Liquefaction of Soils During Earthquakes.

Initial Study
for the proposed
Fontana Grandview - Tract 15962

Prepared By:

Blodgett/Baylosis Associates

Planners □ Scientists □ Economists

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May 6, 1999

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1.1 Scope of Initial Study

This Initial Study has been prepared pursuant to the California Environmental Quality Act (CEQA) of 1970, as amended, and the CEQA Guidelines. This Initial Study analyzes the potential environmental impacts associated with the construction and subsequent occupancy of a 40 acre, 157 unit, single-family detached residential development proposed in the City of Fontana, in San Bernardino County.

The site selected for the proposed development is located in the portion of the City located north of the San Bernardino Freeway. The proposed project site is a 40 acre parcel located on the northeast corner of Curtis Avenue and Lytle Creek Road. The physical characteristics of the proposed residential development is described in greater detail in Section 2. The City of Fontana is the Lead Agency responsible for the environmental review of the proposed project pursuant to Section 15050(a) of the CEQA Guidelines. As part of the proposed project's review, the City has authorized the preparation of this Initial Study.

1.2 Purpose of Initial Study

The purpose of this Initial Study is to ascertain whether or not the proposed residential development will have the potential for significant adverse impacts on the environment associated with its construction (short-term impacts) and subsequent occupancy (long-term impacts). Other uses for this Initial Study include the following:

- ☐ To provide the City of Fontana with information to use as the basis for deciding whether to prepare an environmental impact report (EIR), mitigated negative declaration, or negative declaration;
- ☐ To enable the City of Fontana to modify the proposed project to mitigate adverse impacts, thereby enabling the project to qualify for a negative declaration;
- ☐ To facilitate environmental assessment and review early in the design of the proposed residential development;
- ☐ To provide documentation for findings in support of a negative declaration, thus, indicating the proposed residential development will not have a significant effect on the environment;
- ☐ To eliminate the need for an EIR; and
- ☐ To determine whether previously prepared environmental documents may be used in support of the environmental analysis for the proposed project.

For this project, the Lead Agency determined that a mitigated negative declaration will be sufficient for the proposed project's environmental review.

1.3 Initial Study Organization

The format and structure of this Initial Study generally reflects that of the Initial Study Checklist, provided herein as Appendix A. Following is an annotated outline summarizing the contents of this Initial Study:

- ☐ *Section 1, Introduction*, provides the procedural context surrounding this Initial Study's preparation and insight into its composition. A summary of findings and the disposition of this Initial Study are also provided in this section.
- ☐ *Section 2, Project Description*, provides an overview of the environmental setting and describes the physical characteristics of the proposed residential development.
- ☐ *Section 3, Environmental Analysis*, contains a discussion of the existing conditions, impacts, and mitigation. This section also indicates how the proposed residential development might yield, or have the potential to yield, a significant effect upon one or more of the issue areas analyzed in this Initial Study.
- ☐ *Section 4, List of References*, identifies the sources and references used in the preparation of this Initial Study. References used in this Initial Study are identified using endnotes.
- ☐ *Appendix A: Initial Study Checklist*, summarizes the contents of the preceding sections.

References and sources used in the preparation of this Initial Study are identified using endnotes. The references are listed in Section 4.3. Although this Initial Study was prepared with consultant support; all analyses, conclusions, findings, and determinations made as part of its preparation fully represent the independent judgment and position of the City of Fontana, acting as Lead Agency.

1.4 Disposition of this Initial Study

Certain projects or actions undertaken by a Lead Agency (in this instance, the City of Fontana) may require oversight, approvals, or permits from other public agencies. These other agencies are referred to as *Responsible Agencies* and *Trustee Agencies*. Pursuant to Sections 15381 and 15386 of the State CEQA Guidelines, as amended. For the purposes of CEQA, the term "Responsible Agency" includes all public agencies other than the Lead Agency which have discretionary approval power over the project. Responsible and trustee agencies and other public agencies and/or entities who may use this Initial Study in decision-making or for informational purposes include, but are not limited to, the following:

- ☐ Fontana Unified School District (development fees);
- ☐ San Bernardino County Fire Department (development review);

- ☐ California Department of Mines and Geology (development review);
- ☐ Fontana Water Company and Chino Basin Municipal Water District (utilities connections);
- ☐ California Department of Transportation (project review and consultation); and
- ☐ San Bernardino County (project review and consultation).

Copies of the Initial Study and the draft Mitigated Negative Declaration will be forwarded to responsible, trustee, and interested agencies for review and comment. A 30-day public review period will be provided to allow these agencies and other interested parties to comment on the proposed project and the environmental review process. A public hearing before the City will also be conducted for the project to solicit public comments.

1.5 Executive Summary

The environmental analysis in Section 3 of this Initial Study indicates that the proposed residential development may have adverse environmental impacts on a number of issue areas (air quality, traffic, public services, and noise) in the absence of mitigation. Mitigation measures have been recommended in this Initial Study as a means to reduce potential adverse environmental impacts.

Based on the findings of this Initial Study, the City of Fontana, acting as Lead Agency, has made a determination that the proposed residential development does not have the potential to create or generate significant adverse impacts on the environment, with the implementation of the recommended mitigation measures. As a result, the City determined that a Mitigated Negative Declaration is sufficient for the environmental review for the proposed project. Table 1 contains a summary of the findings of the analysis contained herein.

Public Review

Copies of this Initial Study and the Mitigated Negative Declaration are available at the City of Fontana Civic Center and at the Main Library. The Civic Center is located at 8353 Sierra Avenue, Fontana, California 92335

Table 1
Executive Summary

<i>Issue/Topic</i>	<i>Findings of Analysis</i>
Land Use and Development Impacts (Section 3.2)	
<i>A. Would the project conflict with the general plan designation or zoning? <u>Less than Significant Impact.</u></i>	The proposed project site is presently undeveloped. The project's development intensity will not exceed the intensity permitted under the City of Fontana General Plan though a zone change is being requested by the applicant. Surrounding land uses included vacant land and single family residential development to the south, south of Curtis Avenue. The proposed residential development will not result in any land use conflicts.
<i>B. Would the project conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project. <u>No Impact</u></i>	The proposed project does not meet SCAQMD or SCAG thresholds as being regionally significant. The proposed residential development will be in conformance with a pertinent sections of adopted environmental plans. The proposed project is consistent with the City of Fontana General Plan.
<i>C. Will the project be compatible with existing land uses in the vicinity? <u>No Impact</u></i>	The proposed project site is located within a site which is presently undeveloped. The proposed project will not result in any incompatibilities with planned or existing development surrounding the project site. All of the surrounding areas are either developed or will be developed with similar land uses.
<i>D. Would the project affect agricultural resources or operations (e.g. impact to soils or farmlands, or impacts from incompatible land uses)? <u>No Impact</u></i>	No agricultural activities are located onsite or in the surrounding area. The proposed project site is not being used for agricultural purposes. No impacts on existing or future agricultural lands will result from the proposed project's construction and subsequent occupancy.
<i>E. Would the project disrupt or divide the physical arrangement of an established community (including a low-income or minority community)? <u>No Impact</u></i>	The proposed project site is located within an area where urbanization is being contemplated though surrounding land uses consists of vacant, undeveloped lands (the parcels to the east, north, and west are undeveloped). The project will not divide the circulation within the established or planned residential neighborhoods.
Population and Housing Impacts (Section 3.3)	
<i>A. Would the project cumulatively exceed official regional or local population projections? <u>Less than Significant Impact.</u></i>	No residential units are located within the project site. A total of 157 single-family homes will be constructed as part of the proposed project. The estimated 549 persons who will live in the proposed development, once completed, will not result in an exceedance of adopted population projections. The proposed development is consistent with the City's General Plan designation for the site. No adverse impact on local or regional population projections will occur as part of the project's implementation.
<i>B. Would the project induce substantial growth in an area either directly or indirectly (e.g. through projects in an undeveloped area or extension of major infrastructure)? <u>Less Than Significant Impact.</u></i>	Utilities and infrastructure connections that will accompany the proposed project will be designed to serve the site and not the adjacent uses. No growth inducing impacts related to infrastructure connections and/or improvements required to serve the proposed development.
<i>C. Would the project displace existing housing, especially affordable housing? <u>No Impact.</u></i>	There are no residential uses located within the existing project site. The proposed development will not affect any existing housing units in the surrounding area or result in any displacement.
Earth and Geology Impacts (Section 3.4)	
<i>A. Would the project result in or expose people to potential impacts involving fault rupture? <u>No Impact.</u></i>	No known or suspected active fault traces pass through, or are located near the project site. No fault rupture hazards are expected on site nor will these hazards be created with the construction of the proposed development.
<i>B. Would the project result in or expose people to potential impacts involving groundshaking? <u>Less Than Significant Impact.</u></i>	The proposed project will be exposed to potential seismic hazards commonly found throughout the Southern California region. The level of risk at the project site is no greater than that anticipated for the region. The proposed project will not introduce any new seismic hazards in the area.

Issue/Topic	Findings of Analysis
C. Would the project result in or expose people to potential impacts involving liquefaction? <u>Less Than Significant Impact.</u>	According to studies conducted in the surrounding area, the project area is located within an area having a very low potential for liquefaction. The liquefaction risk is considered low due to the area's subsurface geology and its geohydrology.
D. Would the project result in or expose people to potential impacts involving seiche or tsunami? <u>No Impact</u>	The proposed project site is located inland from the Pacific Ocean and thus, would not be subject to the effects of a tsunami. The project site is not located adjacent to any body of water which may be affected by a seiche.
E. Would the project result in or expose people to potential impacts involving landslides or mudslides? <u>No Impact.</u>	The site's topography is generally level and no hillsides are found in the immediate area. Future development will not be affected by potential hazards involving landslides or mudslides.
F. Would the project result in or expose people to potential impacts involving erosion, changes in topography or unstable soil conditions from excavation, grading or fill? <u>No Impact.</u>	Some excavation will occur with the proposed improvements. The limited excavation will not result in any substantial changes in topography on the site. During excavation and construction, limited soil erosion may occur but this erosion is not expected to be significant due to the amount of earth movement.
G. Would the project result in or expose people to potential impacts involving subsidence of the land? <u>No Impact.</u>	Geologic hazards associated with subsidence are not known to be present in the area. Previous geotechnical studies prepared to evaluate the other site's in the surrounding area indicates there are no areas of subsidence.
H. Would the project result in or expose people to potential impacts involving expansive soils? <u>No Impact.</u>	The site and surrounding area is not subject to expansive soils according to the soils and geotechnical investigation. No significant adverse impacts related to expansive soils are anticipated.
I. Would the project result in or expose people to potential impacts involving unique geologic or physical features? <u>No Impact.</u>	The topography within the project area is level and there are no unique geologic or physical features present on the site or within the surrounding area. The proposed project will also maintain the existing topography of the site. Thus, the proposed use will not affect any unique geologic or physical feature in the region.
Water and Hydrology Impacts (Section 3.5)	
A. Would the project result in changes in absorption rates, drainage patterns, or the rate and amount of surface runoff? <u>Less Than Significant Impact.</u>	The site is presently undeveloped and storm water not conveyed to the neighboring streets is absorbed into the ground. The proposed project will involve the covering over of the approximately 50 percent of the site with impervious surfaces. The applicant will be required to install storm drain infrastructure required to serve the project. A temporary storm water retention basin may be constructed in the site's southwest corner.
B. Would the project result in exposure of people or property to water related hazards such as flooding? <u>No Impact.</u>	The project site is not located within a flood hazard area, as defined by the Federal Emergency Management Agency's Flood Insurance Mapping Program. As a result, no significant adverse flooding impacts are anticipated with the installation of the proposed storm drain infrastructure.
C. Would the project result in discharge into surface waters or other alteration of surface water quality (e.g., temperature, dissolved oxygen or turbidity?) <u>Less Than Significant Impact.</u>	Construction activities for the proposed project may lead to temporary discharges of loose soils, debris and other pollutants into the local storm drain system. However, the proposed project's use construction will not lead to any significant additional long-term storm water run off impacts with the installation of the proposed storm drain infrastructure.
D. Would the project result in changes in the amount of surface water in any water body? <u>Less Than Significant Impact.</u>	Storm water runoff will be conveyed to the existing storm drain system. The site will be covered with impervious surfaces following development. However, no significant change in runoff volume is expected and no significant change in the amount of surface water in any water body will occur. A temporary storm water retention basin may be constructed in the site's southwest corner.
E. Would the project result in changes in currents, or the course or direction of water movements? <u>Less Than Significant Impact.</u>	There are no water bodies within the project site or in the adjacent area that would be affected by the proposed development. The discharge of storm water into the storm drain system will not change nor be significant enough to change currents, or the course or direction of surface water.

Issue/Topic	Findings of Analysis
F. Would the project result in change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations? <u>Less than Significant Impact.</u>	No wells are planned on site. The water consumption projected for the proposed project is 48,984 gallons of water daily. This groundwater usage is not anticipated to result in a significant adverse impact on existing groundwater resources. The project applicant will be required to install the necessary infrastructure required to serve the proposed project.
G. Would the project result in altered direction or rate of flow of groundwater? <u>No Impact.</u>	The proposed project's construction will require minor excavation for footings and infrastructure. This excavation will not be deep enough to interrupt the flow of groundwater in the area. As a result, this excavation will not impact any underlying aquifers on site nor will it involve the construction and use of any wells or barriers which could affect the rate or direction of groundwater flow.
H. Would the project result in impacts to groundwater quality? <u>Less Than Significant Impact.</u>	No adverse impacts on groundwater quality are anticipated. The project will be required to obtain a storm water runoff permit for construction pursuant to the National Pollutant Discharge Elimination System (NPDES) requirements.
I. Would the project result in a substantial reduction in the amount of groundwater otherwise available for public water supplies? <u>Less than Significant Impact.</u>	No wells are planned on site. The water consumption projected for the proposed project is 48,820 gallons of water per day. Water consumption for the project does not represent a significant amount of the total water consumption in the planning area. The project applicant will be required to install the necessary infrastructure required to serve the proposed project.
Air Quality Impacts (Section 3.6)	
A. Would the project violate any air quality standard or contribute to an existing or projected air quality violation? <u>Potential Significant Impact Unless Mitigated.</u>	The short-term air quality impacts include construction equipment emissions, vehicle emissions, emissions from power and gas generation, and dust from excavation, grading, demolition, and debris transport that may accompany the construction of the proposed project. Mitigation measures have been recommended as a means to reduce short-term impacts. The daily long-term, operational emissions generated by the proposed project include 229 pounds of carbon monoxide, 29 pounds of nitrogen oxide, 2 pounds of sulfur dioxide, 3 pounds of PM10, and 34 pounds of reactive organic gases. These emissions are below SCAQMD thresholds.
B. Would the project expose sensitive receptors to pollutants? <u>No Impact</u>	The net increase long-term, operational emissions generated by the proposed will not adversely impact sensitive receptors in the area based on the information completed to identify toxic sites in the area.
C. Would the project alter air movements, moisture, or temperature, or cause any change in climate? <u>No Impact.</u>	The proposed project will not be large enough to alter air movement, moisture or temperature, or cause changes in climate either locally or regionally. The individual housing units will not exceed two stories.
D. Would the project create objectionable odors? <u>No Impact.</u>	The proposed project will not include activities which will generate odors. As a result, no odor impacts are anticipated with this project.
Traffic and Circulation Impacts (Section 3.7)	
A. Would the project result in increased vehicle trips or traffic congestion? <u>Potentially Significant Impact Unless Mitigated.</u>	The proposed project, under a worse case scenario, will result in up to 2,355 vehicle trips being generated on a daily basis. Of this total, 115 trips would occur during the morning peak hour and 158 trips would occur during the evening peak hour. The project applicant will be required to construct internal roadways and improve exterior roads pursuant to City requirements.
B. Would the project result in hazards to safety from design features (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)? <u>Potentially Significant Impact Unless Mitigated.</u>	The proposed project will not result in any major alteration in the existing roadway configuration in the area. The project applicant will be required to construct internal roadways and improve exterior roads pursuant to City requirements. Roadway construction standards are described in the Fontana Grandview Community Plan.
C. Would the project result in inadequate emergency access or access to nearby uses? <u>No Impact.</u>	Construction activities will be confined within the project site and not on the roadways serving the site. No closure of roadways or emergency access to the surrounding development is expected with the project's implementation.

Issue/Topic	Findings of Analysis
D. Would the project result in insufficient parking capacity on-site or off-site? <u>No Impact.</u>	The proposed project will be required to comply with the City's parking requirements. No on-street parking will be permitted. As a result, no significant adverse impacts on parking are anticipated.
E. Would the project result in hazards or barriers for pedestrians or bicyclists? <u>Less than Significant Impact</u>	The proposed project will not result in a disruption of existing bike lanes or pedestrian walkways in the vicinity. New bikeways will be constructed along the project's frontage with Curtis Avenue, Lytle Creek Road, and Knox Avenue.
F. Would the project result in conflicts with adopted policies supporting alternative transportation (e.g. bus turnouts, bicycle racks)? <u>No Impact</u>	The proposed development is not conflict with adopted policies related to alternative modes of transit. No bus stops or transit facilities will be impacted by the proposed residential development.
G. Would the project result in rail, waterborne or air traffic impacts? <u>No Impact.</u>	No such facilities are located in the immediate area. The proposed residential project is not located near an airport, railroad, or port facility.
Biological Resources Impacts (Section 3.8)	
A. Would the project result in impacts to endangered, threatened or rare species or their habitats (including but not limited to plants, fish, insects, animals, and birds)? <u>No Impact.</u>	The site is presently developed and onsite vegetation is limited to ruderal vegetation. Review of California Department of Fish and Game survey data for the local U.S.G.S Quadrangle indicates no rare or endangered plant or animal species are found in the project area.
B. Would the project result in impacts to locally designated species (e.g. heritage trees)? <u>No Impact.</u>	No locally designated species are located within the project site or in the surrounding area. Only ruderal and introduced vegetation are found within the acre site.
C. Would the project result in impacts to locally designated natural communities, (e.g. oak forest, coastal habitat, etc.)? <u>No Impact.</u>	The area surrounding the proposed project site is urbanizing and contains no natural plant communities or protected natural communities. The vegetation in the surrounding area, and the animal species supported in these habitats, include species that are commonly found in urban environments.
D. Would the project result in impacts to wetland habitat (e.g. marsh, riparian and vernal pool)? <u>No Impact.</u>	The project site is presently undeveloped though it contains no wetland habitat. The site's natural hydrology has been altered as part of previous disturbance. No natural blue line streams are identified on site or in the surrounding area according to topographic maps published by the United States Geological Survey.
E. Would the project result in impacts to wildlife dispersal or migration corridors? <u>No Impact</u>	The proposed project will not affect wildlife dispersal migration in the region. The project site contains limited ruderal vegetation. The surrounding area is fully developed or planned for development. There are no natural communities or wildlife migration corridors located on-site.
Energy and Mineral Resources Impacts (Section 3.9)	
A. Would the project conflict with adopted energy conservation plans? <u>Less Than Significant Impact</u>	The project site does not contain mineral, oil, or timber resources nor is it subject to natural resource extraction activities. The project area is located within a Significant Mineral Aggregate Resource Area (SMARA) though extraction activities within this area are not permitted under the General Plan.
B. Would the project use non-renewable resources in a wasteful and inefficient manner? <u>Less than Significant Impact</u>	The proposed project will require energy for construction and operation, but is not expected to consume energy resources in a wasteful manner. The project will comply with the California Administrative Code Title 24 requirements related to energy conservation. The proposed project will consume 2,616 kWh of electricity and 34,421 cubic feet of natural gas per day.
C. Will the project result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State? <u>Less Than Significant Impact</u>	There are no known mineral, oil or energy resources on the site or the surrounding area. The resources and materials used in the construction of the proposed project will not include any materials that are considered rare or unique. The project will not result in any significant adverse effects on mineral resources in the region.

Issue/Topic	Findings of Analysis
Risk of Upset and Human Health Impacts (Section 3.10)	
A. Would the project involve a risk of accidental explosion or release of hazardous substances? <u>No Impact</u>	Hazardous materials that may be stored on site will be limited to cleaning solvents, fertilizers, pesticides and other chemicals in a household setting. No adverse impacts are anticipated with this development.
B. Would the project involve possible interference with an emergency response plan or emergency evacuation plan? <u>No Impact</u>	The site does not serve as an emergency access or evacuation route for the surrounding parcels. Construction and subsequent occupancy of the proposed development will have no impact on local emergency evacuation routes.
C. Would the project involve the creation of any health hazard or potential health hazards? <u>No Impact</u>	The project will be required to comply with pertinent health and safety codes and fire safety regulations. No health hazards are expected to be created by the proposed project.
D. Would the project involve exposure of people to existing sources of potential health hazards? <u>No Impact</u>	The proposed project will not be involved in the manufacture of hazardous materials. The proposed project must operate pursuant to the requirements of the San Bernardino County Fire Department, SCAQMD, Regional Water Quality Control Board, California Department of Toxic Substances Control, and other pertinent regulatory agencies.
E. Would the project involve increased fire hazards in areas with flammable brush, grass, or trees? <u>No Impact</u>	The project site is located within an urbanizing area. No wilderness or chaparral areas are located within the site. No wildfire risk is associated with the proposed project.
Noise Impacts (Section 3.11)	
A. Would the project result in increases in existing noise levels? <u>Less than Significant Impact</u>	The FHWA Noise Prediction Model shows that future traffic will result in an increase in traffic noise levels of less than 3.0 dB. Traffic noise levels along Lytle Creek Road and Curtis Avenue will increase by approximately 0.71 dBA and 0.55 dBA respectively.
B. Would the project result in exposure of people to severe noise levels? <u>Potentially Significant Impact Unless Mitigated</u>	Construction activities at the project site could lead to noise impacts on the adjacent uses though none of these uses are considered noise sensitive. Construction machinery will be capable of generating periodic peak noise levels ranging from 70 to 95 dBA at a distance of 50 feet from the source.
Public Services Impacts (Section 3.12)	
A. Would the project have an effect upon, or result in a need for new or altered government services in relation to fire protection? <u>Less Than Significant Impact</u>	The proposed project is not expected to significantly increase the demand for fire protection. The proposed development must conform to current fire code requirements along with any pertinent fire safety standards and regulations.
B. Would the project have an effect upon, or result in a need for new or altered government services in relation to police protection? <u>Less than Significant Impact</u>	Police protection and law enforcement services in the proposed project area are provided by the Fontana Police Department. Potential calls for service will not significantly increase due to the proposed development. Based on the City standards for law enforcement, the proposed development will generate a need for 0.76 uniformed personnel and 0.33 support personnel.
C. Would the project have an effect upon, or result in a need for new or altered government services in relation to school services? <u>Potentially Significant Impact Unless Mitigated</u>	The proposed project will consist of a 157 single-family units and this new construction will lead to additional student generation. The project is located within the service boundaries of the Fontana Unified School District. The proposed project is expected to result in an additional 129 students. Mitigation (payment of fees) has been recommended.
D. Would the project have an effect upon, or result in a need for new or altered government services in relation to the maintenance of public facilities, including roads? <u>Less Than Significant Impact</u>	No adverse impact on governmental services or roadway maintenance is expected. The majority of the vehicle trips to and from the proposed project site will consist of light duty vehicles. The applicant will be required to install roadways needed to serve the project and these improvements are identified in the Fontana Grandview Community Plan.

Issue/Topic	Findings of Analysis
E. Would the project have an effect upon, or result in a need for new or altered government services in relation to other governmental services? <u>Potentially Significant Impact Unless Mitigated.</u>	No new governmental services will be needed to serve the project. The project is not expected to have a significant adverse impact on existing governmental services. Mitigation, however, has been recommended to reduce potential impacts on library services.
Utilities Impacts (Section 3.13)	
A. Would the project result in a need for new systems, or substantial alterations to power and gas services? <u>Less Than Significant Impact</u>	The proposed project will use electricity and natural gas. On an average day, electrical consumption is anticipated to be 2,616 kWh. Natural gas consumption is not anticipated to exceed 34,421 cubic feet per day. The existing utility purveyors will be capable of meeting the projected demand.
B. Would the project result in a need for new systems, or substantial alterations to communication systems? <u>No Impact</u>	The project site will require telephone services (Pacific Bell). The potential service demand is no different from the services currently available to the surrounding area. As a result, no significant impact on communication systems is anticipated with the proposed project.
C. Would the project result in a need for new systems, or substantial alterations to local or regional water treatment or distribution facilities? <u>Less Than Significant Impact</u>	The water consumption is projected to be 48,984 gallons per day. This demand for water is not expected to require significant upgrades to existing facilities or the need for new facilities. The project applicant will be required to install the necessary infrastructure needed to serve the proposed project.
D. Would the project result in a need for new systems, or substantial alterations to sewer services or septic tanks? <u>Less than Significant Impact</u>	Effluent generation is projected to be 40,820 gallons per day. Sewer connections will be made to existing lines. Coordination with the local service provider will be needed for sewer service. Impacts on sewer services will be less than significant following the installation of the required infrastructure. The project applicant will be required to install the necessary infrastructure needed to serve the proposed project.
E. Would the project result in a need for new systems, or substantial alterations to storm water drainage? <u>Less Than Significant Impact</u>	Onsite street runoff is currently provided by surface flows into gutters which is conveyed into storm drains. The project will result in a change in the amount of impervious areas. The project applicant will be required to install the necessary infrastructure needed to serve the proposed project. The applicant may be required to construct an interim storm water retention basin in the southwest corner of the project site.
F. Would the project result in a need for new systems, or substantial alterations to solid waste disposal? <u>No Impact</u>	The proposed project will result in the generation of approximately 1,570 pounds of solid waste daily. The impacts on solid waste disposal will be less than significant.
G. Will the project result in the need for new systems, or substantial alterations to local or regional water supplies? <u>No Impact.</u>	The water consumption is projected to be 48,984 gallons per day. This demand for water is not expected to require significant upgrades to existing facilities or the need for new facilities.
Aesthetic Impacts (Section 3.14)	
A. Would the project affect a scenic vista or scenic highway? <u>No Impact</u>	There are no scenic views in the area that would be adversely impacted by the proposed development. In addition, there are no scenic highways located in the vicinity of the proposed project site.
B. Would the project have a demonstrable negative aesthetic effect? <u>Potentially Significant Impact Unless Mitigated</u>	The landscaping of the site and upgrading of the proposed project will result in a beneficial aesthetic impact on the site and the surrounding area. Mitigation has been recommended to reduce the potential for graffiti along the perimeter wall.
C. Would the project create light or glare? <u>Less Than Significant Impact</u>	The proposed project will lead to the introduction of new light and glare sources at the site. These light and glare sources are not expected to create adverse impacts on surrounding uses.

Issue/Topic	Findings of Analysis
Cultural Resources Impacts (Section 3.15)	
A. Would the project disturb paleontological resources? <u>No Impact.</u>	The potential for paleontological resources in the area is considered low due to the site's geology. The proposed project is not expected to disturb any paleontological resources on the site.
B. Would the project disturb archaeological resources? <u>Potentially Significant Impact Unless Mitigated</u>	Any archaeological resources that may have been present prior to development of the site are not expected to be found due to past soil disturbance. The site is not considered archaeologically sensitive though mitigation has been recommended in the event resources are encountered.
C. Would the project affect historic resources? <u>No Impact</u>	There are no historic structures or objects within the site. As a result, no significant adverse impacts are anticipated.
D. Would the project have the potential to cause a physical change which would affect unique ethnic cultural values? <u>No Impact</u>	The project site does not represent any known historic or cultural significance to any ethnic or cultural group. No impacts on ethnic cultural values are expected with the proposed residential project.
E. Would the project restrict existing religious or sacred uses within the potential impact area? <u>No Impact.</u>	The project site does not contain any religious or sacred structure. There are no sacred uses in the area which may be restricted by the project. No restrictions on existing religious facilities in the surrounding area will occur with the proposed development.
Recreation Impacts (Section 3.16)	
A. Would the project increase the demand for neighborhood or regional parks? <u>Less Than Significant Impact</u>	The proposed project will increase the permanent population of the City. As a result, the proposed project will have an impact on the demand for recreational facilities. Based on a projected population of 549 persons, the proposed development will require 2.85 acres of neighborhood parkland and 2.85 acres of community parkland. The project applicant will be required to pay park development fees to offset the projected demand.
B. Would the project affect existing recreational opportunities? <u>No Impacts</u>	There are no existing recreational facilities within the project boundaries. Thus, the construction and operation of the proposed development will not adversely affect existing recreational opportunities in the City or the surrounding area.
Source: Blodgett/Baylosis Associates. 1999	

2.1 Location and Setting

The proposed project site is located in the City of Fontana, which is located in the southwestern corner of San Bernardino County. The City of Fontana is bounded by the City of Rancho Cucamonga on the west, the City of Ontario on the south, and the City of Rialto on the east. Regional access to the City is provided by the San Bernardino Freeway (I-10) which is located approximately 3.5 miles south of the proposed project site. This freeway bisects the City east to west with connections provided by full interchanges located at Cherry Avenue and Sierra Avenue. The Devore Freeway (I-15) is located 2.9 miles to the west of the proposed project site with full interchanges located at Highland Avenue and Baseline Road. The City's location in a regional context is provided in Exhibit 1.

The proposed project site is located in that portion of the City located north of the San Bernardino Freeway, between Baseline Road and Highland Avenue, as indicated in Exhibit 2. The project site, consisting of 40 acres, is located on the northeast corner of Curtis Avenue and Lytle Creek Road. The project site has been rough graded and on-site vegetation is limited to weeds and other ruderal species. Curtis Avenue, located along the site's southerly frontage and Lytle Creek Road located along the westerly frontage, are fully improved.¹ Surrounding land uses and development are discussed in greater detail in Section 3.2. The proposed concept plan is shown in Exhibit 3.

2.2 Project Description

The proposed project, if approved, will involve the construction of 157 single-family detached homes within a 40-acre parcel. The gross development density is 3.94 units per acre. The area of the individual lots will range from 7,200 square feet to 13,386 square feet.² Specifically, the applicant (L&L U.S.A., Inc.) is seeking to undertake the following activities as part of the current development proposal:

- ☐ The site will undergo final grading and site preparation to accommodate the proposed improvements;
- ☐ 157 single-family detached homes will be constructed;
- ☐ Landscaping, wall treatments, and internal roads and other ancillary public improvements will be provided;

Table 2

Overview of Proposed Development

Component	Description
Units	157 single-family homes
Density (net)	5.53 units/acre
Density (gross)	3.94 units/acre
Minimum Lot Area	7,200 square feet
Maximum Lot Area	13,386 square feet
Component	Area
Residential Units	27.58 acres
Perimeter ROW	3.33 acres
Internal roads	8.18 acres
Landscaped Easement	0.79 acres
Total Site Area	39.88 acres
Source: URS International Consultants, Inc. 1998	

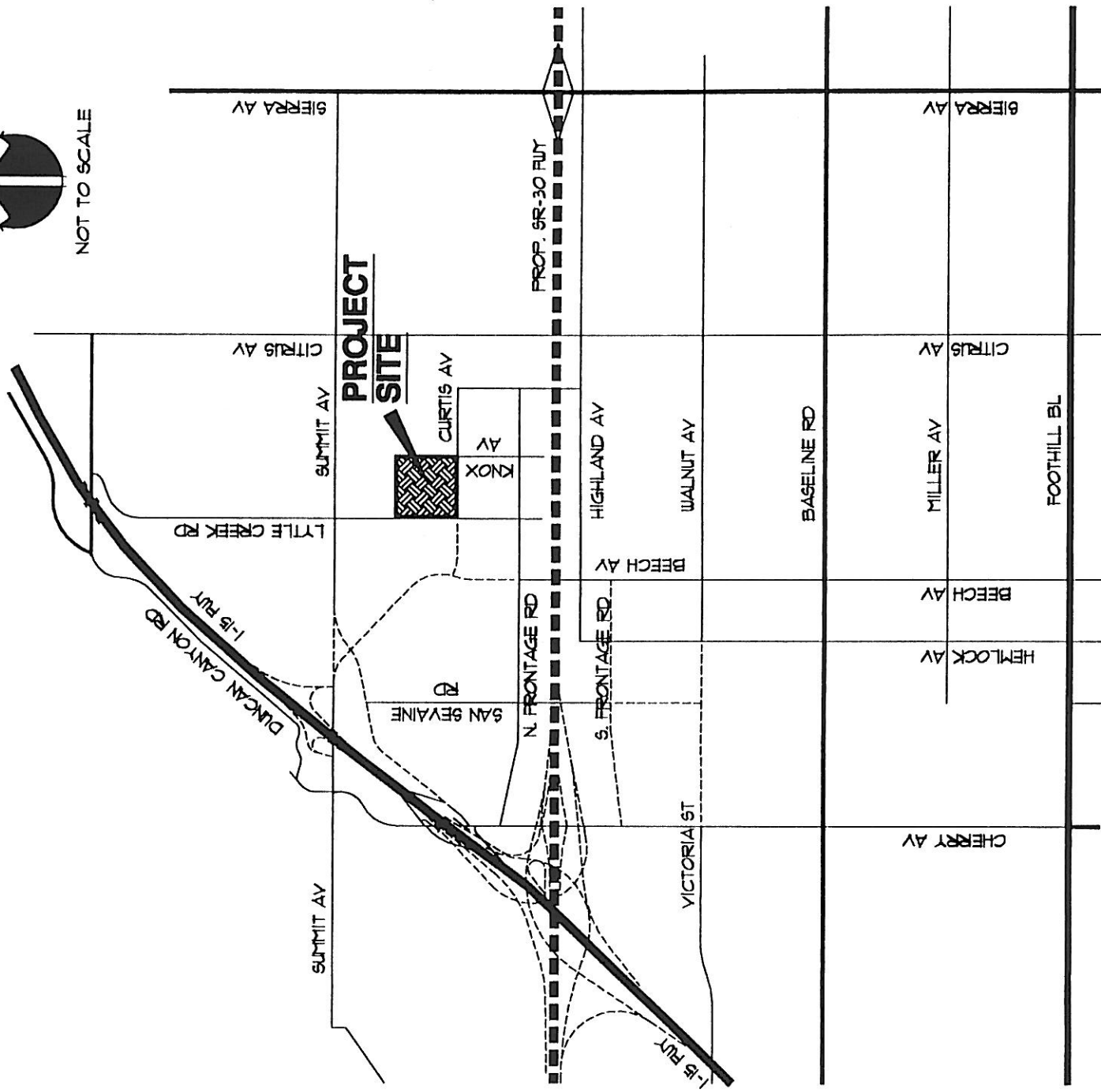
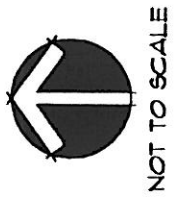


Exhibit 1
Regional Location
Source: Blodgett/Baylosis Associates



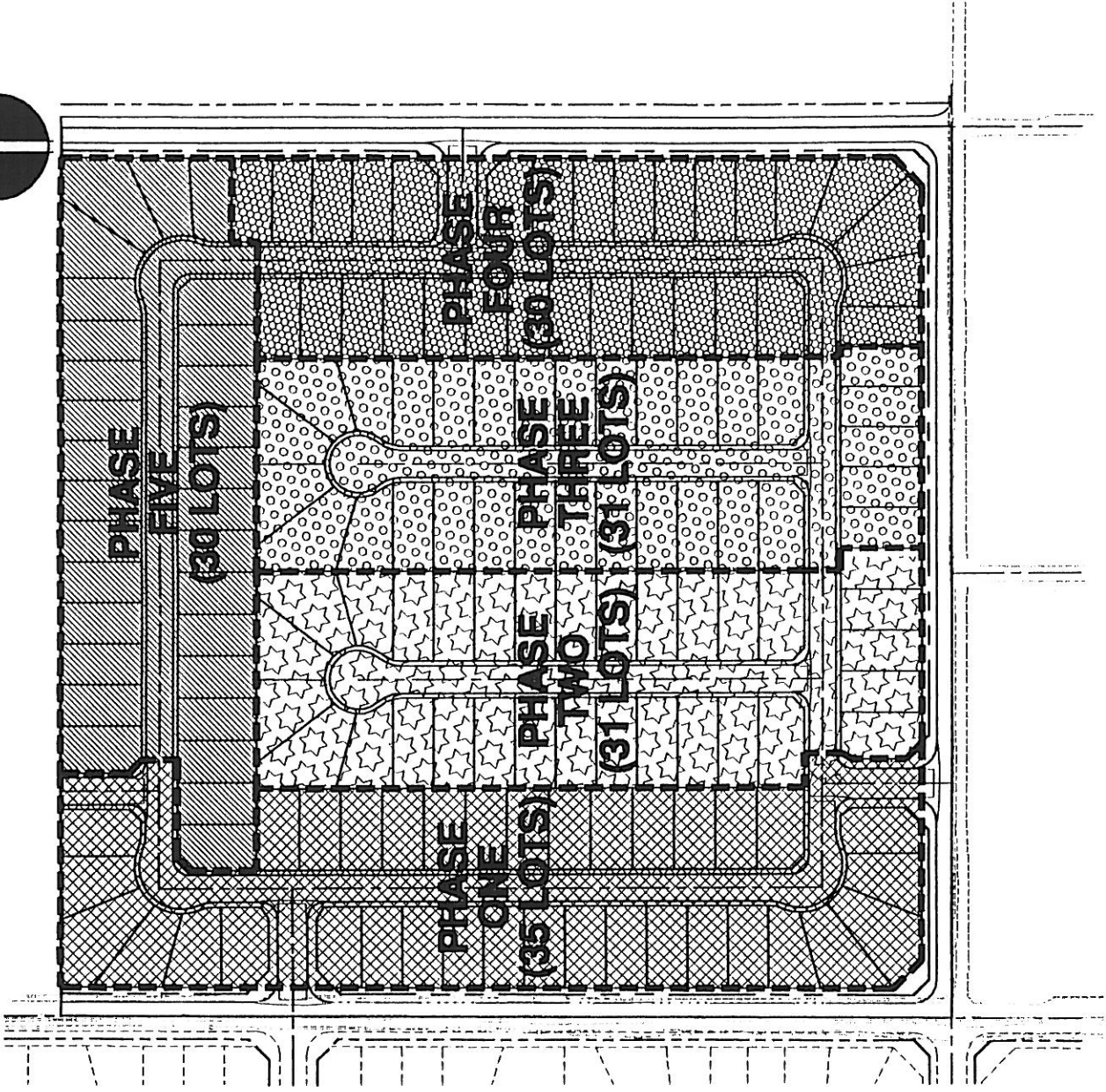
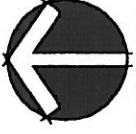
LEGEND :

- A HUNTER'S RIDGE (A)
- B SUMMIT HEIGHTS (P)
- C SIERRA LAKES (A)
- D WESTGATE (A)
- E HERITAGE (WEST END) (A)
- F RANCHO FONTANA (A)
- G CALIFORNIA LANDINGS (A)
- H WALNUT VILLAGE (A)
- I CLURMAN (P)
- J NORTHGATE (A)
- K MORNINGSIDE (A)
- L FONTANA STAR (A)
- M FONTANA GRANDVIEW (P)

- (A) APPROVED
- (P) PROPOSED

Exhibit 2
Project Site Location

Source: Blodgett/Baylosis Associates



NOTES :

STREETS AND OTHER INFRASTRUCTURE SHALL BE COMPLETED IN ACCORDANCE WITH THE TENTATIVE TRACT MAP CONDITIONS OF APPROVAL.

Exhibit 3
Site Plan Map
Source: L&L, USA.

- ☐ Four connector roads providing connections to Lytle Creek Road, Curtis Avenue, Knox Avenue, and to a future roadway located along the site's northerly boundary, will be provided; and
- ☐ Once occupied, the proposed development will accommodate approximately 549 persons.

The proposed site plan, illustrated in Exhibit 3, indicates the placement of the 157 individual lots within the proposed 40-acre development. The individual parcels will be oriented around an internal loop road system and two cul-de-sacs. Key elements of the proposed development are summarized in Table 2. According to the applicant, the proposed development's construction will occur during five phases:

- ☐ *Phase 1* consists of 35 units within the westerly portion of the project site;
- ☐ *Phase 2*, consisting of 31 units located within the west-central portion of the site;
- ☐ *Phase 3*, consisting of 31 units located along the east-central portion;
- ☐ *Phase 4*, consisting of 30 units located in the easterly portion of the proposed project site; and
- ☐ *Phase 5*, consisting of 30 units located in the northernmost portion of the proposed project site.

The entire development will be constructed over a three-to-four year period.³

2.3 Objectives & Discretionary Actions

In approving or denying this project, the City is required to make specific findings. In making findings to approve or disapprove a project, the Lead Agency must weigh the project objectives.⁴ For this project, the City seeks to accomplish the following objectives:

- ☐ To develop community with all single-family detached homes on lots of 7,200 square feet and larger in order to help achieve the City's goal of providing additional large lot development in the northern portion of the City;
- ☐ To develop a master planned community in conformance with the spirit and intent of the City's General Plan and in conformance with the Development Code, thereby allowing fast-tracking of the planning process via the Community Plan process;
- ☐ To continue to enhance the image of the City;
- ☐ To create a high quality and unique design for the proposed development;

- ☐ To develop a community consisting of larger homes;
- ☐ To provide entries accentuated by landscaping, thus creating enhanced gateways to the planned community.
- ☐ To provide an efficient and attractive system of collector streets and local streets;
- ☐ To support the City in achieving its long-range vision; and
- ☐ To provide adequate infrastructure and public facilities to meet the projected demand.

A discretionary decision is an action taken by a government agency (for this project, the government agency is the City of Fontana) that calls for the exercise of judgement in deciding whether to approve a project. The City must approve the Community Plan, Tentative Tract Map, Mitigated Negative Declaration, proposed zone change, and the Mitigation Monitoring Program for the project prior to approval.

3.1 Scope of Analysis

This section analyzes the potential environmental impacts which may result from the construction and subsequent occupancy of the 157 unit residential development described in Section 2 of this Initial Study. The issue areas evaluated herein include the following: land use and development; population and housing; earth and geology; water and hydrology; air quality; transportation and circulation; biological resources; energy and mineral resources; risk of upset and human health; noise; public services; utilities; aesthetics; cultural resources; and recreation.

The environmental analysis contained in this section of the Initial Study is patterned after the State of California's Initial Study Checklist. Under each issue area, the description of the *thresholds of significance* is provided. These thresholds assist the City in making a determination as to whether there is a potential for significant or adverse changes to the environment. For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part. To each question, there are four possible responses:

- ☐ *No Impact.* The proposed residential development will not have any measurable environmental impact on the environment and no further analysis is required.
- ☐ *Less Than Significant Impact.* The proposed residential development may have the potential for impacting the environment, although these impacts will be below levels or thresholds that the City or other responsible agencies consider to be significant and no further analysis is required.
- ☐ *Potentially Significant Impact Unless Mitigated.* The proposed residential development may have the potential to generate impacts which the City considers to be a significant impact on the environment, although recommended mitigation measures will be effective in reducing impacts to levels that are less than significant.

Significant Effects

With regard to the identification of significant effects, CEQA provides the following guidance:

"The determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data. An ironclad definition of a significant effect is not possible because the significance of an activity may vary with the setting."

CEQA provides some examples of consequences which may be deemed to have a significant effect on the environment in Appendix G of the State CEQA Guidelines. Other criteria and standards used by the District, responsible agencies, and trustee agencies are also used in the identification of potentially significant effects.

- ☐ *Potentially Significant Impact.* The proposed residential development may or is known to represent impacts which are considered significant even with the recommended mitigation.

The City, through the preparation this Initial Study, determined that no unmitigable impacts would occur with the proposed project's construction and subsequent occupancy. The sources of information are identified using endnotes, which are listed in Section 4.3 of this Initial Study.

3.2 Land Use and Development Impacts

According to Appendix G of the CEQA Guidelines, a project may be deemed to have a significant impact on land use and development if it results in any of the following:

- ☐ A conflict with the adopted environmental plans and goals of the community in which it is located;
- ☐ A disruption or division of the physical arrangement of an established community;
- ☐ A conflict with established recreational, educational, religious, or scientific uses of the area;
- ☐ A displacement of a large number of persons;
- ☐ Incompatibility with existing land uses in the vicinity; or
- ☐ A conversion of prime agricultural land to non-agricultural use or impairment of the productivity of prime agricultural land.

A. Would the project conflict with the general plan designation or zoning? *Less Than Significant Impact*

The proposed project site is designated as R-PC, *Residential Planned Community* in the City of Fontana General Plan. This land use designation provides for single-family detached units within 7,200 square foot lots. Lot sizes within the proposed development will range from 7,200 square feet to 13,386 square feet. The net density of the proposed development will be 3.94 units per acre and the gross density will be 5.53 units per acre. The development envisioned for the proposed project site corresponds with the applicable General Plan designation and, as a result, no general plan amendment will be required to implement the proposed project.⁵

The site is zoned as *Single Family Residential*.- R-1-10,000.⁶ Approval of the proposed project, as currently envisioned will require the change in the site's zoning from R-1-10,000 to R-1-7,200 to accommodate the proposed development.

The proposed project will be consistent with the land use designations for adjacent properties and conforms to the intent of the *Fontana General Plan* and *Fontana Zoning and Development Code*. Based on the analysis contained herein, the Lead Agency determined that the impacts are less than significant.

B. *Would the project conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project?* No Impact

The proposed project site is located within the North Fontana Redevelopment Project Area. The primary objective of the Redevelopment Plan is to remove blighted conditions and to improve the existing development within the project area. The proposed development is not a redevelopment project. The proposed project will not be in conflict with the redevelopment goals of this plan.

The proposed residential development will not be in conflict with pertinent provisions of the Caltrans State Route 30 Project, *San Bernardino County Congestion Management Plan*, *Regional Comprehensive Plan*, and *Regional Mobility Plan*, the *Regional Water Quality Management Plan*, the *North Fontana Area Water Management Plan*, the *San Bernardino County Hazardous Waste Management Plan*, or the *San Bernardino County Solid Waste Management Plan*.

The proposed project does not meet Southern California Association of Governments (SCAG) significance criteria for a regionally significant project. The proposed residential development, consisting of 157 single-family units, does not meet the significance criteria of the SCAQMD which is 166 units.⁷ Thus, the project will not affect any environmental plan or policy for the area or region and no significant adverse impact is anticipated. Based on the analysis contained herein, the Lead Agency has determined that there are no significant environmental effects associated with the proposed residential development.

C. *Will the project be compatible with existing land uses in the vicinity?* No Impact

The 40 acre proposed project site is currently vacant and undeveloped.⁸ Adjacent land uses include, but are not limited to the following:

- ☐ Undeveloped land to the north is designated as *Residential Planned Community* in the City of Fontana General Plan.
- ☐ Existing single-family residential development is located to the south, south of Curtis Avenue.

- ☐ There is undeveloped land is located to the west, west of Lytle Creek Road. This area is designated as *Residential Planned Community* in the City of Fontana General Plan. This area will be developed pursuant to Tract No. 15841 (Summit Heights) and will consist of residential development, commercial development, and an office park.
- ☐ Undeveloped land is located to the east of the proposed project site. This area is designated as *Residential Planned Community* in the City of Fontana General Plan.

Under the City's General Plan, the site and adjacent areas to the north, east, south, and west are planned for residential development.⁹ Existing land uses in the vicinity, and planned land uses in the surrounding area, are similar to that being contemplated under the proposed project.¹⁰ A number of major developments have been approved, proposed, or developed in the vicinity of proposed development site including the following:

- ☐ *Hunter's Ridge* (570 acres) is located one mile northwest of the project site, north of the I-15 Freeway. Hunter's Ridge will consist of 1,501 single-family residences, 620 multi-family residences, 5.5 acres of neighborhood commercial uses, parkland, open space, and a school site.
- ☐ *Summit Heights* (316 acres) is located adjacent to the proposed project site on the west. The site is north of Highland Avenue, west of Lytle Creek Road, and south of Summit Avenue. The Summit Heights project will consist of residential development, commercial and office development, parkland areas, and other public uses.
- ☐ *Sierra Lakes* (700 acres) is located one mile east of the project site, adjacent to Citrus Avenue and Highland Avenue. Sierra Lakes will consist of 2,100 single-family residences, 64 acres of commercial and business park uses, a golf course, parks, and a school site.
- ☐ *Westgate* (954 acres) is located one mile southwest of the project site. This development will contain a mix of residential uses, commercial development, parks, and public uses.
- ☐ *California Landings* (223 acres) is located one mile south of the project site, south of Highland Avenue. California Landings will consist of 750 single family homes, 15 acres of commercial uses, a park, and a school site.
- ☐ *Morningside* (120 acres) is located one mile southwest of the project site, north of Baseline Avenue and east of Cherry Avenue. The Morningside project will consist of 440 residential units and 10 acres of commercial uses.
- ☐ *Village of Heritage* (1,478 acres) is located two miles southwest of the project site north of Foothill Boulevard. This project, when completed, will consist of 2,955 single family residences, 294 multi-family residences, 31 acres of commercial development, 110 acres of office park, 448 acres of business park, open space/parks, and two school sites.

- ☐ **Walnut Village** (342 acres) is located two miles southeast of the project site, south of Highland Avenue, and east of Sierra Avenue. Walnut Village will consist of 1,644 residential units, 39 acres of commercial uses, community facilities, and park/open space areas.

The proposed Fontana Grandview project will consist of 157 single-family units located within a 40-acre site. The proposed project will be compatible with the planned and approved developments within the vicinity. The proposed project, as currently envisioned, is consistent with the City of Fontana General Plan in terms of intended land uses and development within the project site. Based on the on the analysis contained herein, the Lead Agency has determined that there are no significant environmental effects associated with the proposed development.

D. Would the project affect agricultural resources or operations (e.g., impact to soils or farmlands, or impacts from incompatible land uses)? No Impact

While the site is presently vacant and undeveloped, no agricultural production or activities are present.¹¹ Within the City, agricultural lands account for approximately 840 acres, the majority of which are productive vineyards. As part of their *Farmland Mapping and Monitoring Program*, the project site has been designated as "Other Land" by the California Department of Conservation. Lands so designated are not considered to be "Prime Farmland." The site does not contribute to the agricultural productivity of either the immediate area, region or the state. As a result, the proposed development will have a negligible impact on either agricultural production or resources. Based on the on the analysis contained herein, the Lead Agency has determined that there are no significant environmental effects on agricultural resources or operations associated with the proposed residential development.

E. Would the project disrupt or divide the physical arrangement of an established community (including a low-income or minority community)? No Impact

The areas located to the north, west, and east of the proposed project site are currently undeveloped. Access to the proposed project site will be provided by internal roadways connecting with Curtis Avenue on the south, Knox Avenue on the east (which remains to be constructed), and Lytle Creek Road on the west. Given the nature and extent of development in the surrounding area, and the configuration of existing and planned roadways, the Lead Agency has determined that there are no significant environmental effects associated with the proposed residential development.

3.3 Population & Housing Impacts

According to Appendix G of the CEQA Guidelines, a project may be deemed to have a significant impact on housing and population if it results in any of the following:

- ☐ A substantial growth or concentration of population or a displacement of a large number of persons;
- ☐ An exceedance of official regional or local projections; or
- ☐ A displacement of affordable housing.

A. *Would the project cumulatively exceed official regional or local population projections? Less Than Significant Impact*

The City's 1990 population was estimated at 87,500 residents. As of January 1, 1998, the City's population was estimated to be 107,590 residents.¹² This is an increase of 22.9 percent between 1990 and 1998. In 1990, there were 29,100 housing units in the City in 1990, according to the U.S. Census. In 1998, the Department of Finance estimated there were 34,101 housing units, an increase of 17.2 percent since 1990. These statistics indicate the City's significant population growth may be attributed to both new housing development and natural population increases (increased household size).

The construction of the 157 single-family homes will translate into an additional 549 residents, assuming an average household size of 3.498 persons per unit.¹³ The Southern California Association of Governments (SCAG) projections for the year 2010 anticipates the City's population to be 167,052 residents. These same projections call for 47,394 housing units in the year 2010. The proposed project will represent less than one percent of the total forecasted population and housing units in the City.¹⁴ As a result, the proposed project will not exceed official regional or local population and housing projections.

No homes are located within the proposed project site's boundaries. As a result, no displacement impacts will occur with the proposed development.

Based on the on the analysis contained herein, the Lead Agency has determined that the potential

**Table 3
Population Projections**

	Factor
Total Housing Units	157 units
Ave. Household Size	3.498 persons/unit
Total Population	549 persons
Source: Blodgett/Baylosis Associates, 1999	

environmental effects are less than significant.

B. Would the project induce substantial growth in an area either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)? Less Than Significant Impact

The majority of the parcels located immediately adjacent to the site are currently undeveloped. Scattered lots located in the area to the south, south of Curtis Avenue, are developed as single-family residential.

As indicated previously, the project site is designated for residential development in the City of Fontana General Plan. The site's present zoning permits single-family development within 10,000 square foot lots. The applicant is requesting a zone change that would permit development within 7,200 square foot lots, which would result in a higher density of residential development compared to the density permitted under the existing zoning designation. As a result, the potential growth inducing impacts for this project would be somewhat higher when compared to a lower density development permitted under the existing zoning.

No significant adverse growth inducing impacts are anticipated since the proposed project is consistent with the City of Fontana General Plan. Based on the on the analysis contained herein, the Lead Agency has determined that there are no potential growth-inducing environmental effects.

C. Would the project displace existing housing, especially affordable housing? No Impact

No residential units are located on site and no displacement impacts will occur as part of the proposed project's development.¹⁵ In addition, the proposed project would not result in the displacement or elimination of any "planned" land uses.¹⁶

Based on the on the analysis contained herein, the Lead Agency has determined that there are no significant adverse impacts related to potential displacement associated with the proposed project's construction and subsequent occupancy.

3.4 Earth & Seismicity Impacts

According to Appendix G of the CEQA Guidelines, a project may be deemed to have a significant adverse environmental impact on the environment if it results in the following:

- ☐ Exposure of people or structures to major geologic hazards; or
- ☐ The damage or destruction of unique geologic features.

A. Would the project result in or expose people to potential impacts involving fault rupture? No Impact

The most significant geologic hazard to the project site is related to the potential for moderate to severe seismic shaking that is likely to occur during the design life of the proposed project. The project site is located in the seismically active Southern California region which is subject to the influence of several fault systems that are considered to be active or potentially active.

An active fault is defined by the State of California as a surface fault which has exhibited surface displacement within the Holocene time (the last 11,000 years). A potentially active fault is defined by the State as a fault with a history of movement within Pleistocene time (between 11,000 and 1.6 million years ago). These active and potentially active faults are capable of producing ground motion at the site. It is anticipated that the project site will periodically experience the effects associated with small to moderate magnitude earthquakes. No active fault traces are known to traverse the proposed project site.¹⁷

Potential sources of ground shaking hazards on-site include the San Andreas fault, San Jacinto fault, Cucamonga fault, Red Hill fault, Rialto-Colton fault, and an unnamed fault which traverses the City.¹⁸ The San Andreas fault is located seven miles from the proposed project site, the Cucamonga fault is located two miles from the proposed project site, and the San Jacinto fault is located eight miles to the north. The maximum credible earthquake on the San Andreas fault is projected to be 8.2 R(Richter), 7.5 R on the Cucamonga fault, and 7.5 R on the San Jacinto fault.¹⁹ Ground motion intensities for the proposed project site and surrounding area, as measured according to the Modified Mercalli Scale, are projected to be VII from a major 8.0 earthquake along the San Andreas Fault (refer to box located to the right).²⁰

The Mercalli Scale

I	Tremor not felt.
II	Tremor felt by persons at rest or in upper floors of a building.
III	Tremor felt indoors, vibrations feel like a light truck passing by; may not be recognized as an earthquake, hanging objects swing.
IV	Hanging objects swing, vibrations similar to a heavy truck, parked cars rock, windows rattle, some cracks in wooden walls and frames.
V	Earthquake felt outdoors, small unstable objects are displaced or upset, doors swing.
VI	Earthquake felt by everyone, windows, dishes, and glassware are broken. Knick-knacks and books fall off shelves; pictures fall off walls, cracking in weak plaster and masonry structures.
VII	Steering of motor cars is affected, partial collapse of masonry structures, failure of stucco and some masonry walls, twisting and falling of chimneys, frame structures may shift.
VIII	Damage slight in specially designed structures, though significant in unreinforced buildings.
IX	Masonry structures destroyed or heavily damaged, damage to foundations, underground pipes are broken, conspicuous cracks in ground.
X	Most masonry and frame structures are destroyed, most foundations, serious damage to dams, dikes, and embankments, underground pipelines are seriously damaged, large landslides.
XI	Underground pipelines completely out of service, widespread ground disturbances, severe damage to wood-frame structures.
XII	Damage is nearly total.

While the proposed development will increase the number of persons who will be exposed to seismic hazards with the site's development, the level of risk is no greater than hazards present in other areas of the Southern California region. The wood-frame construction that will be used in residential structures on-site generally perform well during earthquakes. Development must conform with all pertinent provisions of the Uniform Building Code and other building construction standards

Based on the analysis contained herein, the lead Agency determined that there are no fault-rupture impacts associated with the proposed development.

B. Would the project result in or expose people to potential impacts involving ground shaking? Less Than Significant Impact

The proposed project will be subject to ground shaking hazards associated with earthquakes in the region. Future residents will be exposed to potential seismic hazards commonly found throughout the Southern California region.

A magnitude 8.2 Richter (R) earthquake on the San Andreas fault would result in a peak rock acceleration of 0.70 gravity (g), a repeatable ground acceleration of 0.45 g, and the duration of shaking is projected to last approximately 35 seconds. A magnitude 7.5 R earthquake on the Cucamonga fault would result in a peak rock acceleration of 0.73 gravity (g), a repeatable ground acceleration of 0.47 g, and the duration of shaking is projected to last approximately 33 seconds. Finally, a magnitude 7.5 R earthquake on the San Jacinto fault would result in a peak rock acceleration of 0.45 gravity (g), a repeatable ground acceleration of 0.29 g, and the duration of shaking is projected to last approximately 31 seconds.²¹

The level of risk at the proposed development is not unique or otherwise greater than that anticipated for the surrounding region. Building design and construction required for the proposed development must comply with applicable standard building requirements and seismic design criteria. As a result, the Lead Agency has determined that the potential impacts related to ground-shaking are less than significant.

C. Would the project result in or expose people to potential impacts involving liquefaction? Less Than Significant Impact

Liquefaction refers to the sudden loss of shear strength in a loose, saturated granular soil due to vibratory motions such as those associated with earthquakes. Structures subject to the effects of liquefaction may undergo settlement which may result in structural damage.

Fracturing, cracking, and the fissuring of the ground surfaces within the proposed project site in the event of an earthquake are not expected due to the absence of any known earthquake faults or steep slopes located on or within the vicinity of the site. Sediments that are susceptible to liquefaction are generally water saturated, medium-dense to loose cohesionless soil materials within 50 feet of the surface in areas exhibiting groundwater at similar depths or depths even closer to the ground surface. During the soils investigation undertaken for the proposed development, the depth to groundwater was estimated to be more than 450 feet. No groundwater was encountered in any of the soil borings completed.²²

Because of the depth of groundwater in relation to the surface elevations, no risk of liquefaction is anticipated. As a result, the Lead Agency has determined that the potential impacts are less than significant.

D. Would the project result in or expose people to potential impacts involving seiche or tsunami? No Impact

The City of Fontana is located inland from the Pacific Ocean and thus, the project site would not be subject to the effects of a tsunami. The project site is not located near a major body of water which may create seiche hazards. The area is not located within any designated tsunami flood zone. The proposed project will not create hazards associated with a seiche or tsunami.²³

The Lead Agency determined, as a result of the analysis contained herein, that no significant impacts related to seiche or tsunami risks would occur as part of the proposed project's implementation.

E. Would the project result in or expose people to potential impacts involving landslides or mudslides? No Impact

The site's elevation ranges from 1,582 feet above mean sea level (AMSL) in the northeast portion of the site to 1,534 feet AMSL in the southwest portion. The site is generally level and no hillside features are found within or near the site. The site has a slight slope from the northeast corner to the southwest corner.²⁴

The nearest hillside areas are the foothills of the San Gabriel Mountains, approximately six miles to the north. In addition, the project area is not subject to any known mud-flow hazards. As a result, no landslide or mud-flow hazards are anticipated. No impacts involving landslides or mudslides are anticipated to occur with the construction and subsequent occupancy of the proposed residential development.

F. Would the project result in or expose people to potential impacts involving erosion, changes in topography or unstable soil conditions from excavation, grading or fill? No Impact

The site is relatively level and the grading required to accommodate the proposed development will not substantially modify the general topography of the site. Because the site's topography is generally level, no significant water erosion hazards are expected. However, unconsolidated alluvial soils found on-site have a moderate to high wind erosion potential.

There is a potential that strong Santa Ana winds may contribute to the erosion of barren soils on-site (i.e., generate fugitive dust and PM¹⁰). The potential for such wind erosion potential will be reduced to less than significant levels by adhering to erosion control measures such as watering, use of soil binders, soil covering or revegetation, and other dust control measures during project construction.²⁵ These measures are discussed in Section 3.6 herein.

When the site is fully developed, the overall production of PM¹⁰ transport to off-site areas will be reduced. As a result, no significant erosion or grading-related effects are anticipated as a consequence of the project's construction. Once developed, storm water runoff will be controlled by curb and gutters for conveyance to the local storm channels. No erosion or unstable soil conditions are expected on site following development.

G/H. Would the project result in or expose people to potential impacts involving subsidence of the land or expansive soils? No Impact

The site has not been identified as being subject to subsidence hazards by the Fontana General Plan. Such a hazard is typically the result of fluid extraction. The project area has not been subjected to oil drilling activities. In addition, groundwater levels in the area have remained relatively stable over the last fifteen to twenty years. Groundwater is anticipated to be more than 400 feet below the surface elevation according to the geological investigations undertaken for the proposed project site.

The soils investigations undertaken as part of the development review process, indicated the upper layers of alluvium may require subexcavation and recompaction to provide a suitable subgrade for the building foundation. Recommendations of the geotechnical study will be followed to ensure ground stability and structural integrity.²⁶ According to the analysis undertaken as part of the geotechnical investigation, no unique soil constraints were identified. As a result, the Lead Agency has determined that no significant adverse impacts related to soil subsidence are anticipated as part of the proposed project's construction.

I. Would the project result in or expose people to potential impacts involving unique geologic or physical features? No Impact

Review of the United States Geological Survey (U.S.G.S.) quadrangle for the proposed project site indicates there are no unique geologic or physical features found on or near the project site.²⁷ The nearest geologic features include the San Gabriel Mountains, located approximately five miles to the north; the Jurupa Hills, located nine miles to the south; and Lytle Creek, located nine miles to the east. The proposed residential development will maintain the general topography of the area and will not affect any of the aforementioned unique geologic features. As a result, no significant adverse impacts are anticipated as part of the proposed project's implementation.

3.5 Water & Hydrology Impacts

According to Appendix G of CEQA, a project may be deemed to have a significant adverse environmental impact on water resources or water quality if it results in any of the following:

- ☐ Substantial degradation of water quality or contamination of the public water supply;
- ☐ Substantial degradation or depletion of groundwater resources;
- ☐ Substantial interference with groundwater recharge; or
- ☐ Substantial flooding, erosion, or siltation.

A. Would the project result in changes in absorption rates, drainage patterns, or the rate and amount of surface runoff? Less Than Significant Impact

The proposed project will involve paving and construction within the 40-acre vacant site. The increase in impervious surfaces on-site will lead to decreases in absorption and an increase in the amount of surface runoff. Also, drainage currently occurs as surface flows move across the site in a southwest direction.²⁸ The development of the proposed project site will lead to the controlled diversion of surface runoff toward on-site curbs and gutters, and into a drainage lines in Lytle Creek Road. The increase in impervious surfaces is estimated at 29 acres which includes those areas which are paved or covered with structures.

Local drainage systems are the responsibility of the City of Fontana. The proposed drainage system for the project is part of the North Fontana Master Storm Drain Plan. The on-site residential storm runoff will be handled by internal roadways. As part of the Route 30 construction, Caltrans is constructing a 60" storm drain within Beech Avenue from the Highland Channel northerly to Carter Avenue. As identified

in the Summit Height Specific Plan, a 54" storm drain within Beech Avenue from Carter Avenue northerly to Curtis Avenue and a 48" storm drain within Curtis Avenue from Beech Avenue easterly to Lytle Creek Road, will be constructed by the Summit Heights developer. The storm water run-off from the proposed project site (Fontana Grandview) will be conveyed to this storm drain system. In the event the development of the proposed Fontana Grandview project proceeds prior to the development of Summit Heights, these storm drain facilities will be constructed by the developer of the Fontana Grandview project. In the event this occurs, a reimbursement agreement with the City will be executed to the benefit of the Fontana Grandview developer. The developer of the proposed Fontana Grandview project will be responsible for all of the requisite "in-tract" storm drain infrastructure necessary to serve the proposed project.

Based on the latest Caltrans Route 30 construction date projections, the Highland Channel should be completed and ready to accept flows in June of 1999. Because of the Route 30 construction, there is a temporary restriction in flows that the Highland Channel can accept. At the crossing of the High South Highland Avenue detour, west of Cherry, this restriction will occur until the final street segment's construction. Coordination shall also occur with the San Bernardino County Flood Control District to determine if there is capacity in the San Sevaine Channel for the developed flows from the Fontana Grandview project. An interim detention basin may be required to accept the storm water flows from the proposed project to an acceptable amount as determined by the Flood Control District until such time improvements are made to San Sevaine Channel to accept total developed flows. The basin would be designed as temporary facilities in accordance with City of Fontana standards.

B. Would the project result in exposure of people or property to water related hazards such as flooding? No Impact

The project site itself is outside the boundaries of the 100-year and 500-year flood plains. In addition, there are no nearby bodies of water or dams which pose an inundation hazard to the project site. No significant flooding exposure is anticipated for future residents and other occupants of the proposed project. The Highland Channel, located along the north side of the Route 30 right-of-way, was recently completed. This facility is located approximately 2,000 feet south of the proposed project site.²⁹

100 year & 500 year flood

The concept of a 100 year or 500 year flood condition is used by engineers as a way to design flood control infrastructure. The terms is related to a "statistical probability" of a flood condition occurring during a period of extreme rainfall, runoff, etc, once every 100 years and 500 years. However, reality may be quite different from statistical probabilities...for example some areas of the Midwest have experienced 100 year floods three times over the past decade. Whether or not a property is located within a designated flood plain, will have a bearing on whether or not flood insurance is required.

Local drainage systems are the responsibility of the City of Fontana. The proposed drainage system for the project is part of the North Fontana Master Storm Drain Plan. The on-site residential storm runoff will be handled by internal roadways (curbs and gutters). The street improvements proposed for Lytle Creek Road, Knox Avenue, and Curtis Avenue will serve to convey off-site storm runoff from the northeast to the southwest of the property. The storm water run-off from the proposed project site will be conveyed to this storm drain system. In the event the development of the proposed project proceeds prior to the development of Summit Heights and these storm drain facilities are constructed by the developer of the Fontana Grandview project, a reimbursement agreement with the City will be executed to the benefit of the Fontana Grandview developer. The project developer will be responsible for all of the requisite "in-tract" storm drain infrastructure necessary to serve the proposed project.

An interim detention basin, located in the southwest corner of the site, may be required to accept the storm water flows from the proposed project to an acceptable amount as determined by the Flood Control District until such time improvements are made to San Sevaine Channel to accept total developed flows. The basin would be designed as temporary facilities in accordance with City of Fontana standards.

***C. Would the project result in discharge into surface waters or other alteration of surface water quality (e.g., temperature, dissolved oxygen or turbidity?)
Less Than Significant Impact***

The proposed project site is currently undeveloped and storm water is able to percolate into the soils. No impervious surfaces are located on-site at the present time. Following development, approximately 70.4 percent of the site will be covered with impervious surfaces (structures, roadways, driveways, etc.). This estimate assumes the following distribution of open space: 0.79 acres located within the landscape easement and 11.03 acres located within the yard areas of the individual units. This later figure assumed that 60 percent of each individual lot would be covered with impervious surfaces (structures, patio areas, driveways, etc.).

The runoff within the proposed project will be conveyed into the system of curbs and gutters provided in the local streets which will be constructed as part of the proposed project. The street improvements proposed for Lytle Creek Road, Knox Avenue, and Curtis Avenue will serve to convey off-site storm runoff from the northeast to the southwest of the property. The storm water run-off from the proposed project site will be conveyed to this storm drain system. In the event the development of the proposed project proceeds prior to the development of Summit Heights and these storm drain facilities are constructed by the developer of the Fontana Grandview project, a reimbursement agreement with the City will be executed to the benefit of the Fontana Grandview developer. The project developer will be responsible for all of the requisite "in-tract" storm drain infrastructure necessary to serve the proposed project.

An interim detention basin may be required to accept the storm water flows from the proposed project to an acceptable amount as determined by the Flood Control District until such time improvements are made to San Sevaine Channel to accept

total developed flows. The basin, located in the southwestern corner of the project site, would be designed as temporary facilities in accordance with City of Fontana standards.

D. Would the project result in changes in the amount of surface water in any water body? Less Than Significant Impact

Lytle Creek is located 8.6 miles northeast of the project site, and the Highland Channel is located approximately 2,000 feet to the south. Runoff from the project site will be accommodated by the local and regional storm drain system discussed previously. With the installation of the planned infrastructure, on-site storm water run off would not measurably changing the current, course, or direction of waters in either of these drainage areas.³⁰ Given this, no significant effects are expected in this regard, and no further assessment of this issue is warranted. While the project site is presently undeveloped, it does not serve as a major groundwater recharge area. Thus, the proposed project will not result in any significant change to the quantity of surface water resources in the area. Additional information concerning water service to the site is discussed in Section 3.13. Based on the on the analysis contained herein, the Lead Agency has determined that the potential environmental effects are less than significant.

E. Would the project result in changes in currents, or the course or direction of water movements? Less Than Significant Impact

Free groundwater was not encountered in any of the exploratory borings nor is groundwater anticipated within the upper 50 feet below the ground surface. According to the geological investigation undertaken for the proposed project, groundwater is anticipated to be located more than 450 feet below the ground surface elevations. Any excavation associated with construction of the proposed development will not be deep enough to affect local groundwater resources. Therefore, the proposed development will not result in the alteration of the direction or rate of groundwater flow.³¹ Based on the on the analysis contained herein, the Lead Agency has determined that the potential environmental effects are less than significant.

F. Would the project result in change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations? Less Than Significant Impact

The proposed project does not involve the direct addition or withdrawal of groundwater resources, since no wells are planned on-site. Further, excavation activities on-site are not expected to exceed 10 feet below the ground surface. Since groundwater beneath the project site occurs below 450 feet under the ground surface, the development will not intercept an aquifer. However, the development

of residential uses will lead to the paving of ground surfaces and a reduction in the amount of rainfall that is absorbed through the ground.

Area-wide, groundwater recharge to the Chino basin is made through the San Sevaine and Rich recharge basins, as well as alluvial fans near Lytle Creek at the base of the San Gabriel Mountains. The basin receives recharge from a 192,000-acre area. The loss of pervious area for recharge due to project site development represents a 0.003 percent loss of the total recharge area.³² As a consequence, this loss of groundwater recharge capability is not considered significant, and no further assessment of this issue is warranted.

***G. Would the project result in altered direction or rate of flow of groundwater?
No Impact***

The proposed project does not involve the direct addition or withdrawal of groundwater resources, since no wells are planned on-site. Further, excavation activities on-site are not expected to exceed 10 feet below the ground surface. Since groundwater beneath the project site occurs below 450 feet under the ground surface, the development will not intercept an aquifer.³³

The proposed residential development will lead to the paving of ground surfaces and a reduction in the amount of rainfall that is absorbed through the ground. Area wide, groundwater recharge to the Chino basin is made through the San Sevaine and Rich recharge basins, as well as alluvial fans near Lytle Creek at the base of the San Gabriel Mountains. The basin receives recharge from a 192,000-acre area. The loss of 24 acres of pervious area for recharge due to project site development represents a 0.003 % loss of the total recharge area. A temporary storm water detention basin is proposed in the southwest corner of the site. As a consequence, this loss of groundwater recharge capability is not considered significant, and no further assessment of this issue is warranted. Based on the results of the geotechnical analysis, the Lead Agency determined that the proposed project would not result in any significant adverse impacts on the direction or rate of flow of groundwater.

***H. Would the project result in impacts to groundwater quality? Less Than
Significant Impact***

The proposed development will not involve any unique uses or activities which will directly release substantial quantities of contaminants into the storm drain system. The proposed project will be required to conform to pertinent National Pollutant Discharge Elimination System (NPDES) requirements. In the absence of the proper handling and disposal, hydrocarbon contaminants from driveways and streets and fertilizers and other chemical byproducts used for landscaping and routine maintenance, may be introduced into the storm water run-off.

The quantities and the nature and extent of potential contamination will be consistent with that expected from residential developments of similar size.

Numerous public agencies have initiated public awareness programs indicating the need to properly handle chemical and waste products to avoid the contamination of storm water runoff. However, the proposed residential development will not introduce any substantial quantities of contaminants and the Lead Agency determined that the proposed project's potential impacts on water quality would be less than significant.

I. Would the project result in a substantial reduction in the amount of groundwater otherwise available for public water supplies? Less Than Significant Impact

As indicated above, the proposed project will require approximately 48,984 gallons of water per day to accommodate projected usage. The potential consumption does not represent a substantial amount of available public water supplies. The proposed project does not include the use of on-site water wells. Also, as indicated previously, project-related earth movement activities are not expected to extend to a depth greater than 10 feet, and groundwater occurs at depths greater than 450 feet below the ground surface. As indicated previously, water consumption from the project is estimated at 48,984 gallons per day and service will be provided by the Fontana Water Company, which derives its supply from groundwater wells in the area and surface water from Lytle Creek. The Fontana Water Company has indicated that the project's water demand can be met by the Company's supply though all lines must be installed pursuant to the District's requirements. The Chino Basin Water adjudicates the use of water resources in the basin and ensures that the amount of water pumped from the basin is replenished by rainfall or imported waters to prevent over-drafting.

The project is not expected to result in water consumption that could alter the direction or rate of flow of the groundwater, and no further assessment of this issue is warranted. As a result, the Lead Agency determined that the proposed project would result less than significant adverse impacts on ground water resources.

3.6 Air Quality Impacts

According to Appendix G of the CEQA Guidelines, a project may be deemed to have a significant adverse environmental impact on air quality if it results in any of the following:

- ☐ A violation of any ambient air quality standard;
- ☐ A significant contribution to an existing or projected air quality violation;
- ☐ Exposure of sensitive receptors to substantial pollutant concentrations; or
- ☐ Creation of objectionable odors.

The South Coast Air Quality Management District (SCAQMD) has also established daily emissions thresholds for a number of criteria pollutants. These thresholds include: 550 pounds of carbon monoxide, 55 pounds of nitrogen oxides, 150 pounds of sulfur dioxide, 55 pounds of reactive organic gases, and 150 pounds of PM₁₀ particulates. These thresholds apply to long-term (operational) emissions.

Characteristics of Key Pollutants

Ozone (O₃) a nearly colorless gas which irritates the lungs and damages materials and vegetation. O₃ is formed by photochemical reaction (when nitrogen dioxide is broken down by sunlight).

Carbon Monoxide (CO) a colorless, odorless toxic gas which interferes with the transfer of oxygen to the brain as produced by the incomplete combustion of carbon-containing fuels emitted as vehicle exhaust.

Nitrogen dioxide (NO₂) a yellowish-brown gas which at high levels can cause breathing difficulties. NO₂ is formed when nitric oxide (a pollutant from burning processes) combines with oxygen.

PM₁₀ refers to particulate matter less than ten microns in diameter. PM₁₀ causes a greater health risk than larger sized particles, since fine particles can more easily cause irritation.

A. Would the project violate any air quality standard or contribute to an existing or projected air quality violation? Potentially Significant Impact Unless Mitigated

The City and the project site are located in the South Coast Air Basin which covers a 6,600-square-mile area within Orange County, the non-desert portions of Los Angeles County, Riverside County, and San Bernardino County. Air quality in the basin is monitored by the South Coast Air Quality Management District (SCAQMD) at various monitoring stations throughout the area. The City is located within the Southwest San Bernardino Valley receptor area which is monitored by Station No. 5171.³⁴ Readings at this station are used to characterize air quality in the City and the project site, as provided in Table 4.

Comparison with national and state standards for these contaminants show that air quality readings at Station 1571 have maximum ozone concentrations that are one-to-two times the state standard and exceedance occur one out of every seven days. The station readings for ozone exceeded State standards for ozone in 1996 on 50 days and federal standards on eight days.

The short-term air quality impacts of the project include construction equipment emissions, vehicle emissions,

Table 4
Air Quality Readings - Station 5171

Pollutant - Standards	1995	1996
Ozone (O₃)		
Maximum 1-hr conc.	0.15	0.21
Days > state standard	47	50
Days > federal standard	8	11
Carbon Monoxide (CO)		
Maximum 1-hr conc.	13	9
Maximum 8-hr conc.	9.50	6.63
Days > state 1-hr standard	0	0
Days > federal 1-hr standard	0	0
Days > state 8-hr standard	2	0
Days > federal 8-hr standard	2	0
Nitrogen Dioxide (NO₂)		
Maximum 1-hr. conc.	0.14	0.16
Days > state standard	0	0
% federal standard exceeded	0	0

Source: SCAQMD Air Quality Data, 1995-1996.

and dust from demolition, site preparation, and construction which may occur during the development phases. Under a worse-case scenario, 1,056 pounds of fugitive dust per day may be generated by grading and excavation activities.³⁵ This worse-case estimate assumes grading activities over the entire 40-acre site within a one-day period and no mitigation to control fugitive dust is implemented. Regular watering is expected to reduce fugitive dust by as much as 50 percent and impacts will be less than significant.

Compliance with SCAQMD Rule 403 regarding fugitive dust control will ensure that nuisance dust does not affect nearby sensitive land uses. Also, assuming five construction phases over a three to four year period, construction emissions are not projected to exceed air quality thresholds, except for nitrogen dioxide as shown in Table 5. Table 5 compares the average daily construction emissions with the SCAQMD's daily thresholds. Measures to reduce nitrogen oxide emissions on site shall include the use of properly maintained equipment and turning off trucks and construction equipment instead of idling during construction (refer to Measures 1 through 5 in this section).

Table 5
Construction Emissions (lbs/day)

	CO	ROG	NOx	PM10
Average Daily	04.6	7.7	113.0	8.0
Threshold	550	55	55	150
% Threshold	4.5%	0.1%	254.5%	5.3%

Source: Blodgett/Baylosis Associates, 1998.

Long term emissions from increases in vehicle trips, use of power and natural gas, use of appliances, heaters and other equipment associated with occupancy will also occur. The proposed project is estimated to lead to the generation of up to 2,355 vehicle trips, daily. In addition, emissions associated with power and natural gas consumption are also expected. Table 6 shows the projected increase in pollutant emissions from new vehicle trips and additional power and gas consumption, as estimated using the California Air Resources Board's *Urbemis5* computer model. The proposed project's long-term emissions will result in daily emissions below the SCAQMD's thresholds, as indicated in Table 6.³⁶ The recommended mitigation measures are identified below to reduce short-term construction emissions.

Measure 1: Measures to comply with SCAQMD Rule 403 regarding the control of fugitive dust shall be practiced during all construction activities. This may include the use of a water truck for site watering, soil binders, etc.

Table 6
Long Term Emissions (lbs/day)

Source	CO	NOx	SOx	PM10	ROG
2,355 trips	228.4	26.2	2.1	3.2	33.4
Natural Gas	0.7	2.7	0.1	0.0	0.2
Elec. Power	0.1	0.6	0.1	0.0	0.0
Total	229.2	28.9	2.4	3.2	33.6
% of Threshold	42%	38%	negl	negl.	44%
Thresholds	550	56	150	150	61

See Appendix C for computer worksheets.
Source: Blodgett/Baylosis Associates, 1998.

Measure 2: Equipment used for construction activities shall be properly tuned to reduce exhaust emissions.

Measure 3: Construction activities shall be stopped during first and second stage smog alerts.

Measure 4: All trucks hauling earthen and fill materials from the site shall be kept covered during transport.

Measure 5: During construction, trucks and equipment that are not in use shall shut off their engines instead of idling.

B. Would the project expose sensitive receptors to pollutants? No Impact

Sensitive receptors refer to land uses and/or activities which are especially sensitive to poor air quality. Sensitive receptors typically include homes, schools, playground, hospitals, convalescent homes and other facilities where children or the elderly may congregate. These population groups are generally more sensitive to poor air quality. The proposed project is also considered a sensitive receptor.

The construction and subsequent occupancy of 157 single-family homes will not result in any activities which will generate airborne toxics which may affect sensitive uses in the area. As a result, the Lead Agency determined that no significant adverse impacts are associated with the site's development.

C/D. Would the project alter air movements, moisture, or temperature, cause any change in climate, or result in any objectionable odors? No Impact

The proposed development will involve the construction of 157 single-family units. The housing units individually, or collectively, will not be large enough to cause any wind jetting or changes in the local micro-climate. As a result, no adverse impacts on local climate or meteorology will occur with the proposed project's construction. No activities or uses with the potential of significant odor generation will be located on-site. Thus, the proposed development is not anticipated to involve any uses or activities that will generate objectionable odors. Thus, no objectionable odors will be created by the proposed residential project.

3.7 Transportation and Circulation Impacts

According to the CEQA guidelines, a project may be deemed to have significant adverse impact on traffic and circulation if it causes an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system. The San Bernardino County Congestion Management Plan (CMP) has also established criteria for significant impacts. The ability of a roadway to handle traffic volumes is expressed in terms of "level of service" (LOS) which is typically measured at critical locations, usually intersections. Level of Service ranges from "A", representing free-flow conditions, through "F", which represents extreme congestion. According to the City of Fontana General Plan, the limit of acceptable operation in an urban area is considered to be Level of Service "C".

Level of Service Standards

To understand how well a roadway or intersection is handling traffic, several concepts have been devised. The first is a qualitative measure, referred to as *Level of Service* (LOS), evaluates operations based on observations. A LOS "A" is an optimal traffic condition with severe congestion while a LOS "F" represents severe congestion. A second more quantitative measure, referred to as *Volume to Capacity Ratio (V/C Ratio)* is the ratio of an intersection's or roadway's traffic volumes to their design capacity.

A. Would the project result in increased vehicle trips or traffic congestion? Potentially Significant Impact Unless Mitigated

Table 7 presents the results of the trip generation analysis conducted for the proposed residential development. The proposed residential development consisting of 157-single-family units is projected to generate 2,355 vehicle trips during an average weekday, of which 116 trips would occur during the AM peak hour, and 158 trips would occur during the PM peak hour.

Primary access to the proposed project site will be provided by connector roads with Lytle Creek Road, Knox Avenue, Curtis Avenue, and a future roadway to the north. These adjacent streets are designated as collector streets with an ultimate right-of-way of 68 feet. The entry roads will have a right-of-way width of 72 feet.

Table 7
Trip Generation

	AM Pk. Hr.	PM Pk. Hr.	Total ADT
Proposed Project			
Entries	30	103	--
Exits	86	55	--
Total	116	158	2,355
Trip Rates/Dwelling Unit			
Entries	0.19	0.66	--
Exits	0.55	0.35	--
Total	0.74	1.01	15.0

Source: Institute of Transportation Engineers.
1995, ADT - City of Fontana

A trip distribution model was prepared to evaluate the proposed project's contribution to future traffic volumes on local streets (Appendix B includes an exhibit illustrating trip assignments). Traffic assignments were based on surrounding land use patterns and the nature and extent of roadway facilities in the area. The assignments (expressed in percent of project trips) and the resulting traffic volumes are identified in Table 8. Table 8 indicates the existing traffic volumes for the roadway segments considered in this study (the third column from the left), the project's traffic contribution (the fourth column from the left), the total cumulative traffic (the fifth column from the left), and the percent change in traffic volumes when considering the proposed project's contribution to the existing traffic volumes.

Table 8
Traffic Impacts

Roadway Segment	% Trips	Project Volumes	Existing Volumes	Existing +Project	% Change
Highland WO Lytle Creek	10%	236	13,000	13,236	1.8%
Highland EO Lytle Creek	90%	2,120	13,000	15,120	16.3%
Highland EO Citrus	10%	236	13,000	13,236	1.8%
Citrus SO Highland	80%	1,884	4,800	6,684	39.3%
Citrus SO Baseline	70%	1,649	9,900	11,549	16.7%
Citrus SO Foothill	10%	236	19,500	19,736	1.2%
Citrus NO I-10 Freeway	10%	236	25,800	26,036	0.9%
Baseline EO Citrus	10%	236	12,700	12,936	1.9%
Baseline EO Sierra	10%	236	14,800	15,036	1.6%
Foothill EO Citrus	50%	1,178	39,800	40,978	3.0%
Foothill WO Citrus	10%	236	43,300	43,536	0.5%

Source: Traffic Volumes (existing) were provided by City of Fontana

As indicated in Table 8, the proposed project will generate traffic impacts that will increase volumes on Citrus Avenue, south of Highland Avenue by approximately 39.3 percent. This rate of increase is higher than that for other roadway segments due to the roadway's relatively low traffic volumes (4,800 average daily trips, ADT). Traffic volumes on that segment of Citrus Avenue, south of Baseline Avenue, is expected to increase by 16.7 percent. These segments of Baseline Avenue are relatively near the proposed project site and are expected to handle the majority of the project's traffic. With the exception of the segment of Highland Avenue, located east of Lytle Creek, Citrus Avenue, south of Highland Avenue, and Citrus Road, south of Baseline Road, the project's contribution of traffic will result in increased traffic volumes of less than 3 percent. Traffic volumes along the aforementioned segment of Highland Avenue will increase by 16.3 percent. As part of this project's development, the developer will be required to contribute its fair share to the improvement and/or construction of adjacent roadways. The nature and extent of these improvements and the applicable standards are outlined in the Fontana

these improvements and the applicable standards are outlined in the Fontana Grandview Community Plan. This additional project traffic is anticipated under the City of Fontana General Plan. All of the impacted intersections will continue to operate at an acceptable level of service.

To facilitate traffic flow, the following mitigation measure has been recommended as a means to improve traffic circulation within the vicinity of the proposed project site:

Measure 6: All plans related to ingress and egress from the site must be coordinated with the City of Fontana Traffic Engineer. The requisite roadway improvements must be provided to the satisfaction of the City of Fontana.

B. Would the project result in hazards to safety from design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? Potential Significant Impact Unless Mitigated

Traffic circulation plan, outlined in the draft Fontana Grandview Community Plan, was reviewed by City staff and was found to be adequate. The internal *local* roadways will have a primary right-of-way width of 54 feet and a curb-to-curb pavement width of 40 feet. A 7-foot wide parkway/sidewalk area will be provided on each side of the roadway (within the right-of-way).

Internal *collector* roadways will have a total right-of-way width of 72 feet, with a curb-to-curb pavement width of 44 feet. A 6-foot walkway will be provided on each side of the roadway. Cross-sections illustrating the proposed internal roadways are provided in the Fontana Grandview Community Plan (refer to Figure 3-3, Street Sections).

Knox Avenue will be constructed with an ultimate right-of-way width of 68 feet. The developer will be required to improve the parkway area along the site's easterly side and these improvements will include a community wall, 10 foot wide landscaped area, a 10 foot wide bike/pedestrian path, a curb, and a paved area for traffic lanes totaling 38 feet in width.

The portion of the project site fronting along Lytle Creek Road will also be improved and include the construction of a community wall, a bike/pedestrian path, and curb, with a 12 foot parkway containing sidewalks on each side of the roadway.

The Curtis Avenue frontage along the proposed project's south side will be improved with new pavement for the travel lanes, a bike/pedestrian path, and a landscaped parkway. Cross-sections illustrating the proposed improvements are provided in the Fontana Grandview Community Plan (refer to Figure 3-3, Street Sections).

A number of measures have been recommended as a means to reduce the potential pedestrian conflicts as well as potential constraints related in ingress and egress onto the collector streets (Lytle Creek Road, Curtis Avenue, and Knox Avenue).

Measure 7: In the design of the site (including landscaping) adequate caution must be exercised to obtain unobstructed visibility at the entry way locations.

Measure 8: Stop signs will be provided at all of the exit lanes providing egress onto Lytle Creek Road, Curtis Avenue, and Knox Avenue. All roadways, both internal roadways and those located on the periphery of the proposed development, must be constructed pursuant to City standards.

C. Would the project result in inadequate emergency access or access to nearby uses? No Impact

Construction activities will occur on site and not on the roadways serving the site. Thus, no closure of roadways or emergency access to the surrounding development is expected with the project. Partial closure of Lytle Creek Road and Curtis Avenue will occur with the improvements to these roadways and the installation of the utilities connections. Three entries to the proposed project will be provided by connector roads to Knox Avenue, Curtis Avenue, and Lytle Creek Road. A fourth entry will be provided to the north. Based on the analysis contained herein, the lead Agency determined that the proposed project would not result in any significant adverse impacts related to emergency access.

D. Would the project result in insufficient parking capacity on-site or off-site? No Impact

Each individual unit will be provided garages and driveway parking areas to accommodate the off-street parking demand of the units. In addition, sufficient roadway width (40 feet to 44 feet) will be provided to accommodate two travel lanes and parking on at least one side of the street. No parking will be permitted near the entry roadways.

E. *Would the project result in hazards or barriers for pedestrians or bicyclists? Less Than Significant Impact*

Class III bike lanes will be provided along Lytle Creek Road, Curtis Avenue, and Knox Road as part of the proposed project's development. These bike lanes will be separated from the traffic lanes. As indicated previously, sidewalks will be provided on both sides of the local streets constructed within the proposed project. In addition, sidewalks will be provided along the parkway located within the rights-of-ways located adjacent to Curtis Avenue, Knox Avenue, and Lytle Creek Road. Since the proposed project will be providing sidewalks within the parkways located adjacent to both the internal local street and collector streets (Curtis Avenue, Lytle Creek Road, and Knox Avenue, no adverse impacts on pedestrian circulation are anticipated. Previous mitigation recommended at the entryways (Measures 8 and 9) will further reduce the potential for pedestrian/vehicular conflicts.

F. *Would the project result in conflicts with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)? No Impact*

The proposed project will not result in the elimination of any bus stops, routes, or other measures currently employed to promote public transit useage. The proposed project will involve the construction of Class III bicycle lanes along those portions of Lytle Creek Road, Curtis Avenue, and Knox Road located adjacent to the proposed project. As a result, the Lead Agency determined that no impacts on alternative forms of transportation would occur with the proposed project's implementation.

G. *Would the project result in rail, waterborne or air traffic impacts? No Impact*

The proposed project will not impact any rail, water, or airborne traffic. No such facilities are located within the vicinity of the proposed project site.³⁷ As a result, the Lead Agency made a determination that there would not be any significant adverse impacts associated with the proposed project's implementation.³⁸

3.8 Biological Resources Impacts

According to Appendix G of the CEQA Guidelines, a project will normally have a significant adverse impact on biological resources if it results in any of the following:

- ☐ A substantial effect on a rare or endangered animal or plant species, or the habitat of the species;
- ☐ A substantial interference with the movement of any resident or migratory fish or wildlife species; or
- ☐ A substantial reduction in the habitat for fish, wildlife, or plants.

A. Would the project result in impacts to endangered, threatened or rare species or their habitats (including, but not limited to, plants, fish, insects, animals, and birds)? No Impact

On-site vegetation is limited to ruderal vegetation with no native habitat remaining. In addition, no rare or endangered species or their habitats are found on-site. As a result, the Lead Agency determined that no impacts would occur with the proposed project.

B. Would the project result in impacts to locally designated species (e.g., heritage trees)? No Impact

The proposed project site's vegetation is limited to ruderal vegetation with no mature trees located within the proposed project site. As a result, no impacts on any locally significant species will occur with the construction and subsequent occupancy of the proposed residential development.

C. Would the project result in impacts to locally designated natural communities (e.g., oak forest, (e.g., oak forest, coastal habitat, etc.)? No Impact

The vegetation in the City and in the vicinity of the proposed project site supports species commonly found in an urbanized setting. No natural vegetation is located within the proposed project site. Thus, the proposed residential development will not affect any natural plant community or habitat.

D. Would the project result in impacts to wetland habitat (e.g., marsh, riparian and vernal pool)? No Impact

The project site does not contain any wetland habitat. No natural "blue line" streams are identified on site or in the immediate area. Thus, no impact on wetland habitat will occur with the site's future development.

E. Would the project result in impacts to wildlife dispersal or migration corridors? No Impact

There are no natural communities in the surrounding areas which would serve as wildlife migration corridors. In addition, surrounding properties have been approved for urbanization as part of approved tract maps or in the City of Fontana General Plan. Thus, the proposed development will not affect wildlife migration in the region since no natural habitats are found in the area.

3.9 Energy & Mineral Resources Impacts

According to Appendix G of the CEQA Guidelines, a project may be deemed to have a significant adverse impact on energy and mineral resources if it results in the following:

- ☐ The encouragement of activities which result in the use of large amounts of fuel or energy; or,
- ☐ The use of fuel or energy in a wasteful manner.

A. Would the project conflict with adopted energy conservation plans? Less Than Significant Impact

The project site is served by Southern California Edison (SCE) for electric power service and SCE maintains overhead electrical power lines and poles on site. Southern California Gas Company (SCG) provides natural gas service for the region and provides service to the proposed project site.³⁹ The proposed development is projected to consume 2,616 kWh of electricity and 34,421 cubic feet of natural gas on a daily basis. This projected consumption does not represent a significant impact. Energy saving measures shall be incorporated into the building design to reduce energy consumption. Southern California Edison provides power on demand and does not expect any adverse impacts due to the project. Table 9 indicates projected electrical consumption for the proposed development.

The air quality analysis conducted to evaluate mobile emissions also estimated fuel consumption. This analysis determined that vehicles traveling to and from the proposed project site would consume an estimated 635 gallons of fuel daily.⁴⁰ However, the projected energy and fuel consumption does not represent a significant impact. As a result, the Lead Agency determined that no significant adverse impacts are anticipated.

Table 9
Projected Energy Consumption

Energy	Factor	Consumption
Power Use	6,081 du/yr	2,616 kWh/day
Gas Use	6,665 c.f./du./mo.	43,421 c.f./day
Source: Blodgett/Baylosis Associates, 1999.		

B. Would the project use non-renewable resources in a wasteful and inefficient manner? Less Than Significant Impact

Natural resources that may be affected by development include air, mineral, water, sand and gravel, timber, energy and other resources used for construction. The area surrounding the proposed development site is either developed or slated for development. There are no natural resource extraction activities within or in the immediate area. However, the area is included within a designated *Significant Mineral Aggregate Resource Area* as defined by the State of California.⁴¹

The construction and subsequent occupancy of the proposed 157 single-family units will require the use of construction aggregate and energy resources. The amount of construction aggregate used in the proposed project's construction will not affect the regional supply of this resource. Therefore, construction and subsequent occupancy of the proposed residential development will not result in the substantial depletion of any non-renewable natural resources.

C. Will the project result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State? Less Than Significant Impact

There are no known mineral, oil or energy resources on the site or the immediate area surrounding the proposed development site.⁴² As indicated previously, the site is located within a designated Significant Aggregate Resource Mineral Area though no extraction activities are occurring on-site. Such mineral extraction activities within the proposed project site would not be permitted under the City of Fontana General Plan. The resources and materials used in the construction of the proposed project will not preclude mineral extraction on site nor will it require any materials that are considered rare or unique. The construction materials needed for the development consisting of 157 single-family units does not represent a significant amount of available resources in the region. Thus, the project will not result in any significant adverse effects on mineral resources in the region.

3.10 Risk of Upset & Health Impacts

According to Appendix G of the CEQA Guidelines, a project will normally have a significant adverse impact on risk of upset and human health if it results in any of the following:

- ☐ Creates a potential public health hazard; or
- ☐ Involves the use, production, or disposal of materials which pose a hazard to human, animal, or plant populations in the affected area.

A. Would the project involve a risk of accidental explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals or radiation)? No Impact

The proposed residential development will not involve the use, storage, disposal, or manufacture of hazardous materials beyond that expected in a house setting. The use of such materials will be limited to those commonly used for routine maintenance and cleaning. As a result, the Lead Agency determined that no significant adverse impacts would occur with the proposed project's construction and subsequent occupancy.

B. Would the project involve possible interference with an emergency response plan or emergency evacuation plan? No Impact

The construction of the proposed residential development will not result in a long-term obstruction of either Lytle Creek Road or Curtis Avenue or any other roadways which may be used for emergency evacuation. Limited impacts associated with the aforementioned improvements to these roadways and the construction of utility connections to infrastructure are anticipated. Construction activities must conform to emergency access requirements of the San Bernardino County Fire Department. Thus, no impact on emergency response or evacuation is expected with the project.

C. Would the project involve the creation of any health hazard or potential health hazards? No Impact

The construction and subsequent occupancy of the proposed residential development will be in compliance with all public health and safety regulations and are not expected to create any health hazards. As indicated previously, the proposed project will not involve any activities associated with the use, storage, or disposal of hazardous chemicals other than those commonly found in a household setting. Thus, no health hazards are expected with the project's implementation.

D. Would the project involve exposure of people to existing sources of potential health hazards? No Impact

Hazardous materials used by future residents will be limited to cleaning solvents, pesticides and fertilizers that will be used for routine maintenance. These hazardous materials will not be used or stored in quantities that would pose public health concerns or explosion hazards. Hazardous materials use, storage or disposal on site will be regulated by several state and local agencies to ensure risks are minimal. Review of the Environmental Protection Agency's *Environfacts* database indicates there are no hazardous materials users located within the boundaries of the proposed project site or in adjacent areas.⁴³ As a result of the analysis contained herein, the Lead Agency determined that there would not be any adverse impacts related to the exposure of hazardous materials.

E. Would the project involve increased fire hazards in areas with flammable brush, grass, or trees? No Impact

The onsite vegetation is relatively sparse and the risk of wildfire is considered low. Some ruderal vegetation is found in adjacent undeveloped properties. No wilderness or chaparral areas are located within the project site. The project site even in its undeveloped state, does not represent a significant adverse impact related to wildfire.⁴⁴ As a result, no wildfire risk will occur with the construction and occupancy of the proposed development. The Lead Agency has determined that the proposed project will not result in any significant adverse impacts.

3.11 Noise Impacts

According to Appendix G of the CEQA Guidelines, a project will normally have a significant impact on the environment if it results in a substantial increase in the ambient noise levels for the adjoining areas. An increase in noise levels of 3 dB is the minimum increase that is typically perceptible among individuals. For this reason, a 3 dB to 5 dB change in ambient noise levels is generally considered the threshold of significance. In addition, the City of Fontana General Plan's Noise Element has established an acceptable range of outdoor ambient noise levels for residential development. According to the Noise Element, ambient outdoor noise levels should not exceed 45 CNEL (over a 24 hour period) and indoor noise levels should not exceed 65 CNEL.

What is a decibel?

The decibel is a measurement of sound level or pressure. The noise levels associated with various activities are provided below:

Activity	Noise Level in decibels
very quiet night	10 dB
library	35 dB
refrigerator	45 dB
light traffic	45 dB
air conditioner	60 dB
freeway traffic (50 ft.)	80 dB
power mower (20 ft.)	105 dB

A. Would the project result in increases in existing noise levels? Less Than Significant Impact

A series of these noise surveys were undertaken at the project site (refer to Table 10), which used statistical samples in terms of percentile noise levels. For example, the L₁₀ noise level represents the noise level that is exceeded 10 percent of the time. The L₅₀ noise level represents the median noise level; half the time, noise exceeds this level, and half the time noise is less than this level. The L₉₀ noise level represents the ambient noise or the noise level which is exceeded 90 percent of the time. On-site noise levels ranged between 58 to 64 dBA during the two noise measurement surveys as indicated in Table 10.

**Table 10
Noise Measurement
Results**

Noise Period	Noise Level (dBA)
99 %	58 dBA
90 %	61 dBA
50 %	63 dBA
33 %	68 dBA
10 %	71 dBA
1 %	78 dBA
Maximum Noise Level	112 dBA

Source: Blodgett/Baylosis Associates, 1998.

Community noise levels were measured in terms of the A-weighted decibel (dBA). A-weighting is a frequency correction that correlates overall sound pressure levels with the frequency response of the human ear. The Federal Highway Administration (FHWA) Noise Prediction Model was used for estimating noise levels due to project traffic on Curtis Avenue and Lytle Creek Road. Table 11 presents these noise estimates for future conditions with and without the proposed development.

**Table 11
Traffic Noise Projections**

	65 CNEL	60 CNEL	55 CNEL	at 50'
Curtis Avenue				
Existing	55	72	112	65.33
Future w/ Project	57	77	121	65.88
Lytle Creek Road				
Existing	0	0	55	48.17
Future w/ Project	0	0	58	48.88

See Appendix C for computer worksheets.

Source: Blodgett/Baylosis Associates, 1998.

As shown, increases in noise levels will be less than 0.71 dBA on Curtis Avenue and 0.55 dBA along Lytle Creek Road. These noise increases will not be perceptible and thus, less than significant.

B. Would the project result in exposure of people to severe noise levels? Potentially Significant Impact Unless Mitigated

Construction work may lead to noise which could affect adjacent uses. Construction noise will be audible in residential areas located in the immediate area. Construction machinery will be capable of generating periodic peak noise levels ranging from 70 to 95 dBA at a distance of 50 feet from the source. Mitigation has been recommended to reduce the extent of disturbances to noise sensitive uses located to the south of Curtis Avenue. A single measure recommended to reduce construction noise are identified below:

Measure 9: All construction activities shall be restricted to 7:00 AM to 6:00 PM pursuant to the City's Noise Control Ordinance.

3.12 Services Impacts

According to CEQA, a project may be deemed to have a significant adverse impact on public services if it requires an alteration or expansion of existing public services.

A. Would the project have an effect upon, or result in a need for new or altered government services in relation to fire protection? Less Than Significant Impact

The San Bernardino County Fire Department provides fire protection services to the City of Fontana and the proposed project site. Fire stations that would provide primary response to the project site include Station 78, located at 6262 Citrus Avenue, which is located approximately three miles northeast of the site, and Station 73, located at 14360 Arrow Highway, approximately four miles south of the site. Both stations are each equipped with one pumper truck and one water tender and staffed by 3 firefighters at any time. The average response time citywide is from 4 to 5 minutes.⁴⁵

The proposed development will increase the demand for fire protection services in the area. However, the San Bernardino County Fire Department indicates that the proposed development would not have a significant effect on their current and projected level of service. In addition, the project must provide on-site and off-site fire hydrants, as well as adequate emergency access to all units, in accordance with the requirements of the San Bernardino County Fire Department. Prior to the issuance of building permits, the developer shall obtain site plan approval from the San Bernardino County Fire Department regarding the provision of on-site and off-site fire hydrants, adequate emergency access, and other fire district requirements.

In order to reduce fire protection service demand, the project must conform with all pertinent provisions in the Uniform Fire Code regarding building construction and design, and with any existing requirements for all new construction to provide fire sprinkler systems.

The developer will be required to pay fees pursuant to Resolution 92-161 for additional fire protection services to serve the proposed development, if required. Based on the analysis contained herein, the Lead Agency has determined that the proposed residential development will not result in any significant adverse impacts upon fire protection services.

B. Would the project have an effect upon, or result in a need for new or altered government services in relation to police protection? Less Than Significant Impact

The Fontana Police Department provides law enforcement services within the City. The Police Station is located at 17005 Upland Avenue, approximately six miles southeast of the project area. There is an existing contact station at Southridge in the southern section of the City, and one is planned for the North Fontana area. The Police Department currently has 115 sworn police officers.⁴⁶

The proposed development will increase the number of residents on-site. This in turn will increase the demand for law enforcement and police protection services. The Public Services and Facilities Element of the Fontana General Plan states a standard of 1.4 police officers and 0.6 support personnel per 1,000 residents. On this basis, the proposed project's estimated 549 residents will generate a demand of approximately 0.76 police officers, and 0.33 unsworn employee will be required.

Prior to the issuance of building permits, the developer shall comply with the City of Fontana Police Department's Standard Building Security Specifications. Also, prior to the issuance of Certificates of Occupancy, the developer shall pay fees under Resolution 91-190 for additional police protection services required to serve the proposed development, if required. Based on the foregoing, no significant law enforcement impacts attributable to the proposed project are expected.

C. Would the project have an effect upon, or result in a need for new or altered government services in relation to school services? Potentially Significant Impact Unless Mitigated

Table 12
Student Generation

School Dist.	Factor	Students
Elementary & Middle School Grades (K-8)		
Grade K-5	.4343 students/du	68
Grades 6-8	.1934 students/du	30
Subtotal		98
High School Grades (9-12)		
Grades 9-12	0.2 students/du	31
Total		129

Source: Blodgett/Baylous Associates, 1999

The site is within the service boundaries of the Fontana Unified School District.⁴⁷ Table 12 indicates the student generation factors the Districts use in projecting student enrollments. As indicated in Table 12, the proposed 157 units development is projected to generate 98 students in grades K through 8. Table 11 also indicates that 31 high school students will be generated by the proposed. The following mitigation has been recommended as a means to reduce the potential impact:

Measure 10. Prior to the issuance of a building permit, the project proponent shall be required to submit to the City of Fontana evidence of either an appropriate fee payment or an approved agreement with the Fontana Unified School District.

D. Would the project have an effect upon, or result in a need for new or altered government services in relation to the maintenance of public facilities, including roads? Less Than Significant Impact

The proposed project will have to provide roadway improvements on Lytle Creek Road, Curtis Avenue, and a new roadway along the project site's easterly boundary. Public roadway rights-of-way will be dedicated to and maintained by the City of Fontana. The proposed development will be required to improve the surrounding roadways discussed previously. Based on the foregoing, the potential impacts of the project upon government services or maintenance of public facilities attributable to the proposed project are considered to be less than significant.

E. Would the project have an effect upon, or result in a need for new or altered government services or other governmental services? Potentially Significant Impact Unless Mitigated

The proposed development will increase the number of residents in the area which may require library services. Rapid population growth in the City has led to the

inadequate availability of library facilities and services to serve all interested users. Plans for service expansion are currently being implemented to better serve residents and other users. Demand from the proposed development will add to existing service deficiencies. Using a national standard of two volumes per capita, the estimated population of the project will require approximately 1,092 volumes. As a result, the following mitigation will be required:

Measure 11: Prior to the issuance of certificates of occupancy, the developer shall pay impact fees to the City for expanded library services to serve the proposed development. Based on the foregoing, no significant impacts upon government services attributable to the proposed project are expected.

3.13 Utilities Impacts

According to Appendix G of the CEQA Guidelines, a project may be deemed to have a significant adverse impact on utilities if it results in any of the following:

- ☐ Activities that result in the use of large amounts of fuel, water, or energy; the use of fuel, water, or energy in a wasteful manner;
- ☐ The extension of a sewer trunk line with capacity to serve new development;
- ☐ Any project that would require a substantial modification or upgrading of existing infrastructure;
- ☐ Overcapacity of the storm drain system, causing area flooding attributable to the resulting deficiencies; or
- ☐ Any project that breaches published national, state or local standards relating to solid waste or litter control.

A. Would the project result in a need for new systems, or substantial alterations to power and gas services? Less Than Significant Impact

Southern California Edison (SCE) provides electrical power to the site, and the Southern California Gas Company (SCG) provides natural gas service. Implementation of the proposed project will require hookups of these utilities. Underground utilities are located in Lytle Creek Road.⁴⁸ The proposed project will consume 2,646 kilowatts of electricity per day (kWh/day) and 34,421 cubic feet of natural gas per day. As SCE and SCG provide power and natural gas service on demand, no adverse impacts are expected from the proposed project.

B. Would the project result in a need for new systems, or substantial alterations to communication systems? No Impact

Pacific Bell provides telephone services to the project site. The proposed project will require additional telephone and dedicated computer lines. Comcast Cable provides cable television service to the proposed project site. Both service purveyors provide service on demand, no adverse impacts are expected with operation of the project.⁴⁹ As a result, the Lead Agency determined that the proposed project would not result in any significant adverse impacts on communications systems.

C. Would the project result in a need for new systems, or substantial alterations to local or regional water treatment or distribution facilities? Less Than Significant Impact

A six inch water line is located in Curtis Avenue and Malboof Avenue. While the Fontana Water Company has been contacted regarding the necessary improvements required to serve the proposed project, no final determination regarding the location and extent of needed infrastructure has been determined. The applicant's engineer has indicated two 8-inch connections will be made to a proposed water 12-inch main located within Lytle Creek Road and a future 8-inch main in Curtis Avenue.

The Inland Empire Utilities Agency (IEUA) provides industrial and municipal wastewater treatment services for the cities of Ontario, Chino, Chino Hills, Fontana, Montclair, and Upland, and to other districts and agencies in the area. Existing land uses and development in the City generate approximately 11 million gallons per day (mgd) of wastewater, which is treated at IEUA's Regional Plant Number I (RP-1). RP-1 is located south of the Pomona (SR-60) Freeway, between Vineyard and Archibald Avenues, and treats an average of 37.8 mgd of wastewater annually. The plant has a design capacity of 44 mgd and provides primary, secondary, and tertiary treatment to reclaimable wastewater. Some of the effluent from RP-1 is used for irrigation at the Whispering Lakes Golf Course, El Prado Golf Course, and the lakes at Prado Park. Treated sewage effluent is also used for the recharge of the Ely Basins and discharge into the Santa Ana River. Industrial wastewater and other non-reclaimable wastewater are conveyed through the trunk lines of the Los Angeles County Sanitation Districts for treatment at the Harbor Island Treatment Plant.⁵⁰

Sewage from the surrounding area enters City of Fontana sewer mains and is conveyed through IEUA interceptors to the IEUA Plant I in Ontario. Plant 1 has a 44 mgd capacity and treats 34 mgd. RP-4, a new treatment plant with a 28 mgd capacity, is located at Etiwanda and 6th in Rancho Cucamonga and may open in 1997 or 1998.

The proposed development will require water service from either the Fontana Water Company. Water will be provided by surface water from Lytle Creek and groundwater wells in the area. Water consumption is estimated at approximately 48,984 gallons per day. Implementation of water conservation measures such as drip irrigation, water-efficient appliances, drought-tolerant landscaping, timers, and automatic shut-off devices is expected to reduce water consumption and demand from the project. Final design of water lines and fire hydrant locations will be based on the fire flow requirements for the commercial and residential development proposed, as required by the San Bernardino County Fire Department.

The Fontana Water Company has indicated that it will be able to serve the proposed project with no adverse impact on existing services or facilities. The Company will provide the final design of on-site and off-site water systems.

The proposed project will be subject to the following: 1) Prior to the issuance of building permits, water system plans shall be designed by the Fontana Water Company; 2) Water system improvements shall be constructed prior to issuance of certificates of occupancy as required by the City of Fontana and San Bernardino County Fire Department; 3) Prior to the issuance of certificates of occupancy, the developer shall submit plans showing the implementation of water conservation measures such as automatic irrigation valves/controllers and site-appropriate drought-tolerant plant materials; and, 4) compliance with Title 24 of the California Administrative Code regarding water efficient appliances. Based on the foregoing, no significant impacts upon water systems or supplies attributable to the proposed project are expected.

D. Would the project result in a need for new systems, or substantial alterations to sewer services or septic tanks? Less Than Significant Impact

The proposed development will generate sewage which will require disposal and treatment. Sewage generation from the proposed project is estimated at 40,820 gallons per day. A proposed 15-inch sewer main will be constructed in Lytle Creek Road, from Summit Avenue to Curtis Avenue, continuing to Beech Avenue.

The on-site sewage from the residential planning areas will be collected and conveyed through a proposed 8-inch sewer line to the proposed 15-inch sewer main at intersection of Curtis Avenue and Lytle Creek Road (at the southwest corner of the project site). Final engineering will be necessary to determine the exact size of the off-site sewer main. The installation of this main will be required for both the Summit Heights Specific Plan and Fontana Grandview Community Plan. In the event the development of Fontana Grandview project proceeds prior to the development of the Summit Heights project and the entire line is constructed by the developer of the Fontana Grandview project, a reimbursement agreement with the City will be executed to the benefit of the Fontana Grandview developer. The project developer of the Fontana Grandview development will be responsible for all required in-tract sewer system improvements necessary to serve the proposed

project. These improvements are illustrated in the Fontana Grandview Community Plan (refer to Figure 3-15 in the Community Plan). The IEUA collects a sanitary sewer facility expansion fee of \$3,350 per dwelling unit. In accordance with Sewer Ordinance 1021, the City collects a fee of \$600 per dwelling unit. Prior to the issuance of certificates of occupancy, the developer shall either pay fees or complete construction in lieu of fees under Ordinance 1021 for sewer service to the site, and shall construct local sewer lines to serve the proposed development, as approved by the City of Fontana. Based on the foregoing, no significant impacts upon sewer services attributable to the proposed project are expected.

E. Would the project result in a need for new systems, or substantial alterations to storm water drainage? Less Than Significant Impact

Local drainage systems are the responsibility of the City of Fontana. The proposed drainage system for the project is part of the North Fontana Master Storm Drain Plan. The on-site residential storm runoff will be handled by internal roadways (curbs and gutters). The street improvements proposed for Lytle Creek Road, Knox Avenue, and Curtis Avenue will serve to convey off-site storm runoff from the northeast to the southwest of the property. The storm water run-off from the proposed project site will be conveyed to the storm drain system. In the event the development of the proposed project proceeds prior to the development of Summit Heights and these storm drain facilities are constructed by the developer of the Fontana Grandview project, a reimbursement agreement with the City will be executed to the benefit of the Fontana Grandview developer. The project developer will be responsible for all of the requisite "in-tract" storm drain infrastructure necessary to serve the proposed project. The project may also involve the construction of an interim storm water retention basin in the southwest corner of the site.

Drainage systems are the responsibility of the City of Fontana, which collects an l-10 North drainage fee of \$15,721 per net acre. The drainage system for the proposed project will reflect the plans in the North Fontana Drainage Master Plan, as modified in April 1995. The project site will ultimately drain into the San Sevaine Channel. The San Bernardino County Flood Control District has responsibility over this channel and collects a regional fee of \$4,405 per gross acre for development within the channel's drainage area. Prior to the issuance of certificates of occupancy, the developer shall construct local drainage facilities in accordance with the requirements of the City of Fontana, and shall pay fees or construct in-lieu facilities, or join a community facilities district for the construction and maintenance of master-planned and regional storm drain facilities. Based on the foregoing, no significant storm water drainage impacts attributable to the proposed project are expected.

F. Would the project result in a need for new systems, or substantial alterations to solid waste disposal? No Impact

Fontana Rubbish Collectors will provide waste collection and disposal services to the site. The occupants of the development will be allowed to participate in the voluntary curbside recycling program provided by Fontana Rubbish Collectors, as well as other source reduction and recycling programs of the City. The landfill to be used for disposal of on-site wastes is the Mid-Valley Landfill. This landfill has excess daily capacity (3,100 tons) and remaining capacity (2.67 million tons) to serve the project without significant adverse impacts. The proposed project is anticipated to generate approximately 1,570 pounds of solid waste on a daily basis. As a result, the Lead Agency determined that the project's potential impacts on solid waste generation would be less than significant.

G. Will the project result in the need for new systems, or substantial alterations to local or regional water supplies? No Impact

The Fontana Water Company and City of Fontana have indicated that the water consumption of the proposed development is within their capacity to provide, considering existing and planned supplies. The estimated water consumption represents less than one percent of the water resources used in the Chino Basin and the supplies of the Fontana Water Company and City of Fontana. The Company will design and/or review on- and offsite water system improvements to ensure that they comply with the Company's standards and requirements. The developer will be required to install all of the aforementioned improvements and infrastructure (refer to Section 3.13C). Based on the foregoing, no significant impacts upon regional water supplies attributable to the proposed project are expected. As a result, the Lead Agency determined that the impacts would be less than significant.

3.14 Aesthetic Impacts

According to Appendix G of the CEQA Guidelines, a project may be deemed to have a significant adverse aesthetic impacts if the proposed project has a substantial, demonstrable negative aesthetic effect. The City of Fontana Zoning Ordinance contains development standards applicable to all development in the City.

A. Would the project affect a scenic vista or scenic highway? No Impact.

The proposed project site consists of relatively level topography. On-site groundcover consists of ruderal vegetation. The proposed development envisioned as part of this project will consist of 157 single-family detached homes. The individual units will be limited to two stories. The proposed units will not obstruct views of the San Gabriel and San Bernardino Mountains located to the north. Based on the analysis contained herein, the Lead Agency has determined that the proposed project will not result in any significant adverse aesthetic impacts.

B. Would the project have a demonstrable aesthetic effect? Potentially Significant Impact Unless Mitigated

The Community Plan calls for a street-scape concept which will provide a 10-foot parkway area along the project's frontage with Lytle Creek Road, Curtis Avenue, and Knox Avenue. The street-scape plan calls for the construction of a combination bike/pedestrian path outside of this parkway area. Landscaping and street tree plantings will also be provided within this parkway between the wall surrounding the development and the roadway curb. A mitigation measure has been recommended as a means to reduce the potential for graffiti and other types of vandalism:

Measure 12: The perimeter wall must be well maintained by the homeowners following occupancy of the project. During project construction, the applicant will be required to install and maintain parkway landscaping. The perimeter wall must be constructed of materials and/or landscaping that will discourage graffiti.

C. Would the project create light or glare? Less Than Significant Impact

Presently, sources of lighting in the area consist of street lights and vehicle headlights. Light sensitive land uses in the immediate area are limited to those single-family homes located within the existing residential development located south of Curtis Avenue. Development of the site will add lighting to the project site and this can be expected to spill onto the adjacent areas.

The City's design review process will involve the review of the proposed lighting plan and this review is expected to reduce the level of potential impact. Prior to obtaining development review approval, the developer will be required to submit development plans indicating compliance with the City's development standards. Based on these conditions, the potential light and glare impacts are anticipated to be less than significant.

3.15 Cultural Resources Impacts

According to Appendix G of the CEQA Guidelines, a project may be deemed to have a significant impact on cultural resources if it disrupts or adversely affects a prehistoric or historic archaeological site or a property of historic or cultural significance to a community, ethnic, or social group, or a paleontological site, except as part of a scientific study.

A. *Would the project disturb paleontological resources? No Impact*

Soils encountered during the geotechnical investigation consisted of recent alluvium deposits over the entire project site. These deposits consisted of sand and cobbles at varying depths. Paleontological resources are not found within these soils and bedrock materials, which consist of igneous materials or recent alluvium and fill. As a result, the Lead Agency determined that there would not be any significant adverse impacts from the proposed project on paleontological resources.

B. *Would the project disturb archaeological resources? Potentially Significant Impact Unless Mitigated.*

Archaeological surveys undertaken in surrounding areas indicate the likelihood of encountering archaeological resources during grading and excavation are low. The past disturbance of the site further limits the likelihood of any discovery or artifacts. The following mitigation has been recommended, however, should resources be discovered during grading and excavation:

Measure 13: In the event subsurface cultural resources are found during excavation, the provisions outlined in Appendix K of CEQA calling for the timely salvage or study of these resources shall be enacted. In addition, Section VII of Appendix K (Limitations on Mitigation) shall also apply, where applicable. In the event human remains are discovered, Section VIII of Appendix K shall apply.

C. *Would the project affect historic resources? No Impacts*

There are no structures located within the proposed project site. As a result, future development will not result in any impacts on historic resources.

D. Would the project have the potential to cause a physical change which would affect unique ethnic cultural values? No Impact.

The proposed development site is presently vacant and it is not accessible to the general public. The project site does not have any known historic or cultural significance to any ethnic or cultural group. No significant adverse impact on ethnic cultural values is expected with the construction of the proposed residential development.

E. Would the project restrict existing religious or sacred uses within the potential impact area? No Impact.

The project site does not contain any religious or sacred structure. Public access to the site is restricted and, as a result, no religious uses will be affected by the proposed project's construction and subsequent occupancy.

3.16 Recreation Impacts

According to Appendix G of the CEQA Guidelines, a project may be deemed to have a significant adverse impact on the environment if it is in conflict with the established recreational, educational, religious, or scientific uses of the area. In addition, the City of Fontana General Plan has established a standards of two acres of community park land and three acres of neighborhood parkland for every 1,000 residents.

A. Would the project increase the demand for neighborhood or regional parks of other recreational facilities? Less Than Significant Impact

The City of Fontana maintains 32 parks consisting of 1,380 acres. The nearest park to the proposed project site is the Jesse Turner Park and Community Center located approximately 1.22 road miles to the southeast. The proposed project's construction will not physically impact this existing park. Table 13 indicates the parkland (community and neighborhood) need that will be generated by the projected 459 new residents. Based on a standard of 5.0 acres of open space for every 1,000 persons for both parkland classifications, the proposed project will

***Table 13
Parkland Service Demand***

Park type	Standard	Park Need
Neighborhood	5 ac./1,000 persons	2.85 acres
Community	5 ac./1,000 persons	2.85 acres
total		5.69 acres

*Source: City of Fontana General Plan and
Blodgett/Baylous Associates, 1999*

generate a need for 5.69 acres. The applicant and/or developer must provide either open space or in-leu fees pursuant to City requirements. As a result, the proposed project will be "self-mitigating" in terms of potential parkland impacts.

B. Would the project affect existing recreational opportunities? No Impact

The proposed project site was previously privately owned and secured from public access. The site historically, was not used for any informal or sanctioned recreation use and no impacts are anticipated.

3.17 Findings of Initial Study

The following findings may be made by the City regarding the mandatory findings of significance set forth in Section 15065 of the CEQA Guidelines, based on the results of the environmental analysis contained in this Initial Study:

- ☐ The proposed residential development does not have the potential to degrade the quality of the environment, with the implementation of the recommended mitigation measures described herein.
- ☐ The proposed residential development does not have the potential to achieve short-term goals to the disadvantage of long-term environmental goals.
- ☐ The proposed residential development is not expected to have impacts which are individually limited but cumulatively considerable when considering planned or proposed development in the immediate vicinity.
- ☐ The proposed residential development is not expected to have environmental effects that will adversely affect humans, either directly or indirectly, with the implementation of the recommended mitigation measures.

3.18 Mitigation Measures

The Fontana Grandview Community Plan contains guidelines and requirements for the proposed development which will mitigate a number of environmental effects. In addition, the City of Fontana will also impose a number of other conditions which will be effective in reducing or eliminating other environmental impacts. However, a number of mitigation measures have been recommended as a means to reduce or eliminate potential adverse environmental impacts to insignificant levels. The measures recommended as part of this analysis include the following:

Measure 1 (Air Quality). Measures to comply with SCAQMD Rule 403 regarding the control of fugitive dust shall be practiced during all construction

activities. This may include the use of a water truck for site watering, soil binders, etc.

Measure 2 (Air Quality). Equipment used for construction activities shall be properly tuned to reduce exhaust emissions.

Measure 3 (Air Quality). Construction activities shall be stopped during first and second stage smog alerts.

Measure 4 (Air Quality). All trucks hauling earthen and fill materials materials from the site shall be kept covered during transport.

Measure 5 (Air Quality). During construction, trucks and equipment that are not in use shall shut off their engines instead of idling.

Measure 6 (Traffic and Circulation). All plans related to ingress and egress from the site must be coordinated with the City of Fontana Traffic Engineer. The requisite roadway improvements must be provided to the satisfaction of the City of Fontana.

Measure 7 (Traffic and Circulation). In the design of the site (including landscaping) adequate caution must be exercised to obtain unrestricted visibility at the entry way locations.

Measure 8 (Traffic and Circulation). Stop signs will be provided at the exit lanes providing egress onto Lytle Creek Road, Curtis Avenue, and Knox Avenue. All roadways, both internal roadways and those located on the periphery of the proposed development, must be constructed pursuant to City standards.

Measure 9 (Noise). All construction activities shall be restricted to 7 a.m. to 5 p.m. on weekdays and on Saturdays, except Sundays and holidays.

Measure 10 (Services). Prior to the issuance of a building permit, the project proponent shall be required to submit to the City of Fontana evidence of either an appropriate fee payment or an approved agreement with the Fontana Unified School District.

Measure 11 (Services). Prior to the issuance of certificates of occupancy, the developer shall pay impact fees to the City for expanded library services to serve the proposed development. Based on the foregoing, no significant impacts upon government services attributable to the proposed project are expected.

Measure 12 (Aesthetics). The perimeter wall must be well maintained by the homeowners following occupancy of the project. During project construction, the applicant will be required to install and maintain parkway landscaping. The perimeter wall must be constructed of materials and/or landscaping that will discourage graffiti.

Measure 13 (Cultural Resources). In the event subsurface cultural resources are found during excavation, the provisions outlined in Appendix K calling for the timely salvage or study of these resources shall be enacted. In addition, Section VII of Appendix K (Limitations on Mitigation) shall also apply, where applicable). In the event human remains are discovered, Section VIII of Appendix K shall apply.

3.19 Mitigation Monitoring

AB 3180 requires that a monitoring and reporting program be adopted for the recommended mitigation measures. Thus, the implementation and monitoring responsibilities are provided in Table 14.

Table 14
Mitigation Monitoring

Mitigation Measure	Responsible Party	Monitoring Agency	Monitoring Action & Timing
<i>Measure 1. (Air Quality).</i> Measures to comply with SCAQMD Rule 403 regarding the control of fugitive dust shall be practiced during all construction activities. This may include the use of a water truck for site watering, soil binders, etc.	Contractor	City and the SCAQMD	Periodic site inspections during construction phases
<i>Measure 2 (Air Quality).</i> Equipment used for construction activities shall be properly tuned to reduce exhaust emissions.	Contractor	City and the SCAQMD	Periodic site inspections during construction phases
<i>Measure 3 (Air Quality).</i> Construction activities shall be stopped during first and second stage smog alerts.	Contractor	City and the SCAQMD	Periodic site inspections during construction phases
<i>Measure 4 (Air Quality).</i> All trucks hauling earthen and fill materials from the site shall be kept covered during transport.	Contractor	City and the SCAQMD	Periodic site inspections during construction phases
<i>Measure 5 (Air Quality).</i> During construction, trucks and equipment that are not in use shall shut off their engines instead of idling.	Contractor	City and the SCAQMD	Periodic site inspections during construction phases
<i>Measure 6 (Traffic and Circulation).</i> All plans related to ingress and egress from the site must be coordinated with the City of Fontana Traffic Engineer. The requisite roadway improvements must be provided to the satisfaction of the City of Fontana.	City Traffic Engineer	City	Development plan review and site inspection
<i>Measure 7 (Traffic and Circulation).</i> In the design of the site (including landscaping) adequate caution must be exercised to obtain unrestricted visibility at the entry way locations.	City Traffic Engineer	City	Ongoing over the life of project
<i>Measure 8 (Traffic and Circulation).</i> Stop signs will be provided at the exit lanes providing egress onto Lytle Creek Road, Curtis Avenue, and Knox Avenue. All roadways, both internal roadways and those located on the periphery of the proposed development, must be constructed pursuant to City standards.	City Traffic Engineer	City	Development plan review and site inspection
<i>Measure 9 (Noise).</i> All construction activities shall be restricted to 7 a.m. to 5 p.m. on weekdays and on Saturdays, except Sundays and holidays.	Contractor	City	Periodic site inspections during construction phases

Table 14
Mitigation Monitoring

Mitigation Measure	Responsible Party	Monitoring Agency	Monitoring Action & Timing
<i>Measure 10 (Services).</i> Prior to the issuance of a building permit, the project proponent shall be required to submit to the City of Fontana evidence of either an appropriate fee payment or an approved agreement with the Fontana Unified School District.	Contractor	City	Prior to building permit
<i>Measure 11 (Services).</i> Prior to the issuance of certificates of occupancy, the developer shall pay impact fees to the City for expanded library services to serve the proposed development. Based on the foregoing, no significant impacts upon government services attributable to the proposed project are expected.	Contractor	City	Prior to issuance of certificate of occupancy
<i>Measure 12 (Aesthetics).</i> The perimeter wall must be well maintained by the homeowners following occupancy of the project. During project construction, the applicant will be required to install and maintain parkway landscaping. The perimeter wall must be constructed of materials and/or landscaping that will discourage graffiti.	Contractor	City	Ongoing over the life of project
<i>Measure 13 (Cultural Resources).</i> In the event subsurface cultural resources are found during excavation, the provisions outlined in Appendix K calling for the timely salvage or study of these resources shall be enacted. In addition, Section VII of Appendix K (Limitations on Mitigation) shall also apply, where applicable. In the event human remains are discovered, Section VIII of Appendix K shall apply.	Grading Contractor	City	Only applicable in the event resources are encountered.
<i>Source: Blodgett/Baylosis Associates, 1999</i>			

4.1 Preparers

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Hershey Edwards, Project Planner
Robert Campbell, Graphics

4.2 References

Documents may be viewed at the offices of Blodgett/Baylosis Associates at 6709 Greenleaf Avenue, Suite 314, Whittier, California 90601. The BBA office is open for business Monday through Friday, 8:00 a.m. to 5:00 p.m. Review of reference information at BBA can be arranged by appointment. Please call (562) 907-4541.

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4.3 Endnotes

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