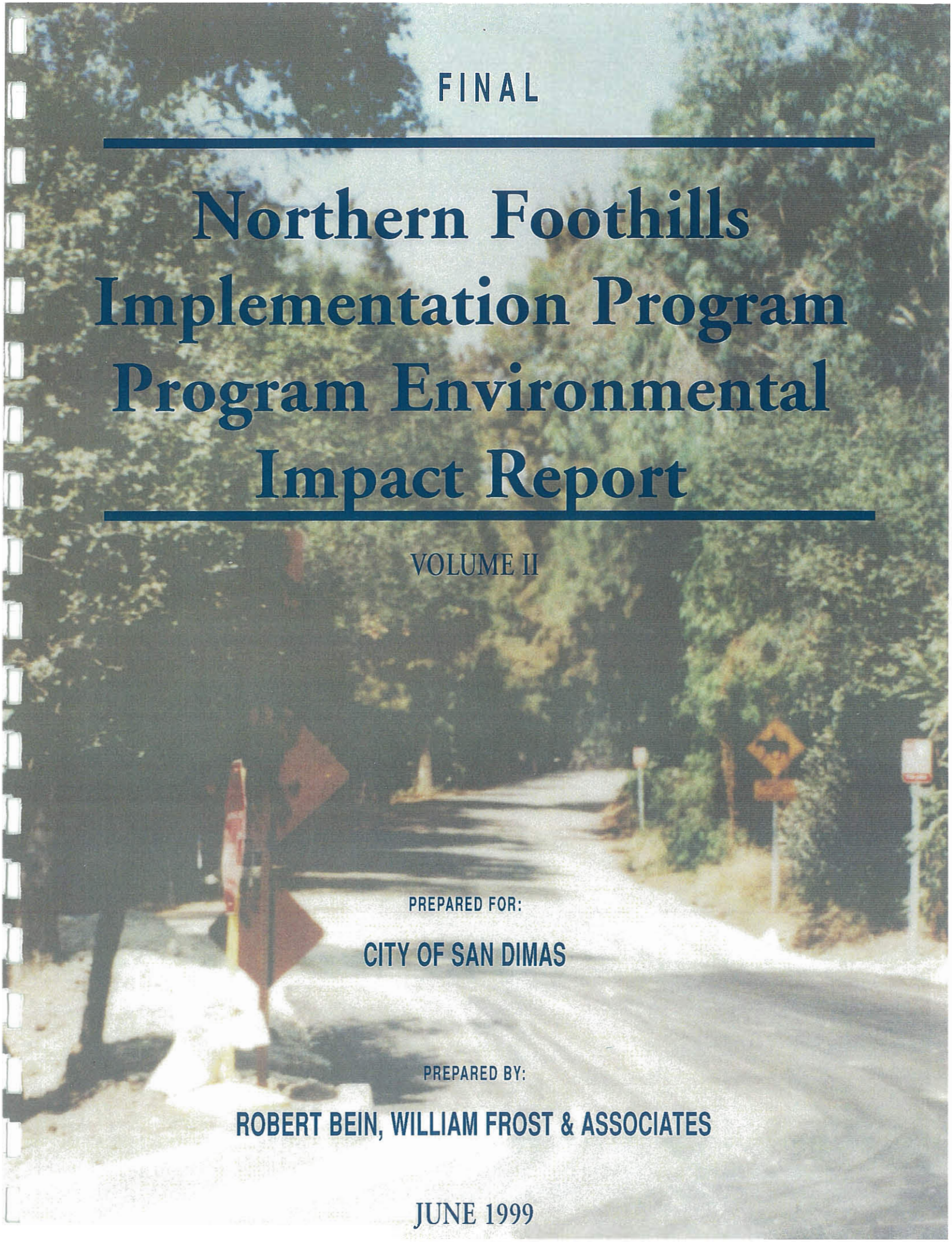

FINAL

Northern Foothills Implementation Program Program Environmental Impact Report

VOLUME II

PREPARED FOR:

CITY OF SAN DIMAS

PREPARED BY:

ROBERT BEIN, WILLIAM FROST & ASSOCIATES

JUNE 1999

Administrative Draft EIR Completed: February 5, 1999
Preliminary Draft EIR Completed: February 24, 1999
Draft EIR Completed: March 1, 1999
Final EIR Completed: June 9, 1999

FINAL

PROGRAM ENVIRONMENTAL IMPACT REPORT

for the

NORTHERN FOOTHILLS IMPLEMENTATION PROGRAM

VOLUME II

SCH # 98121072

Lead Agency:

CITY OF SAN DIMAS
245 East Bonita Avenue
San Dimas, California 91773
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June 1999

JN 10-034933

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15.0 Appendices

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NOTICE OF PREPARATION

To: Distribution

Subject: **Notice of Preparation of a Draft Environmental Impact Report**

Lead Agency:

Agency Name:	City of San Dimas
Street Address:	245 East Bonita Avenue
City/State/Zip:	San Dimas, CA 91773
Contact:	Lawrence L. Stevens, AICP, Planning Director
Telephone:	(909) 394-6250

Consulting Firm:

Name:	Robert Bein, William Frost & Associates
Street Address:	14725 Alton Parkway
City/State/Zip:	Irvine, California 92618
Contact:	Collette L. Morse, AICP, Project Manager
Telephone:	(949) 472-3505

The City of San Dimas will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study is attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but ***not later than 30 days*** after receipt of this notice. Please send your response to **Lawrence L. Stevens, AICP, Planning Director**, at the address shown above. We will need the name for a contact person in your agency.

Project Title: Northern Foothills Implementation Program

Project Location: San Dimas, Los Angeles County, California

Project Description: The project study area is an area of primarily undeveloped land consisting of approximately 3,000 acres in the portion of San Dimas north of Foothill Boulevard. Under the existing General Plan, the maximum development permitted is one dwelling unit per five acres (1 du/5 ac), which would permit a total of 195 dwelling units on the 972 vacant acres in the project area. The development strategy proposed in the *Northern Foothills Development and Infrastructure Study* (November 1998) would permit a maximum of 127 dwelling units on the 972 vacant acres. The project entails a General Plan Amendment and a Zone Change/Specific Plan. The General Plan Amendment is a request to amend the San Dimas General Plan text to create a "Northern Foothills" land use designation and to outline development policies and requirements specific to the Northern Foothills area consistent with the "Northern Foothills Development Strategy." The Zone Change/Specific Plan is a request to create a new zone or specific plan to implement the policies and requirements of the General Plan and the adopted Development Strategy.

Date: December 18, 1998

Signature: Collette L. Morse

Title: Project Manager, Robert Bein, William Frost & Associates

Telephone: (949) 472-3505

Reference: California Code of Regulations, Title 14, (CEQA Guidelines) Sections 15082(a), 15103, 15375.

Revised October 1989

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NORTHERN FOOTHILLS IMPLEMENTATION PROGRAM EIR
Notice of Preparation Distribution List
December 1998

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INITIAL STUDY/ENVIRONMENTAL CHECKLIST

Northern Foothills Implementation Program

LEAD AGENCY:

City of San Dimas
245 East Bonita Avenue
San Dimas, CA 91733
Contact: Mr. Larry Stevens, AICP, Planning Director
909/394-6250

PREPARED BY:

Robert Bein, William Frost & Associates
14725 Alton Parkway
Irvine, California 92718
Contact: Ms. Collette L. Morse, AICP
949/472-3505

December 17, 1998

JN 34933

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1.0 INTRODUCTION

Following preliminary review of the proposed project, the City of San Dimas has determined that the Northern Foothills Implementation Program project is subject to the guidelines and regulations of the California Environmental Quality Act (CEQA) and the City of San Dimas Environmental Guidelines. This Initial Study addresses the direct, indirect, and cumulative environmental effects associated with the Northern Foothills Implementation Program, as proposed.

1.1 STATUTORY AUTHORITY AND REQUIREMENTS

In accordance with CEQA (Public Resources Code Sections 21000-21177) and pursuant to Section 15063 of the California Code of Regulations (CCR), the City of San Dimas, acting in the capacity of Lead Agency, is required to undertake the preparation of an Initial Study to determine if the proposed project would have a significant environmental impact. If, as a result of the Initial Study, the Lead Agency finds that there is evidence that any aspect of the project may cause a significant environmental effect, the Lead Agency shall further find that an environmental impact report (EIR) is warranted to analyze project-related and cumulative environmental impacts. Alternatively, if the Lead Agency finds that there is no evidence that the project, either as proposed or as modified to include the mitigation measures identified in the Initial Study, may cause a significant effect on the environment, the Lead Agency shall find that the proposed project would not have a significant effect on the environment and shall prepare a Negative Declaration for that project. Such determination can be made only if "there is no substantial evidence in light of the whole record before the Lead Agency" that such impacts may occur (Section 21080(c), Public Resources Code).

The environmental documentation, which is ultimately selected by the City of San Dimas in accordance with CEQA, the State CEQA guidelines and the City of San Dimas CEQA Guidelines, is intended as an informational document undertaken to provide an environmental basis for subsequent discretionary actions upon the project. The resulting document is not, however, a policy document and its approval and/or certification neither presupposes nor mandates any actions on the part of those agencies from whom permits and other discretionary approvals would be required.

The Environmental Determination and supporting analysis is subject to a public review period. During this review, public agency comments on the document relative to environmental issues should be addressed to the City of San Dimas. Following review of any comments received, the City of San Dimas will consider these comments as a part of the project's environmental review and include them with the Initial Study Document for consideration by the City of San Dimas.

1.2 PURPOSE

The purpose of the Initial Study is to: (1) identify environmental impacts; (2) provide the Lead Agency with information to use as the basis for deciding whether to prepare an EIR or Negative Declaration; (3) enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared; (4) facilitate environmental assessment early in the design of the project; (5) provide documentation of the factual basis for the finding in a Negative Declaration that a project would not have a significant environment effect; (6) eliminate needless EIRs; (7) determine whether a previously prepared EIR could be used for the project; and (8) assist in the preparation of an EIR, if required, by focusing the EIR on the effects determined to be significant, identifying the effects determined not to be significant, and explaining the reasons for determining that potentially significant effects would not be significant.

Section 15063(d) of the State CEQA Guidelines identifies specific disclosure requirements for inclusion in an Initial Study. Pursuant to those requirements, an Initial Study shall include: (1) a description of the project, including the location of the project; (2) an identification of the environmental setting; (3) an identification of environmental effects by use of a checklist, matrix or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries; (4) a discussion of ways to mitigate significant effects identified, if any; (5) an examination of whether the project is compatible with existing zoning, plans, and other applicable land use controls; and (6) the name of the person or persons who prepared or participated in the preparation of the Initial Study.

1.3 CONSULTATION

As soon as the Lead Agency has determined that an Initial Study would be required for the project, the Lead Agency is directed to consult informally with all Responsible Agencies and Trustee Agencies that are responsible for resources affected by the project, in order to obtain the recommendations of those agencies as to whether an EIR or Negative Declaration should be prepared for the project. Following the City of San Dimas's receipt of any written comments from those agencies, the City of San Dimas would consider any recommendations of those agencies in the formulation of the City of San Dimas's preliminary findings. Following execution of this Initial Study, the City of San Dimas would initiate formal consultation with these and other governmental agencies as required under CEQA and its implementing guidelines.

1.4 INCORPORATION BY REFERENCE

Pertinent documents relating to this Initial Study have been cited and incorporated, in accordance with Sections 15148 and 15150 of the CEQA Guidelines, to eliminate the need for inclusion of voluminous engineering and technical reports within the EIR. Of particular relevance are those previous EIRs which present information regarding descriptions of environmental settings, future development-related growth and cumulative impacts. This Initial Study incorporates the *City of San Dimas General Plan, General Plan Environmental*

Impact Report (GP EIR), and the *Northern Foothills Development and Infrastructure Study* by reference. These planning documents include numerous mitigation measures and policies related to the proposed project. These documents were utilized throughout this Initial Study/Environmental Checklist and are available for review at the City of San Dimas.

2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION

The project area is located within the northern portion of the City of San Dimas, County of Los Angeles, California (refer to Exhibit 1, *Regional Vicinity Map*). The approximately 3,000 acre project area is generally bordered by the Angeles National Forest to the north and northeast, the City of La Verne to the southeast, residential areas to the south, and the City of Glendora immediately to the west (refer to Exhibit 2, *Project Area Boundary*). Regional access is provided via Interstate 210 (I-210) and State Route 30. Primary access to the project area is provided via Foothill Boulevard which parallels the project area's southern boundary.

2.2 PROJECT CHARACTERISTICS

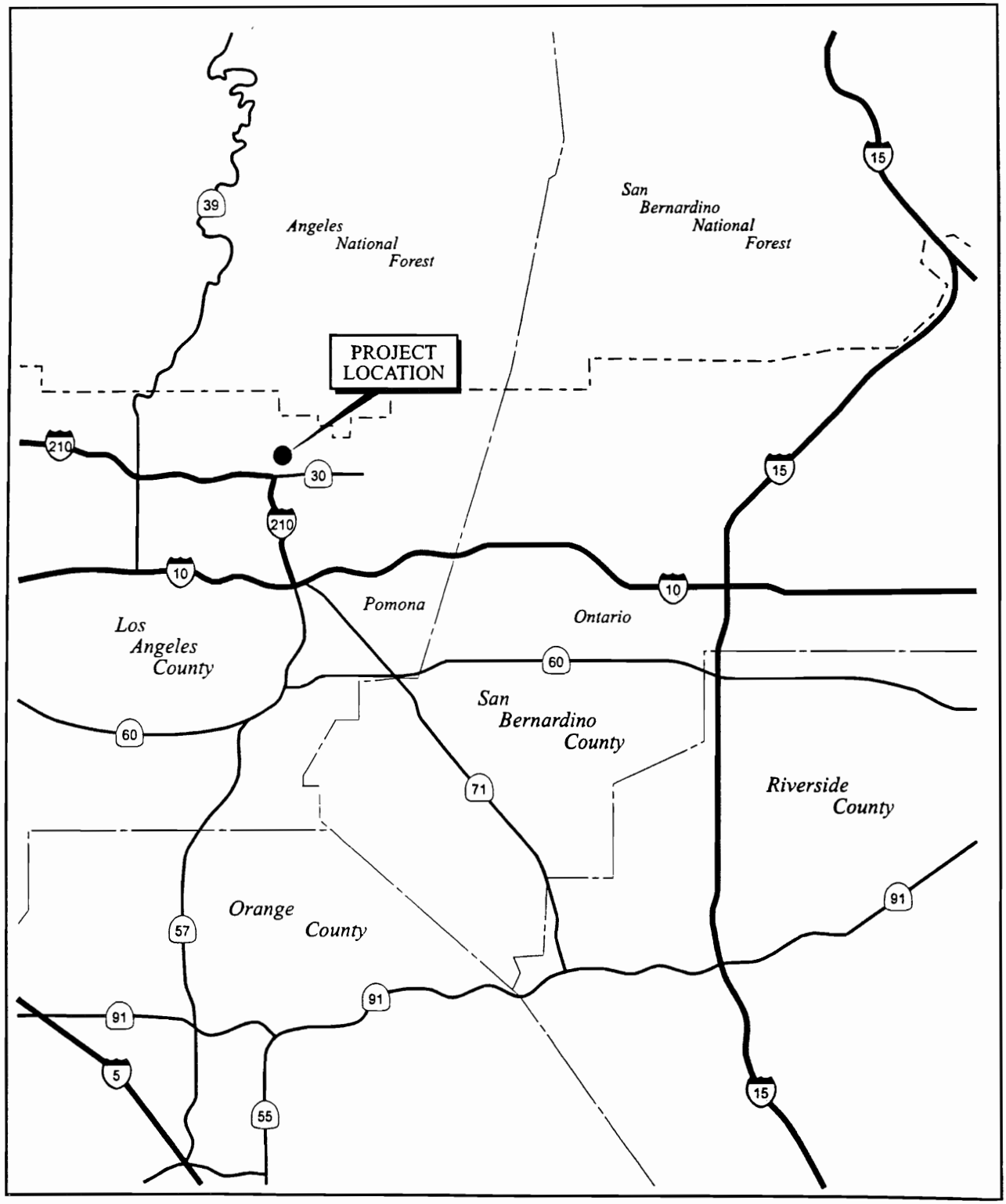
Under the existing General Plan, the maximum development permitted is one dwelling unit per five acres (1 du/5 ac), which would permit a total of 195 dwelling units on the 972 vacant acres in the project area (refer to Exhibit 3, *General Plan Land Use*). The development strategy proposed in the *Northern Foothills Development and Infrastructure Study* (November 1998) would permit a maximum of 127 dwelling units on the 972 vacant acres, based upon the following criteria:

1. 1 du/5 ac within the development feasibility zone; and
2. 1 du/20 ac outside the development feasibility zone.

Table 1
Existing Land Uses by Acre

Land Use	Acreage	% of Total
National Forest	1,280.0	43.0
Vacant Land	972.0	32.7
Single Family Residential	352.0	11.8
Public Facilities	141.0	4.7
Golf Course	70.0	2.4
Parks	68.0	2.3
Agriculture	56.0	1.9
Equestrian	21.5	0.7
Other	7.5	0.3
Commercial	5.0	0.2
Senior Citizen Housing	3.0	0.1
Total Study Acreage	***2,976.0***	***100.0***

Source: *San Dimas Northern Foothills Development and Infrastructure Study*, prepared by LSA Associates, Inc., dated June 3, 1998.



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CITY OF SAN DIMAS
NORTHERN FOOTHILLS IMPLEMENTATION PROGRAM EIR

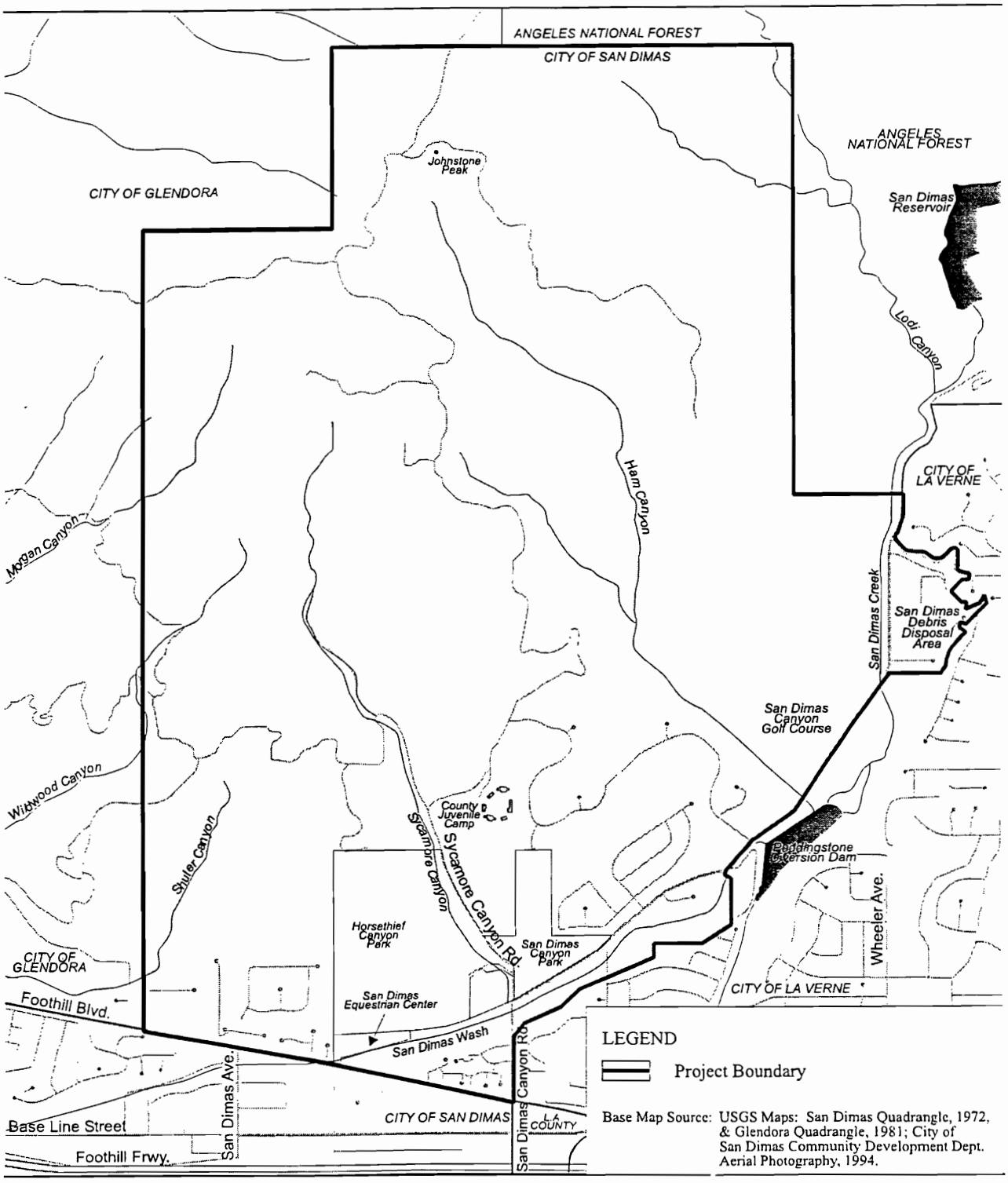
Regional Vicinity Map

Robert Bein, William Frost & Associates

12-98

JN 34933

Exhibit 1



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CITY OF SAN DIMAS
NORTHERN FOOTHILLS IMPLEMENTATION PROGRAM EIR

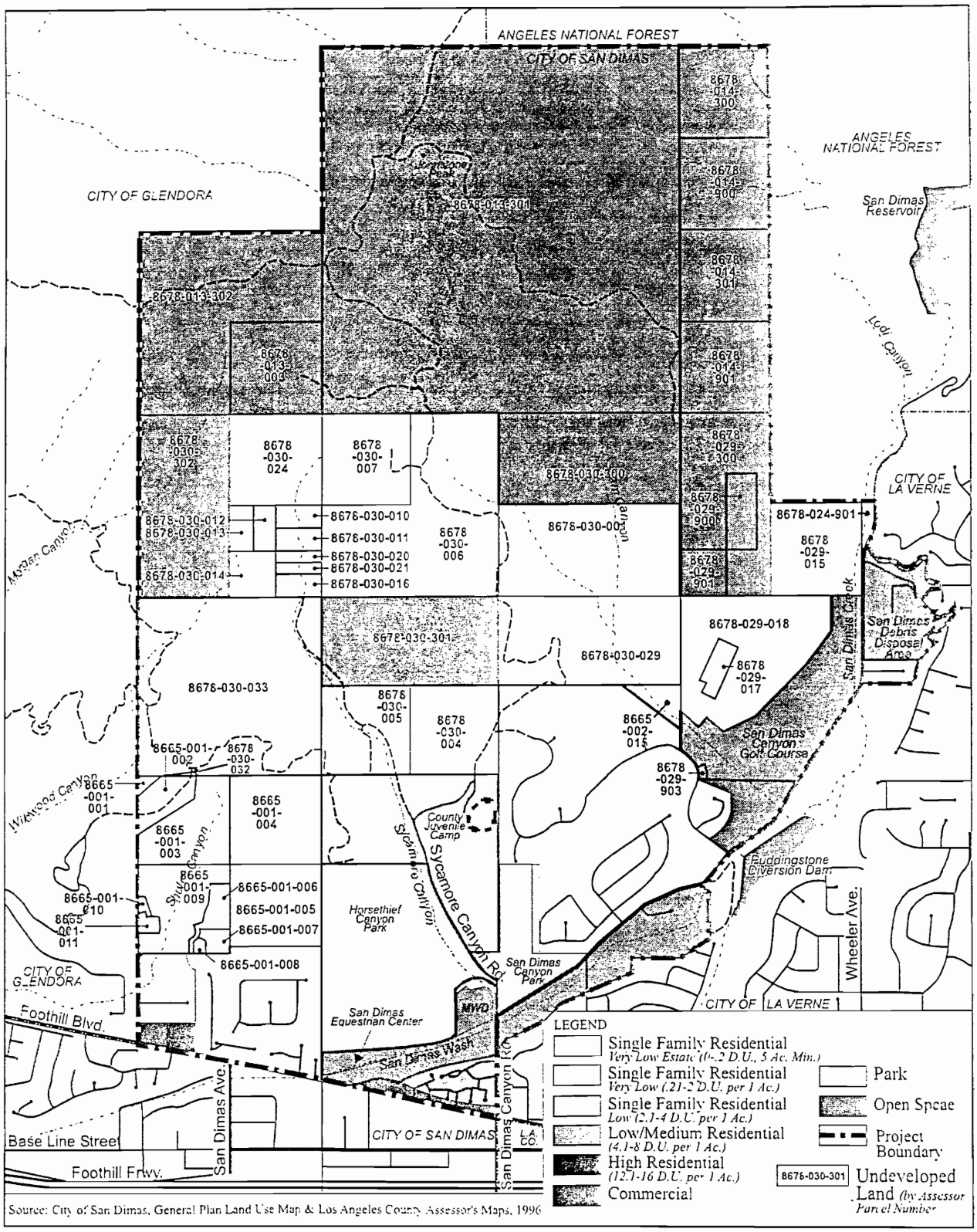
Project Area Boundary

Robert Bein, William Frost & Associates

12-98

JN 34933

Exhibit 2



Source: City of San Dimas, General Plan Land Use Map & Los Angeles County Assessor's Maps, 1996

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CITY OF SAN DIMAS
NORTHERN FOOTHILLS IMPLEMENTATION PROGRAM EIR

General Plan Land Use

Exhibit 3

The proposed project involves a General Plan Amendment and Zone Change/Specific Plan. The General Plan Amendment would amend the San Dimas General Plan text to create a "Northern Foothills" land use designation and to outline development policies and requirements specific to the Northern Foothills area consistent with the "Northern Foothills Development Strategy." The Zone Change/Specific Plan would create either a new zone or specific plan to implement the policies and requirements of the General Plan and the adopted Development Strategy.

The following revisions are recommended to amend the General Plan and Zoning Ordinance to reflect the Northern Foothills Development Strategy.

General Plan Revisions

C. Amend the land use designation of all privately-owned lands within the Northern Foothills project area that are currently designated Single Family Residential to Very Low Estate, with the exception of the Terrebonne Tract, to a new designation of "Northern Foothills." Retain the existing "Park" and "Open Space" land use designations for the National Forest, Camp Glen Rocky, Horsethief Canyon Park, San Dimas Wash, San Dimas Canyon Golf Course and other publicly-owned lands.

D. Amend the land use designation of the National Forest Service property (APN 8678-030-301) to "Northern Foothills."

E. Add next text to the General Plan that outline development policies and requirements specific to the Northern Foothills project area.

Zoning Ordinance Revisions

F. Create a new zone to apply to lands within the Northern Foothills project area. The new zoning shall include standards/requirements for, but not limited to, slope density, minimum lot sizes, building height, building envelope, landscaping, and street geometrics.

G. Apply the Private Horse Overlay zone or its equivalent to all privately owned lands.

2.3 OBJECTIVES

The guiding principle for managing environmental values and future development within the Northern Foothills area is to protect the area's natural environment and existing resources, and to ensure the design/layout of future hillside developments by 1) preserving sensitive resources in place, and 2) adapting to the natural hillside topography and maximize view opportunities to, as well as from the development. The overall objective is to fit projects into their hillside setting rather than altering the hillside to fit the project. While individual property rights within the Northern Foothills Area must be acknowledged and recognized, the priority between development and natural resource values should be given to protecting the resource.

2.4 PHASING

The phasing plan is designed and intended to assure the timely and efficient implementation of the proposed project. Future development projects will be completed in individual phases, which are to be determined at a later date.

3.0 INITIAL STUDY CHECKLIST

3.1 BACKGROUND

1.	**Project Title:** Northern Foothills Implementation Program
2.	**Lead Agency Name and Address:** City of San Dimas 245 East Bonita Avenue San Dimas, CA 91733
3.	**Contact Person and Phone Number:** Larry Stevens, AICP, Planning Director (909) 394-6250
4.	**Project Location:** An area of primarily undeveloped land consisting of approximately 3,000 acres in the portion of San Dimas north of Foothill Boulevard.
5.	**Project Sponsor's Name and Address:** City of San Dimas 245 East Bonita Avenue San Dimas, CA 91773
6.	**General Plan Designation:** Open Space and Single Family Residential - Very Low Estate (0 to 0.2 du/ac)
7.	**Zoning:** O-S (Open Space), W (Watershed), SF-A (Single Family-Agricultural), and SF-H (Single Family-Hillside).
8.	**Description of the Project:** (Describe the whole action involved, including but not limited to, later phases of the project, and any secondary, support or off-site features necessary for its implementation.) General Plan Amendment - a request to amend the San Dimas General Plan text to create a "Northern Foothills" land use designation and to outline development policies and requirements specific to the Northern Foothills area consistent with the "Northern Foothills Development Strategy" Zone Change/Specific Plan - a request to create a new zone or specific plan to implement the policies and requirements of the General Plan and the adopted Development Strategy.

9. Surrounding Land Uses and Setting:

Most of the existing development is along the base of the Northern Foothills near to Foothill Boulevard and San Dimas Canyon Road. Land uses in the nearly 3,000 acre study area are principally public ownership and single family residential. Public ownership includes 1280 acres of National Forest, a city-owned golf course, a city (Horsethief Canyon Park - now nearing completion) and a county regional park (San Dimas Canyon Park), and a county juvenile probation facility. Nearly one-third of the area is vacant and available for future development. Existing zoning regulations could have allowed up to 448 lots on the vacant 972 acres but subsequent revisions to the general plan reduced that to 182 lots.

There are paved roads leading to much of the perimeter of the area but the existing lots, which are sparsely improved with a couple of ranches, equestrian facilities and accessory buildings, are primarily accessed by a series of unpaved motorways. Except for several overhead electrical lines, generally intended to serve existing facilities at Johnstone Peak, there is no other infrastructure in the undeveloped portions of the Northern Foothills.

Topographically elevations range from 1,000 to 3,200 feet above sea level and the area is characterized by steep terrain, narrow canyons and broad ridgelines. Major topographical features include Johnstone Peak, Sycamore Flat and three major north-south ridgelines which result in four uniquely identifiable canyons (Wildwood, Sycamore, Ham and Lodi). The overall average slope of the area is 52 percent. There is evidence of a number of landslides and slope failures in the area and the area is traversed by the Cucamonga branch of the Sierra Madre Fault. The study area is highly visible to the surrounding developed communities below it.

The area is replete with a variety of biological resources. Plant communities include chaparral, coastal sage scrub, grasslands, woodlands and riparian scrub. A number of sensitive species are likely to live in these habitat areas. In addition, the area contains several blue-line streams.

10. Other public agencies whose approval is required (e.g., permits, financing approval or participation agreement).

None

3.2 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" or "Potentially Significant Unless Mitigated," as indicated by the checklist on the following pages.

X	Land Use & Planning	X	Hazards
	Population & Housing		Noise
X	Geological Problems	X	Public Services
X	Water	X	Utilities & Service Systems
	Air Quality	X	Aesthetics
X	Transportation		Cultural Resources
X	Biological Resources		Recreation
	Energy & Mineral Resources	X	Mandatory Findings of Significance

3.3 EVALUATION OF ENVIRONMENTAL IMPACTS

This section analyzes the potential environmental impacts associated with the proposed project. The issue areas evaluated in this Initial Study include:

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

The environmental analysis in this section is patterned after the Initial Study Checklist used by the City of San Dimas in its environmental review process. Under each issue area, a description of the *thresholds of significance* is provided. These thresholds provide guidance in the Lead Agency's determination as to whether there is a potential for significant effects on the environment. For the preliminary environmental assessment undertaken as part of this Initial Study's preparation, a determination that there is a potential for significant effects indicates the need to more fully analyze the development's impacts and to identify mitigation in the EIR. 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 judgement on the part of the public agency*

involved, based to the extent possible on scientific and factual data. An ironclad definition of 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 be a significant effect on the environment in Appendix G of the State CEQA Guidelines, as amended. Other criteria and standards used by the Lead Agency, responsible agencies, and trustee agencies are also used to aid in the determination of potential significant effects. Finally, accepted scientific and factual data provide further guidance in this regard.

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 of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the development. To each question, there are four possible responses:

- **No Impact.** The development will not have any measurable environmental impact on the environment.

- **Less Than Significant Impact.** The development will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.

- **Potentially Significant Impact Unless Mitigation Incorporated.** The development will have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the development's physical or operational characteristics can reduce these impacts to levels that are less than significant.

- **Potentially Significant Impact.** The development will have impacts which are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

Where potential impacts are anticipated to be significant, mitigation measures will be recommended in the EIR, so that impacts may be avoided or reduced to insignificant levels.

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
1 LAND USE AND PLANNING. *Would the project:*				
A. Conflict with the general plan designation or zoning?		✓		
B. Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project?	✓			
C. Be incompatible 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)?				✓
2 POPULATION AND HOUSING. *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 EARTH AND GEOLOGY. *Would the project result in or expose people to potential impacts involving:*				
A. Fault rupture?	✓			
B. Seismic groundshaking?	✓			
C. Seismic ground failure, including 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?	✓			

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
H. Expansive soils?	✓			
I. Unique geologic or physical features?	✓			
4 WATER. *Would the project result in:*				
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. Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?			✓	
G. Altered direction or rate of flow of groundwater?				✓
H. Impacts to groundwater quality?			✓	
I. A substantial reduction in the amount of groundwater otherwise available for public water supplies?				✓
5 AIR QUALITY. *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 movements, moisture, or temperature, or cause any change in climate?				✓
D. Create objectionable odors?				✓

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
6 TRANSPORTATION/CIRCULATION. *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)?	✓			
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?				✓
7 BIOLOGICAL RESOURCES. *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?	✓			
8 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?				✓

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
9 HAZARDS, 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 hazard?			✓	
D. Exposure of people to existing sources of potential health hazards?			✓	
E. Increased fire hazard in areas with flammable brush, grass, or trees?	✓			
10 NOISE. *Would the project result in:*				
A. Increases in existing noise levels?			✓	
B. Exposure of people to severe noise levels?			✓	
11 PUBLIC SERVICES. *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?				✓
12 UTILITIES. *Would the project result in a need for new systems, 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 services or septic tanks?	✓			

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
E. Storm water drainage?			✓	
F. Solid waste disposal?			✓	
G. Local or regional water supplies?			✓	
13 AESTHETICS. *Would the project:*				
A. Affect a scenic vista or scenic highway?	✓			
B. Have a demonstrable negative aesthetic effect?	✓			
C. Create light or glare?	✓			
14 CULTURAL RESOURCES. *Would the project:*				
A. Disturb paleontological resources?			✓	
B. Disturb archeological 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?				✓
15 RECREATION. *Would the project:*				
A. Increase the demand for neighborhood or regional parks or other recreational facilities?			✓	
B. Affect existing recreational opportunities?			✓	
16 MANDATORY FINDINGS OF SIGNIFICANCE.				
A. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	✓			

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
B. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact to the environment is one which occurs in a relatively brief, definite period of time while long-term impacts will endure well into the future.)	✓			
C. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	✓			
D. Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?	✓			

EARLIER ANALYSIS

Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a discussion should identify the following on attached sheets:

a) **Earlier analyses used.** *Identify earlier analyses and state where they are available for review.*

The project site has been the subject of several previous environmental studies. These studies have been used as appropriate throughout this Initial Study:

City of San Dimas General Plan, 1991
City of San Dimas General Plan EIR, 1991
San Dimas Northern Foothills Development and Infrastructure Study, November 1998

The above documents are available for viewing at the City of San Dimas Planning Department, 245 E. Bonita Avenue, San Dimas, CA 91773.

b) **Impacts adequately addressed.** *Identify which effects from the above checklist were within the scope of and adequately analyzed in the earlier document pursuant to applicable legal standards and state whether such effects were addressed by mitigation measures based on the earlier analysis.*

The City's General Plan and associated CEQA document include a city-wide assessment of the conversion of open space to urban development, land use compatibility issues associated with the project area and cumulative impacts associated with buildout of the City under General Plan land use designations..

c) **Mitigation measures.** *For effects that are "potentially significant unless mitigated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.*

The Program EIR will recommend mitigation measures for all potential significant environmental impacts. Where mitigation measures from these previous EIRs are incorporated, they will be referenced as such.

Authority: Public Resources Code Sections 21083 and 21087.
Reference: Public Resources Code Sections 21080(c), 21080.1, 21080.3. 21082.1, 21083, 21083.3, 21093, 21094, 21151; *Sundstrom* v. *County of Mendocino*, 202 Cal. App. 3d 296 (1988); *Leonoff v. Monterey Board of Supervisors*, 222 Cal. App. 3d 1337 (1990).

4.0 ENVIRONMENTAL ANALYSIS

The following is a discussion of potential project impacts as identified in the Initial Study. Explanations are provided for each item.

4.1 Land Use and Planning. Would the proposal:

a) *Conflict with general plan designation or zoning?* **Potentially Significant Impact Unless Mitigation Incorporated.**

The project area consists of various approved land use designations as contained within the City of San Dimas General Plan Land Use Map (refer to Exhibit 2, *General Plan Land Use*). Implementation of the proposed project would involve a General Plan Amendment and Zone Change/Specific Plan. This would result in an amendment to the San Dimas General Plan text to create a "Northern Foothills" land use designation. The General Plan Amendment would also serve to outline development policies and requirements consistent with the "Northern Foothills Development Strategy". The Zone Change/Specific Plan would serve to create either a new zone or specific plan to implement the policies and requirements of the General Plan and the Development Strategy. The proposed project's consistency with the City of San Dimas General Plan and the City's Zoning Ordinance will be evaluated in the Program EIR.

b) *Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project?* **Potentially Significant Impact.**

The project area is not located within an existing Specific Plan area or Redevelopment Project area. The City of San Dimas General Plan and supporting General Plan EIR, as well as the South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan (AQMP) and Natural Communities Conservation Plan (NCCP) apply to the project area. The project's consistency with these plans will be evaluated in the Program EIR.

c) *Be incompatible with existing land use in the vicinity?* **Less Than Significant Impact.**

Existing uses within the project area include single-family residential, 1,280 acres of National Forest and the San Dimas Canyon Golf Course, San Dimas Canyon Park, Horsethief Canyon Park, and a county juvenile probation facility. The proposal would result in a density reduction in the existing number of approved single-family residential units within the project area (refer to Exhibit 3, *Potential Development Areas*). The current land use density as contained in the General Plan Land Use Map allows for 1 dwelling unit (du) per 5 acres, which would allow for a maximum development 195 dwelling units on the 972 acre of vacant land. The proposal would result in a less than significant impact when compared to the approved land uses, since

a maximum of 127 dwelling units on the 972 vacant acres are allowed. As indicated in subsequent sections of this Initial Study, the Program EIR will evaluate potential impacts on aesthetics, traffic, noise, and other issues that are directly and indirectly related to land use compatibility.

d) *Affect agricultural resources or operations (e.g. impacts to soils or farmlands, or impacts from incompatible land uses)?* **No Impact.**

No agricultural resources are located on or within the immediate vicinity of the project area. Therefore, impacts to agricultural resources would not occur with implementation of the proposed project. This issue will not be analyzed in the Program EIR.

e) *Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?* **No Impact.**

Presently, the majority of the existing development within the project area is located along the base of the Northern Foothills. Surrounding land uses include the Angeles National Forest to the north; single-family residential uses and the Angeles National Forest to the east; residential uses to the south; and vacant land to the west. The project area is within an area of the City that has been designated for residential uses. The area surrounding the project area has been developed with these types of uses for many years. No division of an established community would occur. This issue will not be analyzed in the Program EIR.

4.2 Population and Housing. Would the proposal:

a) *Cumulatively exceed official regional or local population projections?* **No Impact.**

The project area is currently designated for a number of land uses, including a majority of the area designated as Single Family Residential (refer to Exhibit 2, *General Plan Land Use*). Under the existing general plan the maximum development permitted is one dwelling units per five acres (1 du/5ac), which would permit a total of 195 dwelling units on the 972 vacant acres in the project area. However, as previously discussed above, the development strategy proposed in the *Northern Foothills Development and Infrastructure Study* (November 1998) would permit a maximum of 127 dwelling units on the 972 vacant acres. As such, the project would generate less population than estimated under regional and 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)?* **Less Than Significant Impact.**

Implementation of the proposed project may serve as a catalyst for development in the surrounding area. However, future land uses for properties surrounding or located in the vicinity of the project area are governed by the City's General Plan and Zoning Ordinance. The existing northern foothills area is sparsely populated except on the fringes where infrastructure now exists. The proposed project may induce growth and new infrastructure in this undeveloped area. Although it is intended to introduce growth at minimum levels with corresponding levels of infrastructure, any new activity introduced into a sparsely developed sensitive area would induce growth. While this development may affect the timing and/or feasibility of future development in the surrounding area, future development of undeveloped sites in the project area is defined by the City's General Plan. This issue will be analyzed in the Program EIR.

c) *Displace existing housing, especially affordable housing?* **No Impact.**

Single-Family Residential and Low/Medium Residential uses are currently located along the southern portion of the project area. The existing General Plan land use and zoning designations allow for development of single-family residential units on-site. The proposal would not result in the displacement of existing residential units located on-site. This issue will not be analyzed in the Program EIR.

4.3 Geological Problems. Would the proposal result in or expose people to potential impacts involving:

a) *Seismicity: fault rupture?* **Potentially Significant Impact.**

The project area is located in the seismically active Southern California region and would likely be subjected to ground shaking, thus exposing residents to seismic hazards. Fault rupture is a break in the surface along a fault, characterized by slippage along the fault or by surface soil rupture. It results from horizontal and/or vertical surface displacement associated with active fault movement and normally occurs along the actual fault trace, but can occur anywhere within the fault zone. According to the City of San Dimas General Plan, the City is not located in an Alquist-Priollo Special Studies Zone (APSSZ).

The southern portion of the project area is traversed by the active Cucamonga branch of the Sierra Madre fault. The impact of earthquakes on the project area depends on several factors including the particular fault, fault location, distance from the project area, and magnitude of the earthquake. Each of these factors can help determine the degree of shaking that would occur in the project area. The Program EIR will

incorporate the findings of a Geotechnical Study prepared for the project area addressing seismic issues. Current development standards will require the project applicant(s) to comply with appropriate seismic design criteria in accordance with the Uniform Building Code (UBC). These issues will be addressed within the appropriate sections of the Program EIR.

b) *Seismicity: Groundshaking?* **Potentially Significant Impact.**

The primary source of groundshaking hazards in the area that could affect the project area include the Cucamonga branch of the Sierra Madre Fault. As discussed above, groundshaking associated with earthquakes depends on several factors including the particular fault, fault location, distance from the project area, and magnitude of the earthquake. The Program EIR will incorporate the findings of a Geotechnical Study prepared for the project area addressing seismic issues. The project applicant(s) would be required to comply with appropriate seismic design criteria relative to groundshaking in accordance with the Uniform Building Code (UBC). This issue will be addressed in the Program EIR.

c) *Seismicity: ground failure or liquefaction?* **Potentially Significant Impact.**

Additional seismic-related hazards include the potential for liquefaction and seismically induced dynamic settlement of soils. Liquefaction is a response to severe ground shaking that can occur in loose soils. Ground failure from liquefaction is limited to certain geologic and hydrologic conditions and certain types of materials. The Program EIR will incorporate the findings of a Geotechnical Study prepared for the project area addressing seismic issues.

d) *Seismicity: seiche, tsunami or volcanic hazard?* **Less Than Significant Impact.**

Seiches are periodic oscillations of water in confined basins such as lakes and reservoirs. Seiches are usually caused by seismic ground waves in conjunction with an earthquake. Due to the presence of the Puddingstone Reservoir and San Dimas Canyon Reservoir located to the northeast and east, respectively, seiches, or earthquake generated waves are a potential hazard. The project area is not in the vicinity of or located near a volcanic hazard area. It should be noted that the proposed used have previously been addressed within the General Plan and supporting General Plan EIR, thus, the issue of seiches have been evaluated. Therefore, hazards involving tsunamis, seiche, or volcanic eruptions are not expected to affect the proposed development. These issues will not be addressed in the Program EIR.

e) *Landslide or mudslide?* **Potentially Significant Impact.**

Landslides and other types of slope failure are often triggered by earthquakes. Areas most susceptible to slope failure include terrain with greater than 30 percent slopes. The project area contains both foothill and mountainous terrain, and has an overall average slope steepness of approximately 52 percent. Landslides have occurred in many portions of the project area, some of which originated at times of active faulting and earthquakes related to the Cucamonga branch of the Sierra Madre fault zone. In addition, on-site soil conditions have resulted in a number of historic landslides scattered throughout the project area. The potential for landslides or slope failure to occur as a result of development on-site will be analyzed as part of the Program EIR. As previously discussed above, the Program EIR will incorporate a Geotechnical Study prepared for the project area addressing potential landslide impacts.

f) *Erosion, changes in topography or unstable soil conditions from excavation, grading or fill?* **Potentially Significant Impact.**

The project area is situated within the eastern most portion of the San Gabriel Mountains, which are a part of the large Transverse Range Geomorphic Province. This province covers the Transverse Mountain ranges and structural basins that trend approximately east-west. The geologic rock units within the project area range in age from approximately 147 million years old (Mesozoic to essentially modern. Three independent soil types cover the project area Ramona-Placentia Association, Hanford Association an the Vista-Amargosa Association

Due to several factors, including the characteristics of the on-site soils, the steepness and stability of the on-site terrain, the proposed project potentially may result in significant erosion and/or displacement of soils. The Program EIR will incorporate a both a Geotechnical Study and a Hydrological Study prepared for the project area, which will address potential erosion and changes in existing topography as a result of project implementation.

Since a Program EIR will be prepared, short-term construction impacts will not be addressed. However, it should be noted that grading operations would expose soils to short-term erosion by wind and water. Future individual developments on-site would be subject to City codes and requirements for erosion control.

g) *Subsidence of the land?* **Potentially Significant Impact.**

Subsidence or settlement is a loss of elevation of the land surface caused by the rearrangement of individual soil grains into smaller spaces. The more significant natural causes are seismically-induced ground shaking, local or regional tectonic settling, and heavy rainfall. Man-induced causes of subsidence include groundwater,

oil and gas withdrawal. However, the project area is not subject to oil or groundwater extraction. The potential for subsidence to occur within the project area will be addressed in the Geotechnical Study prepared as part of the Program EIR.

h) *Expansive soils?* **Potentially Significant Impact.**

Refer to response 4.3-f above.

i) *Unique geologic or physical features?* **Potentially Significant Impact.**

The project area primarily consists of undeveloped rolling hills with an approximately topographic low of 1,000 feet above mean sea level (MSL), and an approximate high of 3,200 feet above MSL. The project area is characterized by steep terrain, narrow canyons and broad ridgelines. Major topographic features within the project area include Wildwood Canyon, Sycamore Canyon, Ham Canyon, and Lodi Canyon. The Program EIR will discuss the potential effects that development of the project area may have on the existing natural resources.

4.4 Water. Will the proposal result in:

a) *Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?* **Potentially Significant Impact.**

The project site is located within three major watersheds and four smaller watersheds. Smaller areas with unnamed drainage courses are present where the foothills meet the alluvial fan and in the northwest portion of the project area. The majority of the project area ultimately drains into San Dimas Wash, which generally forms the southeasterly boundary of the project area; the western and northwesterly portions of the site drain toward the city of Glendora and into Big Dalton Wash. Both San Dimas Wash and Big Dalton Wash are ultimately tributaries to the San Gabriel River.

Project buildout will result in the creation of increased impervious ground surfaces on-site. This may result in significantly higher volumes and velocities of storm runoff, and will result in slightly reduced absorption and groundwater recharge. The Program EIR will incorporate the findings of a Hydrology Study for the project area, which will identify potential changes in absorption rates, drainage patterns, and amount of surface runoff. Impacts of the developed condition hydrology will be evaluated based on the proposed drainage improvements and stormdrain improvements.

b) *Exposure of people or property to water related hazards such as flooding?* **Less Than Significant Impact.**

Implementation of the proposed project may involve alteration and/or improvement of drainage courses, which may affect the flow and/or course of flood waters. A small portion of the low lying areas in the southwest portion of the project area have been designated as "areas of 500-year flood; or areas subject to 100-year flooding with average depths less than one (1) foot or with drainage areas less than one square mile" on the flood insurance rate maps published by the Federal Emergency Management Agency (FEMA). The Program EIR will discuss the potential impacts of flood waters on uses in the project area. Refer to Response 4.4-a above.

c) *Discharge into surface waters or other alteration of surface water quality (e.g., temperature, dissolved oxygen, or turbidity)?* **Potentially Significant Impact.**

The proposed project will increase urban pollutant discharge in the project area. The potential for the project to substantially degrade water quality, interfere with groundwater recharge, contaminate a public water supply, or expose people to water-related hazards will be evaluated in the Program EIR. An analysis of the National Pollutant Discharge Elimination System (NPDES) permitting criteria will also be provided in the Program EIR. Particular attention will be given to potential water quality impacts to the San Dimas and Big Dalton Washes.

d) *Changes in the amount of surface water in any water body?* **Less Than Significant Impact.**

The increased runoff produced by project implementation may result in slightly higher water levels in the San Dimas Wash and the Big Dalton Wash. This increased runoff would occur primarily during storm events, however, increased water demand and subsequent discharge to local storm drains may also increase surface water levels during the dry season. The hydrological impacts of the proposed project will be addressed in the Program EIR. Refer to Response 4.4-a above.

e) *Changes in currents, or the course or direction of water movements?* **Potentially Significant Impact.**

Implementation of the proposed project would involve alteration and/or improvement of several "blue-line" drainage courses, which may affect the flow and/or course of waters. The hydrological impacts of the proposed project will be addressed in the Program EIR. Refer to Response 4.4-a above.

f) *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.**

Portions of the project area are within the Foothill Groundwater Basin, which extends only into the areas of rolling hills, as the mountainous portions do not have readily accessible groundwater supplies. Groundwater occurs at a depths of between 900 to 1,200 feet below ground surface (bgs) within the project area. Two existing water tunnels exist in the upper reaches of Sycamore Canyon and currently convey water via steel pipes along the west slope of Sycamore Canyon. Water from this system is currently not used for domestic purposes. The proposed project does not have the ability to alter the direction or rate of flow of ground waters, as no aspects of the project would be expected to lead to such effects. This potential impact is not expected to be significant. This issue will not be addressed in the Program EIR.

g) *Altered direction or rate of flow or groundwater?* **No Impact.**

Refer to response 4.4-f above. This issue will not be addressed in the Program EIR.

h) *Impacts to ground water quality?* **Less Than Significant Impact.**

Refer to response 4.4-f above. This issue will be discussed in the Program EIR.

i) *A substantial reduction in the amount of groundwater otherwise available for public water supplies?* **No Impact.**

Refer to response 4.4-f above. This issue will not be discussed in the Program EIR.

4.5 Air. Will the proposal result in:

a) *Violate any air quality standard or contribute to an existing or projected air quality violation?* **Less Than Significant Impact.**

The proposed project is located under the jurisdiction of the South Coast Air Quality Management District (SCAQMD) in the South Coast Air Basin. The South Coast Air Basin is currently in violation of federal air quality standards. Development associated with the proposed project will result in the generation of long-term air quality impacts. These impacts are considered to be less than significant, both individually and cumulatively, as the proposed project is consistent with the General Plan and associated CEQA documents. It should be noted that the project proposes a reduction in the number of dwelling units from the approved land uses previously analyzed. Long-term effects will result from the increased vehicular traffic and energy demand expected to accompany development of the 127 dwelling units.

While the impacts are anticipated to be less than significant, the Program EIR will discuss the potential air quality impacts associated with the proposed development, as well as the current status of relevant air quality standards/guidelines, including the California Clean Air Act, the SCAQMD's Final Air Quality Management Plan and the SCAQMD's Final CEQA Air Quality Handbook.

b) *Expose sensitive receptors to pollutants?* **Less Than Significant Impact.**

The proposed project is located near existing residential uses, which are considered sensitive air quality receptors by the South Coast Air Quality Management District (SCAQMD). Due to the low number of residential units proposed, project generated traffic will not produce a significant amount of air pollutants. Therefore, implementation of the proposed project would not result in a significant air quality impact to sensitive receptors. This issue will not be addressed in the Program EIR.

c) *Alter air movement, moisture, or temperature, or cause any change in climate?* **No Impact.**

Given the nature of the proposed development, would it does not have the potential to result in local or regional changes of air movement, moisture, temperature or climate. This issue will not be discussed in the Program EIR.

d) *Create objectionable odors?* **No Impact.**

Implementation of the proposed project itself would not create objectionable odors. As the supporting CEQA document will be a Program EIR, short-term construction impacts will not be analyzed. However, it should be noted that future developments within the project area would require site specific environmental documentation addressing potential site specific short-term construction impacts.

4.6 Transportation/Circulation. Will the proposal result in:

a) *Increased vehicle trips or traffic congestion?* **Less Than Significant Impact.**

Development of 127 dwelling units within the project area would result in the generation of additional vehicular traffic. It should be noted that the proposed project is consistent with the General Plan, and project-generated traffic has been accounted for in City-wide traffic modeling. The Program EIR will address potentially significant impacts associated with proposals that might modify existing road development standards related to width, grade, radius, paving surface and related design factors.

b) *Hazards of safety from design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?* **Potentially Significant Impact.**

The proposal is subject to City of San Dimas design standards in order to alleviate potential safety hazards. Refer to 4.6-a above.

c) *Inadequate emergency access or access to nearby uses?* **Potentially Significant Impact.**

The proposed project would improve access to the project area. Inadequate roadways, some of which are not paved, would be replaced with roadways consistent with applicable safety criteria including speed, sight distance, signage and signalization. It should be noted that this can limit access for various emergency services in a manner that may not meet their normally accepted standards. The Program EIR will incorporate an Access Study Report for the project area that will analyze these impacts further and recommend sufficient mitigation. Access to individual future developments would be required to satisfy all City of San Dimas and other responsible agency design standards related to emergency access.

d) *Insufficient parking capacity on-site or off-site?* **No Impact.**

Implementation of the proposed project would not result in insufficient parking capacity on-site or off-site. However, future development would be required to satisfy all City of San Dimas parking standards on a project-by-project basis. This issue will not be analyzed in the Program EIR.

e) *Hazards or barriers for pedestrians or bicyclists?* **Potentially Significant Impact Unless Mitigation Incorporated.**

The proposed project will increase traffic volumes within the project vicinity circulation system, which could result in increased traffic hazards. In addition, there is the potential for conflicts between proposed uses and the historical use of existing equestrian trails in the project area. The Program EIR will identify potential traffic hazards relating to the project for pedestrians, bicyclists and equestrians.

f) *Conflicts with adopted policies supporting alternative transportation (e.g. bus turnouts, bicycle racks)?* **Less Than Significant Impact.**

The City of San Dimas has developed an extensive system of equestrian and bike trails throughout the City. These trails are primarily used for recreation, but also offer an alternative transportation mode to get to work, school and shop. Implementation of the project itself would not result in conflicts with policies supporting alternative transportation. However, future developments within the project area would be

required to address alternative transportation opportunities (i.e., bike lanes, racks, and trail linkages) on a project-by-project basis. This issue will not be discussed in the Program EIR.

g) *Rail, waterborne, or air traffic impacts?* **No Impact.**

Rail, waterborne and air transportation facilities are not located in the site vicinity, therefore no impacts are anticipated. Further, the project intensity is within the limits set by the General Plan. Therefore, no unanticipated demand for rail, waterborne or air travel will occur. This issue will not be addressed in the Program EIR.

4.7 Biological Resources. Would the proposal result in impacts to:

a) *Endangered, threatened, or rare species or their habitats (including but not limited to plants, fish, insects, animals and birds)?* **Potentially Significant Impact.**

The Northern Foothills area supports a diverse mix of biological resources, reflecting various influencing factors such as climatic variations, slope, aspect, fire history, soils, moisture availability, and drainage conditions. The project area contains areas classified as Chaparral, Coastal Sage Scrub, Grassland, Woodland, and Riparian Scrub. Existing native vegetation will be preserved, enhanced or restored in preservation areas where feasible. The Program EIR will incorporate a Biological Resources study prepared for the project area and will focus on potential impacts to any sensitive habitat or species. The Program EIR will also address the project's relationship to the NCCP.

Environmentally sensitive vegetation has been identified throughout the project area. These areas support a wide diversity of wildlife species and may function as habitat linkages or corridors. Woodland areas, particularly along, streambeds, are a highly sensitive habitat of the project area. Sycamore Canyon, Ham Canyon, and woodland along San Dimas Canyon are major areas of woodland habitat along streambeds. Coastal sage scrub, grassland communities, and chaparral are considered sensitive habitat within the project area. The Program EIR will further identify unique, aesthetically significant, rare or endangered species that may be impacted by the proposed project.

b) *Locally designated species (e.g. heritage trees)?* **Potentially Significant Impact.**

Refer to response 4.7-a above. This issue will be analyzed in the Program EIR.

c) *Locally designated natural communities (e.g., oak, forest, coastal habitat)?* **Potentially Significant Impact.**

Refer to response 4.7-a. This issue will be analyzed in the Program EIR.

d) *Wetland habitat (e.g. marsh, riparian and vernal pool)?* **Potentially Significant Impact.**

The Program EIR will incorporate the findings of a Biological Resources study prepared for the project area regarding wetland habitat.

e) *Wildlife dispersal or migration corridors?* **Potentially Significant Impact.**

The Program EIR will incorporate the findings of a Biological Resources study prepared for the project area regarding wildlife dispersal and potential project impacts on migration corridors. Also refer to response, 4.7-a above.

4.8 Energy and Mineral Resources. Would the proposal:

a) *Conflict with adopted energy conservation plans?* **No Impact.**

Development associated with the proposed project does not conflict with energy conservation plans. The City requires that new developments utilize energy saving devices. Development on-site shall be subject to State Title 24 Energy Regulations which establishes energy performance building code requirements that the City follows and implements. This issue will not be discussed in the Program EIR.

b) *Use of non-renewable resources in a wasteful and inefficient manner?* **No Impact.**

Energy sources and usage required for project implementation and operation are not considered to be significant impacts, due to the small scale of the proposed project. No significant mineral deposits are found in the project area. This issue will not be discussed in the Program EIR.

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?* **No Impact.**

According to the City of San Dimas General Plan (Exhibit VI-2), the project area does not contain significant mineral resources. Also refer to response 4.8-b above. This issue will not be discussed in the Program EIR.

4.9 Hazards (Risk of Upset/Human Health). Would the proposal involve:

a) *A risk of accidental explosion or the release of hazardous substances (including, but not limited to: oil, pesticides, chemical or radiation)?* **Less Than Significant Impact.**

The proposed project will result in the increased use, production and or disposal of hazardous materials, particularly household hazardous wastes. No uses would be located on-site that would be engaged in the production or disposal of hazardous material; thus, significant impacts in this regard would not occur. This issue will not be analyzed in the Program EIR.

b) *Possible interference with an emergency response plan or emergency evacuation plan?* **Potentially Significant Impact.**

Emergency access to the project area will be evaluated following consultation with emergency service providers (such as the Los Angeles County Fire Department and the Los Angeles County Sheriff's Department) to identify potential impacts and required mitigation. This issue will be discussed in the Program EIR.

c) *Creation of any health or potential health hazards?* **Less Than Significant Impact.**

Refer to response 4.9-a above. This issue will not be analyzed in the Program EIR.

d) *Exposure of people to existing sources of potential health hazards?* **Less Than Significant Impact.**

Refer to response 4.9-a above. This issue will not be analyzed in the Program EIR.

e) *Increased fire hazard in areas with flammable brush, grass, or trees?* **Potentially Significant Impact.**

The Northern Foothills area is substantially more susceptible to fires than other areas of the City, due to the location of fire-prone vegetation, less convenient access by fire fighting equipment, steep topography, and seasonal conditions that exacerbate fore hazard conditions. Hillside fire maintenance and protection is provided to the City of San Dimas though a joint agreement of the Los Angeles County Fire Department (LACFD), the California Department of Forester and Fire Warden (CDFFW), and the U.S. Forest Service. Most of the parcels within the project area are within or adjacent to areas containing moderate to dense native growth and vegetation. Conversely, wildfires originating in the Angeles National Forest could threaten adjacent residential uses.

The Program EIR will evaluate the potential hazards associated with introduction of new development and associated permanent population and visitors within these fire prone areas.

4.10 Noise. Will the proposal result in:

a) *Increase of existing noise levels?* **Less Than Significant Impact.**

Long-term noise impacts would be associated with vehicular traffic to and from the proposed project area. Long-term noise impacts will be address within the Program EIR. The project's consistency with the City's Noise Element will also be addressed. Due to the relatively minor increase in the amount of traffic that would be generated with implementation of the proposed project, impacts in this regard are anticipated to be less than significant.

b) *Exposure of people to severe noise levels?* **Less Than Significant Impact.**

Refer to response 4.10-a above.

4.11 Public Services. Will the proposal have an effect upon, or result in a need for new or altered governmental service in any of the following areas:

a) *Fire Protection?* **Potentially Significant Impact Unless Mitigation Incorporated.**

The City of San Dimas Fire Department provides fire protection, emergency, rescue services, and hazardous material coordination within the City. Hillside fire maintenance and protection is provided to the City of San Dimas though a joint agreement of the Los Angeles County Fire Department (LACFD), the California Department of Forester and Fire Warden (CDFFW), and the U.S. Forest Service. The Program EIR will include a discussion of existing services/facilities in the area, response times to the project area, and available fire flow. The Program EIR will also include an analysis of fire standards for rural areas.

b) *Police protection?* **Potentially Significant Impact Unless Mitigation Incorporated.**

The Los Angeles County Sheriff Department provides law enforcement services in the City of San Dimas. Future development on-site will require additional police surveillance, resulting in additional service demands on the Sheriff Department. The Program EIR will evaluate police service response times to the project area, available personnel, and overall protection services.

c) *Schools?* **Less Than Significant Impact.**

The proposal includes 127 single-family residential units within the proposed project area. Due to the relatively small scale of the proposed project, the increase in the student level throughout the affected school district is considered less than significant. The Program EIR will provide an analysis of existing conditions, projection of students generated by the proposed project, and an analysis of the potential impacts.

d) *Maintenance of public facilities, including roads?* **No Impact.**

Implementation of the proposed improvements would require long-term maintenance of the roadway. Due to the relatively limited area of the project, adverse physical impacts associated with long-term maintenance are not anticipated. This issue will not be discussed in the Program EIR.

e) *Other governmental services?* **No Impact.**

Due to the size and scope of the proposal, the development would not significantly affect other governmental services or agencies, such as social services, administrative offices, animal control and other general support services. No impacts to other governmental services are anticipated. This issue will not be addressed in the Program EIR.

4.12 Utilities and Service Systems. Would the proposal result in a need for new systems, or substantial alterations to the following utilities:

a) *Power or natural gas?* **Potentially Significant Impact.**

Southern California Edison (SCE) provides electricity services to the City of San Dimas and the Southern California Gas Company (SCGC) provides gas services. As the project proposes less intensified land uses for the project area than these previously analyzed in the San Dimas General Plan and supporting EIR, no impacts relative to power or natural gas consumption would occur. However, the Program EIR will analyze the practical installation of new electrical and gas facilities in the project area, as well as analyze the practicality of propane tanks for proposed uses in the project area.

b) *Communication systems?* **Potentially Significant Impact Unless Mitigation Incorporated.**

The project area is within the service boundaries of GTE. The proposed development would require telephone service and the extension of telephone lines. The Program EIR

will include discussion of existing telephone and cable facilities, as well as constraints associated with location and/or relocation of lines.

c) *Local or regional water treatment or distribution facilities?* **Potentially Significant Impact.**

There are currently nine water tanks, one reservoir, and one well within the San Dimas Northern Foothills study area. These facilities are owned and operated by several different agencies, including the Southern California Water Company (SCWC), the U.S. Forest Service, and the County of Los Angeles. Consultation with SCWC will occur as part of the Program EIR preparation. In addition, the Los Angeles County Department of Health will be contacted regarding standards relating to the installation of private water wells. The Program EIR will discuss potential constraints associated with water distribution facilities in order to provide adequate service to the proposed residential uses.

d) *Sewer or septic tanks?* **Potentially Significant Impact.**

Existing development within the Northern Foothills areas is currently being served with sewer service. Because this development is limited to the lower portions of the project area, sewer services have not been extended into the higher elevations of the foothills. Due to the high costs associated with sewer extension and the low likelihood that the development densities proposed in the area's steep hillside could support the required costs, it is anticipated that individual homes would utilize septic tanks. The Program EIR will discuss potential constraints associated with placement of septic tank leach fields. In addition, the Program EIR will discuss the potential opportunity for a portion of the project area to connect to the public sewer system in Glendora.

e) *Storm water drainage?* **Less Than Significant Impact.**

The proposed project will increase the amount of impervious surfaces, and therefore increase storm runoff volumes. A Hydrological Study will be prepared for the project area which will include an analysis of storm water drainage. The Program EIR will evaluate the ability of existing and proposed storm drainage systems to accommodate the higher volumes anticipated to be generated by project implementation.

f) *Solid waste and disposal?* **Less Than Significant Impact.**

Project implementation will result in increased demand for solid waste disposal services. However, this is considered less significant as the project proposes 127 single-family residential units which is lower than the approved density as contained within the City of San Dimas General Plan. However, the Program EIR will discuss impacts of whether or not trash hauling services can be provided in specific areas.

g) *Local or regional water supplies?* **Less Than Significant Impact.**

Refer to response 4.12-c above.

4.13 Aesthetics. Would the proposal:

a) *Affect a scenic vista or scenic highway?* **Potentially Significant Impact.**

The scenic resources of the City include the open foothills and canyon views to the San Gabriel Mountains. The northern foothills, Way Hill, San Dimas Canyon, Sycamore Canyon, Walnut Creek, Cinnamon Creek and other associated canyons are considered unique visual resources within the City of San Dimas. In addition, Interstate 210 (Foothill Freeway) and State Route 30 are considered scenic corridors of regional significance due to the quality of their environment and the large number of people traveling these routes.

Three distinct type of viewsheds are relevant to the San Dimas Northern Foothills area. These viewsheds include views of the project area from surrounding properties; views from the project area to outlying areas; and interior views, experienced when viewed from within the northern foothills areas. From outlying areas, individual views of the foothills vary depending upon elevation and distance from the area. Certain high points in the southern portion of the City of San Dimas provide good distance views of the project area. The Program EIR will analyze potential aesthetic impacts associated with project implementation on views from adjacent properties, the I-210 and State Route 30.

b) *Have a demonstrable negative aesthetic effect?* **Potentially Significant Impact.**

Implementation of the proposed project will convert vacant land to an urban, built environment, thus resulting in potential aesthetic impacts. In addition, overhead utilities are contemplated for the project area. The Program EIR will assess long-term aesthetic impacts associated with the proposed project including architectural compatibility, potential view impairments from surrounding areas, particularly from adjacent residential uses, and visual impacts of overhead utilities. Refer to response 4.13-a above.

c) *Create light or glare?* **Potentially Significant Impact Unless.**

Implementation of the proposed project will convert vacant land space to an urban, built environment, thus resulting in the introduction of light into the area. However, proposed uses would be similar to those located at the southern portion of the project area, as will generally light use and intensity. The Program EIR will assess the potential light and glare impacts associated with the proposed project.

4.14 Cultural Resources. Would the proposal:

a) *Disturb paleontological resources?* **Less Than Significant Impact.**

The Northern Foothills Development and Infrastructure Study indicated that one prehistoric site (CA-LAN-825) is located within the boundaries of the project area. To more definitely define the cultural resources in the area, a cultural resource study will be prepared for the project site and incorporated into the Program EIR. While the impacts on cultural resources are anticipated to be less than significant, this issue will be addressed in the Program EIR and will focus on potential impacts to significant cultural and historic resources, including archaeology, paleontology and historic resources.

b) *Disturb archeological resources?* **Less Than Significant Impact.**

Refer to response 4.14-a above.

c) *Affect historical resources?* **Less Than Significant Impact.**

A records and literature search has been performed for the project area which identified one historic site (Johnstone Lookout - CA-LAN-2045H). For additional discussion refer to response 4.14-a above.

d) *Have the potential to cause physical change which would affect unique cultural values?* **No Impact.**

Due to the undeveloped nature of the project area, the proposal is not anticipated to have the potential to cause a physical change which would affect unique cultural values. This issue will not be addressed in the Program EIR.

e) *Restrict existing religious or sacred uses within the potential impact area?* **No Impact.**

No religious or sacred uses are known to occur in the project area; thus, the proposal would not result in impacts to such uses. This issue will not be addressed in the Program EIR.

4.15 Recreation. Would the proposal:

a) *Increase the demand for neighborhood or regional parks or other recreational facilities?* **Less Than Significant Impact.**

Due to the relatively small scale of the proposed project, an increase in the demand for neighborhood or regional parks or other recreational facilities would not occur.

The Program EIR will provide a review of overall parkland conditions in the City and impacts the proposed project may have on the City park system. The Program EIR will also include a discussion of trails within the project area.

b) *Affect existing recreational opportunities?* **Less Than Significant Impact.**

The proposed project would not adversely impact existing recreational facilities. Refer to response 4.15-a above.

4.16 Mandatory Findings of Significance.

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

As noted in the preceding checklist responses, the proposal has the potential to result in significant environmental impacts. These will be addressed in the Program EIR.

b) *Does the project have the potential to achieve short-term, to the disadvantage of long-term environmental goals?* **Potentially Significant Impact.**

As noted in the preceding checklist responses, the proposal has the potential to result in significant environmental impacts. These will be addressed in the Program EIR.

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

As noted in the preceding checklist responses, the proposal has the potential to result in significant environmental impacts. These will be addressed in the Program EIR.

d) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?* **Potentially Significant Impact.**

The project area is located immediately adjacent to the Cucuamonga fault which is part of the larger Sierra Madre fault zone. Development of the project area may result in potential health hazards due to seismicity and landslide susceptibility. These issues will be analyzed in the Program EIR.

5.0 REFERENCES

The following references were utilized during preparation of this Initial Study. These documents are available for review at the City of San Dimas, Planning Department, 245 East Bonita Avenue, San Dimas, California, 91733.

City of San Dimas, *General Plan*, 1991.

City of San Dimas, *General Plan EIR,* 1991.

LSA Associates, *San Dimas Northern Foothills Development and Infrastructure Study*, November 1998.

SCAQMD, *Air Quality Handbook for Preparing EIRs*, Revised April 1987.

South Coast Air Quality Management District (SCAQMD), *Air Quality Management Plan* (1997 Final), September 1997.

State of California Resources Agency, *CEQA Guidelines*, Revised October 26, 1998.

Thomas Guide, Los Angeles County, 1998.

6.0 REPORT PREPARATION PERSONNEL

Lead Consultant:

Robert Bein, William Frost & Associates
14725 Alton Parkway
Irvine, CA 92618-2069
(949) 472-3505

Collette L. Morse, AICP	Project Manager
Bruce R. Grove, Jr., REA	Environmental Analyst

7.0 CONSULTANT RECOMMENDATION

Based on the information and environmental analysis contained in this Initial Study/ Environmental Checklist, we recommend that the City of San Dimas prepare an Environmental Impact Report for this proposal. We find that the proposal could have a significant effect on a number of environmental issues and recommend that the third category be selected for the determination (see Section 8, *Determination*).

December 17, 1998
Date

Collette L. Morse, AICP
Robert Bein, William Frost & Associates

8.0 LEAD AGENCY DETERMINATION

On the basis of this initial evaluation:

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

I find that although the proposal could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added. A NEGATIVE DECLARATION will be prepared. ___

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

I find that the proposal 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 "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. ___

Signature

City of San Dimas
Agency

Larry Stevens, AICP
Printed Name

December 17, 1998
Date

BONITA UNIFIED SCHOOL DISTRICT

115 West Allen Avenue San Dimas, California 91773 (909) 599-6787 Fax (909) 592-8703

Superintendent
John E. Rieckewald, Ph.D.

Assistant Superintendents
Lorna Horton, Ph.D. - Instruction
Lonnie L. McConnell, Ed.D. – HRD
Joe Gillentine – Pupil Serv. / Spec. Ed.
Michele McClowry, CPA - Business

Board of Education
Diana Au
Robin Carder
Bruce Colburn
Ed Jones
Robert Olander II

January 25, 1999

Received

JAN 28 1999

City of San Dimas
Planning Division

Mr. Lawrence L. Stevens, AICP
Planning Director
City of San Dimas
245 E. Bonita Avenue
San Dimas, CA 91773

Re: Northern Foothills Implementation Program

Dear Mr. Stevens:

After a quick review of the recent Notice of Preparation of a Draft Environmental Impact Report for the project study area of 3,000 acres just north of Foothill, my only concern is the impact that approximately 63 additional students may have upon local elementary schools in the Bonita Unified School District.

On page 35 of this report it states that the impact to the schools would be less than significant. However, at this time the enrollment in most of our classrooms has reached the maximum number of students allowed by law, especially in kindergarten through third grade due to the class size reduction restriction of 20 students per teacher.

We would greatly appreciate your cooperation in expressing our concern as it relates to this project.

Sincerely,

Michele McClowry

Michele McClowry
Assistant Superintendent
Business Services

MM:ddm

Cc: Dr. John E. Rieckewald

The Bonita Unified School District is an equal opportunity employer and does not discriminate on the basis of any class protected by law.

COUNTY OF LOS ANGELES
DEPARTMENT OF PARKS AND RECREATION

Rodney E. Cooper, Director

Received
JAN 28 1999
City of San Dimas
Planning Division

January 25, 1999

Mr. Lawrence L. Stevens, Planning Director
City of San Dimas
245 East Bonita Avenue
San Dimas, CA 91773

Dear Mr. Stevens:

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT NORTHERN FOOTHILLS IMPLEMENTATION PROGRAM

The department has reviewed the environmental document for the subject project. We find the adverse environmental impacts identified in the Initial Study may have a significant effect on existing recreation and natural resources.

The study area of the proposed project includes San Dimas Canyon Community Regional Park, which is a vital natural area and recreational resource to the surrounding communities. The department is responsible for the maintenance and operation of this facility. The park is approximately 137 acres and consists of wooded picnic areas, rustic outdoor cooking facilities, comfort stations, camping for youth groups, a play area, nature trails, a ball diamond, a service yard and parking. There is also a nature museum where rescued animals native to the area can be studied and viewed.

The proposed project will involve hillside grading causing severe changes in the natural vegetation and topography of the property. These changes in topography and natural vegetation will have a significant impact on the visual qualities and biological resources of the area, the park setting, and the experience of the park user. Project development should include an undisturbed open space area for wildlife habitat, the mitigation of any negative visual impacts on nature trails, and the preservation of the natural topography as much as possible in order to preserve the natural character of the site.

The County, as you may know, has a Riding and Hiking Trails Master Plan. If the City of San Dimas intends to designate trails for the project, the department would like to coordinate planning with the City, particularly concerning trail connections between jurisdictions.

In summary, the significant environmental impacts on existing recreation facilities and resources should be addressed and mitigation measures proposed and included in the Environmental Impact Report. Thank you for bringing the document to our attention. We appreciate participating in this review. If you have any questions regarding these comments, please contact Mr. Larry Hensley at (213) 738-2118.

Sincerely,

Kimel Conway
Chief of Planning

encls

c: Larry Hensley
Env. File

LH:ly2NOP

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100

HARRY W. STONE, Director

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

January 25, 1999

IN REPLY PLEASE REFER TO FILE: P-2

Received

JAN 28 1999

City of San Dimas
Planning Division

Mr. Lawrence L. Stevens, AICP
City of San Dimas
245 East Bonita Avenue
San Dimas, CA 91773

Dear Mr. Stevens:

**RESPONSE TO A NOTICE OF PREPARATION (NOP) -
NORTHERN FOOTHILLS IMPLEMENTATION PROGRAM**

Thank you for the opportunity to provide comments on the NOP for the proposed Northern Foothills Implementation Program. We have reviewed the NOP and offer the following comments:

Environmental Programs

The California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires each "development project" to provide an adequate storage area for collection and removal of recyclable materials. The proposed Environmental Impact Report (EIR) should include/discuss standards to provide adequate "waste storage areas" for collection/storage of recyclable and green waste materials for this project.

Current estimates indicate that a shortfall in permitted daily landfill disposal capacity in Los Angeles County will occur within the next few years. The construction activities and post-development operations associated with the proposed project may increase the generation of solid waste and may negatively impact solid waste management facilities in the County. Therefore, the proposed EIR must identify what measures the project proponent will implement to mitigate the impact. These measures may include, but are not limited to, implementation of waste reduction, recycling and composting programs, as well as programs to divert the generated solid waste from the landfills.

The existing hazardous waste management (HWM) facilities in this County are inadequate to handle the hazardous waste currently being generated. The proposed development may generate hazardous waste and household hazardous waste which could adversely impact existing HWM facilities. This issue should be addressed and mitigation measures provided.

The EIR needs to fully assess the impact of this project on the quality of stormwater runoff. The EIR should reference Order No. 96-054, National Pollutant Discharge Elimination System Permit CAS614001, issued by the California Regional Water Quality Control Board to the County and local agencies. The EIR should also indicate compliance with all relevant stormwater quality management programs of the Federal, State, County, and local agencies.

Along the southeast boundary of the project location is Private Drain 520 and Ham Canyon Channel which discharges to the San Dimas Wash. The western and northwesterly portions of the project drain into the Big Dalton Wash. Both San Dimas Wash and Big Dalton Wash are ultimately tributaries to the San Gabriel River. If any connections are made to these storm drains, a permit is required from this Department's Construction Division.

Should any operations within the subject development include the modification, removal, or installation of underground storage tanks and/or industrial waste control or disposal facilities, this Department's Environmental Programs Division must be contacted for required approvals and operating permits.

If you have any questions regarding the above comments, please contact Mr. Chuk Agu of our Environmental Programs Division at (626) 458-2188.

Flood Maintenance

The San Dimas Sediment Placement Site (SPS) and Spreading Grounds (SG) should be removed from the limits of this project. These flood control facilities are located at the extreme edges of the project and their inclusion within it would cause a significant conflict in the normal operation of these areas. Additionally, the document does not clarify what classification is placed upon these facilities.

It appears that development within this area may significantly impact Puddingstone Diversion Dam with additional flows and debris. Debris basins will likely be required in the canyons to protect San Dimas Wash. The impact as stated on page 27 4.4 d), e) and g) will likely be greater than "LESS THAN SIGNIFICANT IMPACT".

If you have any questions regarding the above comments, please contact Mr. Mike Long of our Flood Maintenance Division at (626) 458-7630.

Materials Engineering

The area covered in the draft EIR is within jurisdiction of the City of San Dimas. If there are any Los Angeles County facilities that may be affected, further review of those facilities and impacts will be required.

If you have any questions regarding the above comments, please contact Mr. Robert Thomas of our Materials Engineering Division at (626) 458-4923.

Traffic and Lighting

We recommend that the State of California Department of Transportation and the adjoining Cities of Glendora and La Verne review this project for any significant impacts/mitigations within their jurisdictions.

If you have any questions, please contact Mr. Hector Rodriguez of our Traffic and Lighting Division at (626) 458-5909.

If you have any questions regarding the environmental reviewing process of this Department, please contact Mr. Vik Bapna at the address on the first page or at (626) 458-4363.

Very truly yours,

HARRY W. STONE
Director of Public Works

For: DAVID YAMAHARA
Assistant Deputy Director
Planning Division

YC:km
165

DEPARTMENT OF FISH AND GAME
South Coast Region
4949 Viewridge Avenue
San Diego, California 92123
(619) 467-4201

Received
JAN 28 1999
City of San Dimas
Planning Division

January 25, 1999

City of San Dimas
Attn: Planning Department
245 E. Bonita Avenue
San Dimas, CA 91773

NORTH FOOTHILLS IMPLEMENTATION PROGRAM
SCH98121072

The Department of Fish and Game (Department) appreciates this opportunity to comment on the above-referenced project, relative to impacts to biological resources. To enable Department staff to adequately review and comment on the proposed project, we recommend the following information be included in the Draft Environmental Impact Report:

1. A complete assessment of the flora and fauna within and adjacent to the project area, with particular emphasis upon identifying endangered, threatened, and locally unique species and sensitive habitats.

    a. A thorough assessment of rare plants and rare natural communities, following the Department's May 1984 Guidelines for Assessing Impacts to Rare Plants and Rare Natural Communities (Attachment 1).

    b. A complete assessment of sensitive fish, wildlife, reptile, and amphibian species. Seasonal variations in use of the project area should also be addressed. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with the Department and the U.S. Fish and Wildlife Service.

    c. Rare, threatened, and endangered species to be addressed should include all those which meet the California Environmental Quality Act (CEQA) definition (see CEQA Guidelines, § 15380).

    d. The Department's California Natural Diversity Data Base in Sacramento should be contacted at (916) 327-5960 to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code.

2. A thorough discussion of direct, indirect, and cumulative impacts expected to

adversely affect biological resources, with specific measures to offset such impacts.

a. CEQA Guidelines, § 15125(a), direct that knowledge of the regional setting is critical to an assessment of environmental impacts and that special emphasis should be placed on resources that are rare or unique to the region.

b. Project impacts should be analyzed relative to their effects on off-site habitats. Specifically, this should include nearby public lands, open space, adjacent natural habitats, and riparian ecosystems. Impacts to and maintenance of wildlife corridor/movement areas, including access to undisturbed habitat in adjacent areas, should be fully evaluated and provided.

c. The zoning of areas for development projects or other uses that are nearby or adjacent to natural areas may inadvertently contribute to wildlife-human interactions. A discussion of possible conflicts an mitigation measures to reduce these conflicts should be included in the environmental document.

d. A cumulative effects analysis should be developed as described under CEQA Guidelines, § 15130. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

e. If applicable, the document should include an analysis of the effect that the project may have on completion and implementation of regional and/or subregional conservation programs. Under § 2800-§ 2840 of the Fish and Game Code, the Department, through the Natural Communities Conservation Planning (NCCP) program, is coordinating with local jurisdictions, landowners, and the Federal Government to preserve local and regional biological diversity. Coastal sage scrub is the first natural community to be planned for under the NCCP program. The Department recommends that the lead agency ensure that the development of this and other proposed projects do not preclude long-term preserve planning options and that projects conform with other requirements of the NCCP program. Jurisdictions participating in the NCCP program should assess specific projects for consistency with the NCCP Conservation Guidelines. Additionally, the jurisdictions should quantify and qualify: 1) the amount of coastal sage scrub within their boundaries; 2) the acreage of coastal sage scrub habitat removed by individual projects; and 3) any acreage set aside for mitigation. This information should be kept in an updated ledger system.

3. A range of alternatives should be analyzed to ensure that alternatives to the

proposed project are fully considered and evaluated. A range of alternatives which avoid or otherwise minimize impacts to sensitive biological resources should be included. Specific alternative locations should also be evaluated in areas with lower resource sensitivity where appropriate.

a. Mitigation measures for project impacts to sensitive plants, animals, and habitats should emphasize evaluation and selection of alternatives which avoid or otherwise minimize project impacts. Off-site compensation for unavoidable impacts through acquisition and protection of high-quality habitat elsewhere should be addressed.

b. The Department considers Rare Natural Communities as threatened habitats having both regional and local significance. Thus, these communities should be fully avoided and otherwise protected from project-related impacts (Attachment 2).

c. The Department generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or endangered species. Department studies have shown that these efforts are experimental in nature and largely unsuccessful.

4. A California Endangered Species Act (CESA) Permit must be obtained, if the project has the potential to result in "take" of species of plants or animals listed under CESA, either during construction or over the life of the project. CESA Permit s are issued to conserve, protect, enhance, and restore State-listed threatened or endangered species and their habitats. Early consultation is encouraged, as significant modification to a project and mitigation measures may be required in order to obtain a CESA Permit. Revisions to the Fish and Game Code, effective January 1998, require that the Department issue a separate CEQA document for the issuance of a 2081 permit unless the project CEQA document addresses all project impacts to listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of a 2081 permit. For these reasons, the following information is requested:

a. Biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for a CESA Permit.

b. A Department-approved Mitigation Agreement and Mitigation Plan are required for plants listed as rare under the Native Plant Protection Act.

5. The Department opposes the elimination of watercourses and/or their channelization or conversion to subsurface drains. All wetlands and watercourses, whether intermittent or perennial, must be retained and provided with substantial

setbacks which preserve the riparian and aquatic values and maintain their value to on-site and off-site wildlife populations.

a. The Department may require a Lake or Streambed Alteration Agreement, pursuant to Section 1600 et seq. of the Fish and Game Code, with the applicant prior to the applicant's commencement of any activity that will divert, obstruct or change the natural flow or the bed, channel, or bank (which may include associated riparian resources) of a river, stream or lake, or use material from a streambed. The Department's issuance of a Lake or Streambed Alteration Agreement for a project that is subject to CEQA will require CEQA compliance actions by the Department as a responsible agency. The department as a responsible agency under CEQA, may consider the local jurisdiction's (lead agency) Negative Declaration or EIR for the project. To minimize additional requirements by the Department pursuant to Section 1600 et seq. and/or under CEQA, the document should fully identify the potential impacts to the lake, stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the agreement.

The Department holds regularly scheduled pre-project planning/early consultation meetings. To make an appointment, please call our office at (562) 590-5880.

Thank you for this opportunity to comment. Questions regarding this letter and further coordination on these issues should be directed to Liam Davis at (619) 467-4207.

Sincerely,

William E. Tippets
Habitat Conservation Supervisor

Attachments

cc: Department of Fish and Game
Chuck Raysbrook
Liam Davis
San Diego

U.S. Fish and Wildlife Service
Carlsbad

U.S. Army Corps of Engineers
Los Angeles

State Clearinghouse
Sacramento

ATTACHMENT 1

State of California
THE RESOURCES AGENCY
Department of Fish and Game
May 4, 1984

GUIDELINES FOR ASSESSING THE EFFECTS OF PROPOSED DEVELOPMENTS ON RARE AND ENDANGERED PLANTS AND PLANT COMMUNITIES

The following recommendations are intended to help those who prepare and review environmental documents determine when a botanical survey is needed, who should be considered qualified to conduct such surveys, how field surveys should be conducted and what information should be contained in the survey report.

1. Botanical surveys that are conducted to determine the environmental effects of a proposed development should be directed to all rare and endangered plants and plant communities. Rare and endangered plants are not necessarily limited to those species which have been "listed" by state and federal agencies but should include any species that, based on all available data, can be shown to be rare and/or endangered under the following definitions.

   A species, subspecies or variety of plant is "endangered" when the prospects of its survival and reproduction are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, over-exploitation, predation, competition or disease. A plant is "rare" when, although not presently threatened with extinction, the species, subspecies or variety is found in such small numbers throughout its range that it may be endangered if its environment worsens.

   Rare plant communities are those communities that are of highly limited distribution. These communities may or may not contain rare or endangered species. The most current version of the California Natural Diversity Data Base's Outline of Terrestrial Communities in California may be used as a guide to the names of communities.

2. It is appropriate to conduct a botanical field survey to determine if, or the extent that, rare plants will be affected by a proposed project when:

   a. Based on an initial biological assessment, it appears that the project may damage potential rare plant habitat;

   b. Rare plants have historically been identified on the project site, but adequate information of impact assessment is lacking; or

   c. No initial biological assessment has been conducted and it is unknown whether or not rare plants or their habitat exist on the site.

3. Botanical consultants should be selected on the basis of possession of the following qualifications (in order of importance):

   a. Experience as a botanical field investigator with experience in field sampling design and field methods;

   b. Taxonomic experience and a knowledge of plant ecology;

   c. Familiarity with the plants of the area, including rare species; and

   d. Familiarity with the appropriate state and federal statutes related to rare plants and plant collecting.

4. Field surveys should be conducted in a manner that will locate any rare or endangered species that may be present. Specifically, rare or endangered plant surveys should be:

   a. Conducted at the proper time of year when rare or endangered species are both "evident" and identifiable. Field surveys should be scheduled (1) to coincide with known flowering periods, and/or (2) during periods of

phenological development that are necessary to identify the plant species of concern.

b. Floristic in nature. "Predictive surveys" (which predict the occurrence of rare species based on the occurrence of habitat or other physical features rather than actual field inspection) should be reserved for ecological studies, not for impact assessment. Every species noted in the field should be identified to the extent necessary to determine whether it is rare or endangered.

c. Conducted in a manner that is consistent with conservation ethics. Collection of rare or suspected rare species (voucher specimens) should be made only when such actions would not jeopardize the continued existence of the population and in accordance with applicable state and federal permit regulations. Voucher specimens should be deposited at recognized public herbaria for future reference. Photography should be used to document plant identification and habitat whenever possible, but especially when the population cannot withstand collection of voucher specimens.

d. Conducted using systematic field techniques in all habitats of the site to ensure a reasonably thorough coverage of potential impact areas.

e. Well documented. When a rare or endangered plant (or rare plant community) is located, a California Native Species (or Community) Field Survey Form or equivalent written form should be completed and submitted to the Natural Diversity Data Base.

5. Reports of botanical field surveys should be included in or with environmental assessments, negative declarations, EIR's and EIS's, should contain the following information:

a. Project description, including a detailed map of the project location and study area.

b. A written description of biological setting referencing the community nomenclature used and a vegetation map.

c. Detailed description of survey methodology.

d. Dates of field surveys.

e. Results of survey (including detailed maps).

f. An assessment of potential impacts.

g. Discussion of the importance of rare plant populations with consideration of nearby populations and total species distribution.

h. Recommended mitigation measures to reduce or avoid impacts.

i. List of all species identified.

j. Copies of all California Native Species Field Survey Forms or Natural Community Field Survey Forms.

k. Name of field investigator(s).

l. References cited, persons contacted, herbaria visited, and disposition of voucher specimens.

ATTACHMENT 2

SENSITIVITY OF TOP PRIORITY RARE NATURAL COMMUNITIES IN SOUTHERN CALIFORNIA*

Sensitivity rankings are determined by the Department of Fish and Game, California Natural Diversity Data Base and based on either number of known occurrences (locations) and/or amount of habitat remaining (acreage). The three rankings used for these top priority rare natural communities are as follows:

S1. - Less than 6 known locations and/or on less than 2,000 acres of habitat remaining.

S2. - Occurs in 6-20 known locations and/or 2,000-10,000 acres of habitat remaining.

S3. - Occurs in 21-100 known locations and/or 10,000-50,000 acres of habitat remaining.

The number to the right of the decimal point after the ranking refers to the degree of threat posed to the natural community regardless of the ranking. For example:

S1.1 = very threatened
S2.2 = threatened
S3.3 = no current threats known

Sensitivity Rankings (February 1992)

Rank	Community Name	
S1.1	Mojave Riparian Forest	Southern Dune Scrub
	Sonoran Cottonwood Willow Riparian	Southern Coastal Bluff Scrub
	Mesquite Bosque	Maritime Succulent Scrub
	Elephant Tree Woodland	Riversidean Alluvial Fan Sage Scrub
	Crucifixion Thorn Woodland	Southern Maritime Chaparral
	Alkali Woodland	Valley Needlegrass Grassland
	Arizonan Woodland	Great Basin Grassland
	Southern California Walnut Forest	Mojave Desert Grassland
	Mainland Cherry Forest	Pebble Plains
	Southern Bishop Pine Forest	Southern Sedge Bog
	Torrey Pine Forest	Cismontane Alkali Marsh
	Desert Mountain White Fir Forest	
S1.2	Southern Foredunes	
	Mono Pumice Flat	
	Southern Interior Basalt Fl. Vernal Pool	
S2.1	Venturan Coastal Sage Scrub	Coastal and Valley Freshwater Marsh
	Diegan Coastal Sage Scrub	S. Arroyo Willow Riparian Forest
	Riversidian Upland Coastal Sage Scrub	Southern Willow Scrub
	Riversidian Desert Sage Scrub	Modoc-G. Bas. Cottonwood Willow Rip.
	Sagebrush Steppe	Modoc-Great Basin Riparian Scrub
	Desert Sink Scrub	Mojave Desert Wash Scrub
	Mafic Southern Mixed Chaparral	Engelmann Oak Woodland
	San Diego Mesa Hardpan Vernal P.	Open Engelmann Oak Woodland
	San Diego Mesa Claypan Vernal P.	Closed Engelmann Oak Woodland
	Alkali Meadow	Island Ironwood Forest
	Southern Coastal Salt Marsh	Island Cherry Forest
	Coastal Brackish Marsh	S. Interior Cypress Forest
	Transmontane Alkali Marsh	Bigcone Spruce-Canyon Oak Forest
S2.2	Active Coastal Dunes	White Mountains Fellfield
	Active Desert Dunes	
	Stab. and Part. Stab. Desert Dunes	
	Stab. and Part. Stab. Desert Sandfield	
	Mojave Mixed Steppe	
	Transmontane Freshwater Marsh	S2.3 Bristlecone Pine Forest
	Coulter Pine Forest	Limber Pine Forest
	S. California Fellfield	

ELEMENT RANKING

GLOBAL RANKING

The *global rank* (G-rank) is a reflection of the overall condition of an element throughout its global range.

SPECIES OR NATURAL COMMUNITY LEVEL

G1 = Less than 6 viable EOs OR less than 1000 individuals OR less than 2000 acres.
G2 = 6-20 EOs OR 1000-3000 individuals OR 2000-10,000 acres.
G3 = 21-100 EOs OR 3000-10,000 individuals OR 10,000-50,000 acres.
G4 = Apparently secure: this rank is clearly lower than G3 but factors exist to cause some concern; i.e. there is some threat, or somewhat narrow habitat.
G5 = Population or stand demonstrably secure to ineradicable due to being commonly found in the world.

SUBSPECIES LEVEL

Subspecies receive a T-rank attached to the G-rank. With the subspecies, the G-rank reflects the condition of the entire species, whereas the T-rank reflects the global situation of just the subspecies or variety.
For example: *Chorizanthe robusta var. hartwegii.*
This plant is ranked G2T1. The G-rank refers to the whole species range i.e. *Chorizanthe robusta.* The T-rank refers only to the global condition of var. *hartwegii.*

STATE RANKING

The *state rank* is assigned much the same way as the global rank, except state ranks in California often also contain a threat designation attached to the S-rank.

S1 = Less than 6 EOs OR less than 1000 individuals OR less than 2000 acres
- S1.1 = very threatened
- S1.2 = threatened
- S1.3 = no current threats known

S2 = 6-20 EOs OR 1000-3000 individuals OR 2000-10,000 acres
- S2.1 = very threatened
- S2.2 = threatened
- S2.3 = no current threats known

S3 = 21-100 EOs or 3000-10,000 individuals OR 10,000-50,000 acres
- S3.1 = very threatened
- S3.2 = threatened
- S3.3 = no current threats known

S4 = Apparently secure within California; this rank is clearly lower than S3 but factors exist to cause some concern; i.e. there is some threat, or somewhat narrow habitat. NO THREAT RANK.

S5 = Demonstrably secure to ineradicable in California. NO THREAT RANK.

Notes:

Other considerations used when ranking a species or natural community include the pattern of distribution of the element on the landscape, fragmentation of the population/stands, and historical extent as compared to its modern range. It is important to take a bird's eye or aerial view when ranking sensitive elements rather than simply counting EOs.

Uncertainty about the rank of an element is expressed in two major ways:

By expressing the rank as a range of values: ex. S2S3 means the rank is somewhere between S2 and S3.

By adding a ? to the rank:

3. Other symbols

GH — All sites are historical; the element has not been seen for at least 20 years but suitable habitat still exists (SH = All California sites are historical).
GX — All sites are extirpated; this element is extinct in the wild (SX = All California sites are extirpated).
GXC — Extinct in the wild; exists in cultivation.
G1Q — The element is very rare, but there is a taxonomic question associated with it.

Top Priority Rare Natural Communities
From Region Five

Code Number	Location	Few Records	Name
S1.1 Rank			
21330	Cis		Southern Dune Scrub
31200	Cis		Southern Coastal Scrub
32400	Cis		Maritime Succulent Scrub
32720	Cis		Riversidean Alluvial Fan Sage Scrub
37030	Cis	Y	Southern Maritime Chaparral
42110	Cis		Valley Needlegrass Grassland
43000	Des	Y	Great Basin Grassland
43777	Des	Y	Mojave Desert Grassland
47000	Cis		Pebble Plains
51177	Cis	Y	Southern Sedge Bog
52310	Cis		Cismontane Alkali Marsh
61700	Des		Mojave Riparian Forest
61810	Des		Sonoran Cottonwood Willow Riparian
61820	Des		Mesquite Bosque
75100	Des	Y	Elephant Tree Woodland
75200	Des	Y	Crucifixion Thorn Woodland
75300	Des	Y	Allthorn Woodland
75400	Des	Y	Arizonan Woodland
81600	Cis		Southern California Walnut Forest
81820	Cis	Y	Mainland Cherry Forest
83122	Cis	Y	Southern Bishop Pine Forest
83140	Cis		Torrey Pine Forest
85330	Des	Y	Desert Mountain White Fir Forest
S1.2 Rank			
21230	Cis		Southern Foredunes
35410	Des		Mono Pumice Flat
44310	Cis		Southern Interior Basalt FL Vernal Pool
S2.1 Rank			
32300	Cis	Y	Venturan Coastal Sage Scrub
32500	Cis		Diegan Coastal Sage Scrub
32710	Cis	Y	Riversidian Upland Coastal Sage Scr.
32730	Cis	Y	Riversidian Desert Sage Scrub
35300	Des	Y	Sagebrush Steppe
35120	Des	Y	Desert Sink Scrub
37122	Cis	Y	Mafic Southern Mixed Chaparral
44321	Cis		San Diego Mesa Hardpan Vernal P.
44322	Cis		San Diego Mesa Claypan Vernal P.
45310	Des		Alkali Meadow
62120	Cis		Southern Coastal Salt Marsh
52320	Cis		Coastal Brackish Marsh
52410	Des		Transmontane Alkali Marsh

Coded as either cis (for cismontane) or des (for desert)

Code Number	Location	Few Records	Name
52410	Cis		Coastal and Valley Freshwater Marsh
61320	Cis		S. Arroyo Willow Riparian Forest
63320	Cis		Southern Willow Scrub
61610	Des		Modoc-G Bas Cottonwood Willow Rip.
63600	Des	Y	Modoc-Great Basin Riparian Scrub
63700	Des	Y	Mojave Desert Wash Scrub
71180	Cis	Y	Engelmann Oak Wood
71181	Cis	Y	Open Engelmann Oak Wood
71182	Cis	Y	Closed Engelmann Oak Woodland
71190	Cis	Y	Island Oak Woodland
71210	Cis		California Walnut Woodland
81700	Cis	Y	Island Ironwood Forest
81810	Cis		Island Cherry Forest
83230	Cis		S. Interior Cypress Forest
84150	Cis	Y	Bigcone Spruce-Canyon Oak Forest
S2.2 Rank			
21100	Cis	Y	Active Coastal Dunes
22100	Des		Active Desert Dunes
22200	Des		Stab. and Part Stab. Desert Dunes
22300	Des	Y	Stab. and Part Stab. Desert Sandfield
34220	Des	Y	Mojave Mixed Steppe
52420	Des	Y	Transmontane Freshwater Marsh
84140	Cis	Y	Coulter Pine Forest
81130	Cis	Y	S. California Fellfield
81140	Des	Y	White Mountains Fellfield
S2.3 Rank			
86400	Des		Bristlecone Pine Forest
86700	Des	Y	Limber Pine Forest

United States Department of the Interior
Fish and Wildlife Service
Ecological Services
Carlsbad Fish and Wildlife Office
2730 Loker Avenue West
Carlsbad, California 92008

Received
JAN 28 1999
City of San Dimas
Planning Division
JAN 21 1999

Mr. Lawrence L. Stevens, AICP, Planning Director
City of San Dimas
245 East Bonita Avenue
San Dimas, California 91773

Re: Notice of Preparation (NOP) for a Draft Environmental Impact Report (DEIR) for the Proposed Northern Foothills Implementation Program, Los Angeles County, California.

Dear Mr. Stevens:

We have reviewed the above referenced NOP, dated December 18, 1998, and the accompanying Initial Study/Environmental Checklist received on December 21, 1998, for the Proposed Northern Foothills Implementation Program (NFIP). We offer the following comments and recommendations regarding program-associated biological impacts based on our review of the NOP, the Initial Study/Environmental Checklist, and our knowledge of declining habitat types and species within Los Angeles County.

The approximately 3,000-acre NFIP study area is located north of Foothill Boulevard, in the northern portion of the City of San Dimas (City), Los Angeles County. The area is generally bordered by the Angeles National Forest to the north and northeast, the City of La Verne to the southeast, residential areas to the south, and the City of Glendora immediately to the west. The primarily undeveloped site consists of habitats, such as chaparral, coastal sage scrub, grassland, woodland, and riparian scrub.

The proposed action, as described in the NOP and Initial Study/Environmental Checklist, entails (1) a General Plan Amendment and (2) a Zone Change/Specific Plan. Under the existing General Plan, the maximum development permitted within the NFIP area (one dwelling unit per 5 acres) would permit 195 dwelling units on 972 acres of the program area. The development strategy proposed in the *Northern Foothills Development and Infrastructure Study* (November 1998) would permit a maximum of 127 dwelling units on 972 acres. The City proposes to amend its General Plan to create a "Northern Foothills" land use designation and to outline policies and requirements consistent with the aforementioned study. The Zone Change/Specific Plan is a request to create a new zone or specific plan to implement the policies and requirements of the General Plan and the adopted development strategy. The overall objective is to fit projects into their hillside setting rather than altering the hillside to fit the project. As stated in the Initial Study, the priority between development and natural resource values should be given to protecting the resource.

We are concerned for the protection of fish and wildlife resources and their habitats. In this regard, we provide comments on public notices issued for a Federal permit or license affecting the Nation's waters pursuant to the Clean Water Act. We also administer the Endangered Species Act of 1973, as amended (Act). Section 7 of the Act requires Federal agencies to consult with the Service should it be determined that their action may affect a listed threatened or endangered species. Section 9 of the Act prohibits the "take" (e.g., harm, harassment, pursuit, injury, kill) of federally listed wildlife species. "Harm", a form of take, is further defined to include habitat modification or degradation where it kills or injures wildlife by impairing essential behavioral patterns including breeding, feeding or sheltering. Take can only be permitted pursuant to the pertinent language and provisions in section 7 (Federal consultations) and 10 (permits) of the Act.

The Natural Community Conservation Planning Act (NCCP) was enacted in 1991 to provide for regional protection and perpetuation of natural wildlife diversity while allowing compatible land use and appropriate development growth. The law provides an alternative to "single species" conservation through the formulation of regional, natural community-based, habitat protection programs. The coastal sage scrub plan in southern California is the first of the NCCP projects in the state. The NCCP plans have been developed to provide adequate mitigation for impacts to the federally threatened coastal California gnatcatcher (*Polioptila californica californica*) and other identified species' habitat. Planning for long-term protection and management of coastal sage scrub resources is implemented through participating land owners and jurisdictions enrolled in the program. The City of San Dimas is one of two cities in Los Angeles County that has enrolled for lands under its jurisdiction. As such, the City of San Dimas has assumed specific responsibilities regarding compliance with interim habitat loss approvals and participation in the preparation of a subregional NCCP Plan. However, this agreement appears to have expired. We strongly support the participation of jurisdictions in these regional planning efforts and would urge you to renew your NCCP planning agreement.

We concur with the findings in your Initial Study/Environmental Checklist that the proposed action has the potential for significant impacts to biological resources. Therefore, we request that as many comprehensive, current, biological surveys as practicable be performed in the program area when preparing this DEIR. We recommend that these include directed surveys for potentially occurring Federal and State-listed species, using standard survey protocols. To facilitate the evaluation of the proposed program from the standpoint of fish and wildlife protection, we request that the DEIR contain the following specific information:

1. A description of the environment in the vicinity of the NFIP program area from both a local and regional perspective, and a complete discussion of the purpose and need for the proposed changes and each of the alternatives.

2. A complete description of the proposed program, including a definition of a Northern Foothills land use designation. A discussion should be included of alternative configurations of proposed developed areas and their relation to surrounding open space areas. This

description should include all practicable alternatives that have been considered to avoid and reduce program impacts to sensitive habitats, wetlands, and endangered, threatened or sensitive species to the maximum extent practicable.

3. Quantitative and qualitative assessments of the biological resources and habitat types that will be impacted by the proposed program and its alternatives. This assessment should include a list of Federal candidate, proposed, or listed species; State-listed species; and locally sensitive species that are in the program site, including a detailed discussion of these species and information pertaining to their local status and distribution. The anticipated or real impacts of the NFIP on these species should be addressed fully. We are particularly interested in any and all information and data (including as many species surveys of the NFIP area as practicable and appropriate) pertaining to potential or real impacts to populations of other Federal candidate, proposed, or listed species; and State-listed species, such as the federally threatened gnatcatcher, endangered southwestern arroyo toad (*Bufo microscaphus californicus*), endangered Quino checkerspot butterfly (*Euphydryas editha quino*), endangered least Bell's vireo (*Vireo belli pusillus*), endangered southwestern willow flycatcher (*Empidonax traillii extimus*), threatened California red-legged frog (*Rana aurora draytoni*), endangered Braunton's milk-vetch (*Astragalus brauntonii*), endangered Nevin's barberry (*Berberis nevinii*), and threatened thread-leaved brodiaea (*Brodiaea filifolia*). We are also interested in information on the locally sensitive species listed in the attachment. We are also interested in impacts to chaparral, coastal sage scrub, woodlands, native grasslands, and riparian scrub habitats. The DEIR should disclose all impacts to these sensitive resources, and proposed measures to be taken to avoid, minimize, and mitigate these impacts.

4. Specific acreages and locations of all habitat types that will be affected by the proposed program or program alternatives. Maps and tables should be used to summarize such information. These are necessary to assess potential impacts to native flora and fauna.

5. All facets of the program should be included in this assessment, including associated growth-inducing effects and cumulative impacts of the program. The cumulative impacts assessment should include an adequate discussion of past, present, and reasonably anticipated future projects.

6. A detailed analysis of impacts of the proposed General Plan amendment, zone change/specific plan, and development strategy on the movement of wildlife. This discussion should address fragmentation of the natural environment, isolation, edge effects, as well as regional landscape effects. Proposed measures to mitigate for these impacts should also be included.

7. An analysis of anticipated noise and lighting impacts to wildlife species should be provided. Mitigation measures should be incorporated into program design to mitigate for any identified significant, adverse impacts.

8. Section 404 of the Clean Water Act prohibits the unauthorized discharge of dredged or fill material into jurisdictional waters of the United States, including wetlands. Section 404 also provides that the U.S. Army Corps of Engineers (Corps) may issue permits for discharges of dredged or fill material into jurisdictional waters and wetlands. Prior to disturbance, potential areas of Corps jurisdiction should be evaluated and wetlands should be delineated using the methodology set forth in the U.S. Army Corps of Engineers Wetland Delineation Manual (Environmental Laboratory 1987). The DEIR should disclose all impacts to jurisdictional waters and wetlands, and proposed measures to be taken to avoid, minimize, and mitigate these impacts.

9. A description of the kind of environmental documentation and discretionary approvals required for future development proposals within the NFIP area before wildlife habitat is permanently lost. This discussion should address what steps private landowners must take if they wish to develop/improve their land.

10. The specific relationship of the proposal to the State of California's NCCP Program.

Future development within the area covered by the NFIP will likely require additional environmental documentation pursuant to California Environmental Quality Act. Please keep us apprized of any new specific development proposals. We appreciate the opportunity to comment on the referenced NOP for potential impacts on sensitive and endangered species, wildlife and wetlands. If you should have any questions pertaining to these comments, please contact Judi Tamasi of my staff at (760) 431-9440.

Sincerely,

Jim A. Bartel
Assistant Field Supervisor

1-6-99-HC-84

Attachment

cc: Bill Tippets (CDFG - San Diego)

Attachment
Sensitive Species* Which May Occur in the Area
of the Proposed Northern Foothills Implementation Program,
San Dimas, Los Angeles County, California
January 21, 1999

*The following list does not include Federal candidate, proposed or listed species. See accompanying letter.

Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), Bell's sage sparrow (*Amphispiza belli belli*), western burrowing owl (*Athene cunicularia*), cactus wren (*Campylorhynchus brunneicapillus*), southwestern pond turtle (*Clemmys marmorata pallida*), coastal western whiptail (*Cnemidophorus tigris multiscutatus*), San Bernardino ringneck snake (*Diadophis punctatus modestus*), Pacific kangaroo rat (*Dipodomys simulans*), white-tailed kite (*Elanus leucurus*), large-blotched ensatina (*Ensatina eschscholtzii klauberi*), least bittern (*Ixobrychus exilis hesperis*), San Bernardino mountain king snake (*Lampropeltis zonata parvirubra*), loggerhead shrike (*Lanius ludovicianus*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), San Diego desert woodrat (*Neotoma lepida intermedia*), Southern grasshopper mouse (*Onychomys torridus ramona*), Dulzura California pocket mouse (*Perognathus californicus femoralis*), pallid San Diego pocket mouse (*Perognathus fallax pallidus*), Los Angeles pocket mouse (*Perognathus longimembris brevinasus*), San Diego horned lizard (*Phrynosoma coronatum blainvillii*), mountain yellow-legged frog (*Rana muscosa*), coast patch-nosed snake (*Salvadora hexalepis virgultea*), California spotted owl (*Strix occidentalis occidentalis*), two-striped garter snake (*Thamnophis hammondii*), slender mariposa lily (*Calochortus clavatus* var. *gracilis*), Plummer's mariposa lily (*Calochortus plummerae*), San Gabriel Mountains dudleya (*Dudleya densiflora*), many-stemmed dudleya (*Dudleya multicaulis*), pious daisy (*Erigeron breweri* var. *bisanctus*), San Gabriel bedstraw (*Galium grande*), Los Angeles sunflower (*Helianthus nuttallii* ssp. *parishii*), Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*), Davidson's bush mallow (*Malacothamnus davidsonii*), rayless ragwort (*Senecio aphanactis*)

DEPARTMENT OF TRANSPORTATION
DISTRICT 7
ADVANCE PLANNING
120 SO. SPRING ST., 1-10C
LOS ANGELES, CA 90012
TEL: (213) 897-0486 ATSS:8- 647-0486
FAX: (213) 897-8906

Received
JAN 15 1999
City of San Dimas
Planning Division

October 14, 1998

MR. LAWRENCE STEVENS
City of San Dimas
245 East Bonita Avenue
San Dimas, CA 91773

Re: IGR/CEQA #990106/NP
Notice of Preparation
Northern Foothills Implementation Program
San Dimas, Los Angeles County
Vic. LA-66/30-0.19
SCH NO. 98121072

Dear Mr. Stevens:

Thank you for the opportunity to provide comments on the above-named document. The development strategy proposed in the Northern Foothills Development and Infrastructure Study would permit a maximum of 127 dwelling units on the 972 vacant acres.

Our review indicates, a full traffic study is needed in advance of the DEIR to analyze the following information:

1) Assumptions and methods used to develop trip generation/distribution, percentages and assignments.
2) An analysis of ADT, AM & PM peak-hour volumes for both the existing and future (year 2015) conditions. This is to include mainline freeways (Routes 66 & 30), and affected ramps, streets, crossroads and controlling intersections.
3) This analysis to address year 2015 conditions including project traffic, cumulative traffic generated for all approved developments in the area, interchange utilization (I.C.U.) and level of service (LOS) of affected freeway ramp intersections on the State highways, and indicating existing + project(s) + other projects LOS (existing and future).
4) Discussion of mitigation measures to alleviate traffic impacts. This mitigation discussion to include, but not be limited to, the following:
    * financing
    * scheduling considerations
    * implementation responsibilities
    * monitoring plans
5) Applicant's percent share of the cost, as well as plan of realistic mitigation measures under the control of the applicant to be addressed. Any assessment fees for mitigation to be of such proportion as to cover the mainline highway deficiencies that occur as a result of the additional traffic generated by the project.

A Caltrans encroachment permit will be processed for work within the State right-of-way, such as signalization, grading, widening, drainage or mainline improvements, etc.

Any transportation of oversized-transport vehicles on State highways will require a Caltrans transportation permit. We recommend that large-sized trucks be limited to off-peak commute periods.

We look forward to reviewing the DEIR. We expect to receive a copy from the State Clearinghouse. However, to expedite the review process, you may send two (2) copies in advance to the undersigned at the following address:

Stephen J. Buswell
Program Manager
Caltrans, District 07, IGR/CEQA 1-12G
120 South Spring Street
Los Angeles, CA 90012

If you have any questions regarding this response, please call the undersigned at (213) 897-4429 and refer to our **IGR/CEQA #990106/NP.**

Sincerely,

STEPHEN J. BUSWELL
Program Manager
IGR/CEQA

cc: Delicia Wynn
State Clearinghouse

CITY OF LA VERNE
CITY HALL
3660 "D" Street, La Verne, California 91750

January 13, 1999

Received

JAN 14 1999

City of San Dimas
Planning Division

City of San Dimas
Attention: Lawrence L. Stevens, AICP
Planning Director
245 East Bonita Avenue
San Dimas, CA 91773

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report for the Northern Foothills Implementation Program

Dear Mr. Stevens:

Thank you for the opportunity to review your Notice of Preparation of a draft environmental impact report for the Northern Foothills Implementation Program. Overall, we agree with the findings that the project many have a significant effect on the environment, and that an environmental impact report should be prepared. The report was very thorough and considerate to the sensitivity of the northern foothill's fragile environment. We would like to further offer some suggestions that address areas of specific concern to us:

4.2.b. The City of La Verne is concerned that the project may *induce substantial growth in an area either directly or indirectly* to a point of being potentially significant unless mitigated. A thorough analysis of the issue should be discussed in the Program EIR to assure mitigation of impacts resulting from the new growth and infrastructure.

4.3.f Your report indicates that short-term construction impacts will not be addressed in the Program EIR. We believe these impacts should be addressed to discuss the measures that can be implemented to mitigate the impacts of increased construction traffic, construction noise, construction pollutants from construction traffic and grading. Short-term construction activities can adversely affect the lives of residents in the area.

4.4.b It is our suggestion that *Exposure of people or property to water related hazards such as flooding* should be upgraded from less than significant impact to potentially significant impact. As stated in 4.4.a of your report, "Project buildout will result in the creation of increased impervious ground surfaces on-site. This may result in significantly higher volumes and velocities of storm runoff..."

4.5.a,b We think that during the grading and construction phase, the project *will violate air quality standards and/or contribute to an existing or projected air quality violation* and *will expose sensitive receptors to pollutants* to the point of significant impact unless mitigated. As stated in your report, "grading operations would expose soils to short-term erosion by wind and water" and, " the proposed project potentially may result in significant erosion and/or displacement of soils." Construction traffic will also contribute to air quality violations. Such potential occurrences will impact the air quality, if even for short-term. These impacts should be addressed in the Program EIR.

4.6.a Although your report indicates that "the Program EIR will address potentially significant impacts associated with proposals that might modify existing road development standards related to width, grade, radius, paving surface and related design factors", no reference was made to the increased construction traffic associated with the project. As we have already indicated, short-term construction impacts should also be addressed in the Program EIR.

4.9.a,d We suggest that *Risk of accidental explosion or the release of hazardous substances* and *exposure of people to existing sources of potential health hazards* should be considered potentially significant unless mitigated and should be addressed in the Program EIR. Again, impacts associated with short-term construction should be included.

Thank you for consideration of our comments.

Respectfully submitted,

Linda Christianson
Interim Community Development Director

Ili Lobaco

By Ili Lobaco
Planning Intern

SOUTHERN CALIFORNIA WATER COMPANY

FOOTHILL DISTRICT
401 S. SAN DIMAS CANYON ROAD
SAN DIMAS, CALIFORNIA 91773
(909) 592-4271 • FAX (909) 592-6690

Received
JAN 13 1999
City of San Dimas
Planning Division

January 11, 1999

Mr. Lawrence L. Stevens, Planning Director
City of San Dimas
245 E. Bonita Avenue
San Dimas, CA 91773

Reference: NOP Draft EIR Northern Foothills

Dear Mr. Stevens:

Thank you for the opportunity to participate in the planning process for the Northern Foothills Implementation Program. While we believe that the addition of the Northern Foothills project will be a positive addition to the City of San Dimas, as the purveyor of water service to the citizens of the City, Southern California Water Company also recognizes that the Northern Foothills project may have an impact on both water supply and water service to the community. In that regard, there are issues that must be addressed in the EIR concerning water supply and required water system additions and improvements.

We look forward to participating in the preparation of this document. If we may provide additional information at this time, please feel free to contact me at our Foothill District Office.

Very truly yours,

Chet F. Anderson, P.E.
District Engineer

cc: L. Barker
B. McDonald
File: 1600.00.326.2 & 2100.07

Department of Economic Development
William L. Bopf
Director

THE CITY OF
POMONA

Planning Division

Received
JAN 13 1999
City of San Dimas
Planning Division

January 4,1999

Mr. Lawrence L Stevens, AICP
City of San Dimas
245 east Bonita Avenue
San Diams, CA 91773

SUBJECT: INITIAL STUDY FOR THE NORTHERN FOOTHILLS IMPLEMENTATION PROGRAM TO ADAPT THE GENERAL PLAN TEXT TO CREATE "NORTHERN FOOTHILLS"

Dear Mr. Stevens,
Thank you for including the City of Pomona in the review process for the above-referenced project. Our planning staff has evaluated the initial Study that was prepared for the proposed project. Considering the distance of the project area from the City of Pomona, we anticipate only impacts in the categories of regional air quality and transportation which we expect will be addressed in the Draft Program EIR. We look forward in receiving a copy of the draft EIR. If you have any further questions concerning the City of Pomona's position, you may reach me at (909)620-2191.

Sincerely,

Richard Belmudez
Assistant Planner
Planning Division

Planning Division
City Hall, 505 So. Garey Ave., Box 660, Pomona, CA 91769
(909) 620-2191, Fax (909) 469-2082

WASTEWATER RECLAMATION
SOLID WASTE MANAGEMENT

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422

CHARLES W. CARRY
Chief Engineer and General Manager

January 6, 1999

File No: 22-00.04-00

Received
JAN 11 1999
City of San Dimas
Planning Division

Mr. Lawrence L. Stevens, AICP
Planning Director
City of San Dimas
245 E. Bonita Avenue
San Dimas, CA 91773

Dear Mr. Stevens:

Northern Foothills, San Dimas

The County Sanitation Districts of Los Angeles County (Districts) received a Notice of Preparation of a Draft Environmental Impact Report for the subject project on December 21, 1998. We offer the following comments regarding sewerage service:

1. The area in question is outside the jurisdictional boundaries of the Districts and will require annexation into District No. 22 before sewerage service can be provided to the proposed development. For specific information regarding the annexation procedure and fees, please contact Ms. Margarita Cabrera, extension 2708.

2. Because of the project's location, the flow originating from the proposed project would have to be transported to the Districts' trunk sewer by local sewer(s) which are not maintained by the Districts. If no local sewer lines currently exist, it is the responsibility of the developer to convey any wastewater generated by the project to the nearest local sewer and/or Districts' trunk sewer.

3. The nearest Districts' trunk sewers are the Sunflower Trunk Sewer located in Base Line Road between San Dimas Avenue and San Dimas Canyon Road, and the Lone Hill Trunk Sewer located in Amelia Avenue at Base Line Road. The 12-inch diameter Sunflower Trunk Sewer has a peak capacity of 2.5 million gallons per day (mgd) and conveyed a peak flow of 0.2 mgd when last measured in 1996. The 8-inch diameter Lone Hill Trunk Sewer has a peak capacity of 0.6 mgd and conveyed a peak flow of 0.05 mgd when last measured in 1996.

4. The wastewater generated by the proposed project will be treated at the San Jose Creek Water Reclamation Plant (WRP), located adjacent to the City of Industry. The San Jose Creek WRP has a design capacity of 100 mgd and currently processes an average flow of 89.7 mgd. Wastewater flows which exceed the capacity of the San Jose Creek WRP, and all sludge, are diverted to and treated at the Joint Water Pollution Control Plant (JWPCP) located in the City of Carson.

Recycled Paper

5. A copy of the Districts' average wastewater generation factors is enclosed to allow you to estimate the volume of wastewater the project will generate.

6. The Districts are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' Sewerage System or **increasing the existing strength and/or quantity of wastewater attributable to a particular parcel or operation already connected**. This connection fee is required to construct an incremental expansion of the Sewerage System to accommodate the proposed project which will mitigate the impact of this project on the present Sewerage System. Payment of a connection fee will be required before a permit to connect to the sewer is issued.

7. The design capacities of the Districts' wastewater treatment facilities are based on population forecasts adopted in the Southern California Association of Governments' (SCAG) 1994 Regional Comprehensive Plan and Guide (RCPG). The RCPG is part of the 1994 South Coast Air Quality Management Plan (AQMP). The AQMP and RCPG are jointly prepared by the South Coast Air Quality Management District (SCAQMD) and SCAG as a requirement of the Federal Clean Air Act (CAA). In order to conform with the AQMP, all expansions of Districts' facilities must be sized and service phased in a manner which will be consistent with the Growth Management Element of the RCPG. The Growth Management Element contains a regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial which was prepared by SCAG. Specific policies included in the RCPG which deal with the management of growth will be incorporated into the AQMP strategies to improve air quality in the South Coast Air Basin. The available capacity of the Districts' treatment facilities will, therefore, be limited to levels associated with approved growth identified in the RCPG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise you that the Districts intend to provide this service up to the levels which are legally permitted and to inform you of the currently existing capacity and any proposed expansion of the Districts' facilities.

If you have any questions, please contact the undersigned at (562) 699-7411, extension 2717.

Very truly yours,

Charles W. Carry

Ruth I. Charles

Ruth I. Charles
Engineering Technician
Planning & Property Management Section

RIC:eg

Enclosure

c: M. Cabrera

TABLE 1
LOADINGS FOR EACH CLASS OF LAND USE

DESCRIPTION	UNIT OF MEASURE	FLOW (Gallons per Day)	COD (Pounds per Day)	SUSPENDED SOLIDS (Pounds per Day)
RESIDENTIAL				
Single Family Home	Parcel	260	1.22	0.59
Duplex	Parcel	312	1.46	0.70
Triplex	Parcel	468	2.19	1.05
Fourplex	Parcel	624	2.92	1.40
Condominiums	Parcel	195	0.92	0.44
Single Family Home (reduced rate)	Parcel	156	0.73	0.35
Five Units or More	No. of Dwlg. Units	156	0.73	0.35
Mobile Home Parks	No. of Spaces	156	0.73	0.35
COMMERCIAL				
Hotel/Motel/Rooming House	Room	125	0.54	0.28
Store	1000 ft²	100	0.43	0.23
Supermarket	1000 ft²	150	2.00	1.00
Shopping Center	1000 ft²	325	3.00	1.17
Regional Mall	1000 ft²	150	2.10	0.77
Office Building	1000 ft²	200	0.86	0.45
Professional Building	1000 ft²	300	1.29	0.68
Restaurant	1000 ft²	1,000	16.68	5.00
Indoor Theatre	1000 ft²	125	0.54	0.28
Car Wash				
Tunnel - No Recycling	1000 ft²	3,700	15.86	8.33
Tunnel - Recycling	1000 ft²	2,700	11.74	6.16
Wand	1000 ft²	700	3.00	1.58
Financial Institution	1000 ft²	100	0.43	0.23
Service Shop	1000 ft²	100	0.43	0.23
Animal Kennels	1000 ft²	100	0.43	0.23
Service Station	1000 ft²	100	0.43	0.23
Auto Sales/Repair	1000 ft²	100	0.43	0.23
Wholesale Outlet	1000 ft²	100	0.43	0.23
Nursery/Greenhouse	1000 ft²	25	0.11	0.06
Manufacturing	1000 ft²	200	1.86	0.70
Dry Manufacturing	1000 ft²	25	0.23	0.09
Lumber Yard	1000 ft²	25	0.23	0.09
Warehousing	1000 ft²	25	0.23	0.09
Open Storage	1000 ft²	25	0.23	0.09
Drive-in Theatre	1000 ft²	20	0.09	0.05

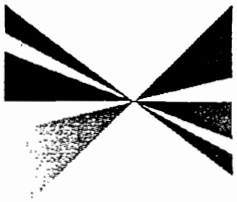
TABLE 1

(continued)

LOADINGS FOR EACH CLASS OF LAND USE

DESCRIPTION	UNIT OF MEASURE	FLOW (Gallons per Day)	COD (Pounds per Day)	SUSPENDED SOLIDS (Pounds per Day)
COMMERCIAL				
Night Club	1000 ft²	350	1.50	0.79
Bowling/Skating	1000 ft²	150	1.76	0.55
Club	1000 ft²	125	0.54	0.27
Auditorium, Amusement	1000 ft²	350	1.50	0.79
Golf Course, Camp, and Park (Structures and Improvements)	1000 ft²	100	0.43	0.23
Recreational Vehicle Park	No. of Spaces	55	0.34	0.14
Convalescent Home	Bed	125	0.54	0.28
Laundry	1000 ft²	3,825	16.40	8.61
Mortuary/Cemetery	1000 ft²	100	1 33	0.67
Health Spa, Gymnasium				
With Showers	1000 ft²	600	2.58	1.35
Without Showers	1000 ft²	300	1.29	0.68
Convention Center, Fairground, Racetrack, Sports Stadium/Arena	Average Daily Attendance	10	0.04	0.02
INSTITUTIONAL				
College/University	Student	20	0.09	0.05
Private School	1000 ft²	200	0.86	0.45
Church	1000 ft²	50	0.21	0.11

SOUTHERN CALIFORNIA



ASSOCIATION of GOVERNMENTS

Main Office

818 West Seventh Street

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County of Imperial: Tom Veysey, Imperial County • David Dhillon, El Centro

County of Los Angeles: Yvonne Brathwaite Burke, Los Angeles County • Zev Yaroslavsky, Los Angeles County • Richard Alarcon, Los Angeles • Richard Alatorre, Los Angeles • Eileen Ansari, Diamond Bar • Bob Bartlett, Monrovia • Bruce Barrows, Cerritos • George Bass, Bell • Sue Bauer, Glendora • Hal Bernson, Los Angeles • Robert Bruesch, Rosemead • Laura Chick, Los Angeles •Gene Daniels, Paramount • John Ferraro, Los Angeles • Michael Feuer, Los Angeles • Ruth Galanter, Los Angeles • Eileen Givens, Glendale • Jackie Goldberg, Los Angeles • Ray Grabinski, Long Beach • Garland Hardeman, Inglewood • Mike Hernandez, Los Angeles • Nate Holden, Los Angeles • Keith McCarthy, Downey • Barbara Messina, Alhambra • Cindy Miscikowski, Los Angeles • David Myers, Palmdale • George Nakano, Torrance • Pam O'Connor, Santa Monica • Jenny Oropeza, Long Beach • Bob Pinzler, Redondo Beach • Beatrice Proo, Pico Rivera • Mark Ridley-Thomas, Los Angeles • Diann Ring, Claremont • Richard Riordan, Los Angeles • Marcine Shaw, Compton • Rudy Svorinich, Los Angeles • Joel Wachs, Los Angeles • Rita Walters, Los Angeles • Dennis Washburn, Calabasas • Paul Zee, South Pasadena

County of Orange: William Steiner, Orange County • Steve Apodaca, San Clemente • Ron Bates, Los Alamitos • Art Brown, Buena Park • Jan Debay, Newport Beach • Richard Dixon, Lake Forest • Charlene Hatakeyama, La Palma • Bev Perry, Brea

County of Riverside: James Venable, Riverside County • Jan Leja, Beaumont • Dick Kelly, Palm Desert • Ron Loveridge, Riverside • Andrea Puga, Corona • Ron Roberts, Temecula

County of San Bernardino: Kathy Davis, San Bernardino County • Bill Alexander, Rancho Cucamonga • Jim Bagley, Twentynine Palms • David Eshleman, Fontana • Lee Ann Garcia, Grand Terrace • Gwenn Norton-Perry, Chino Hills • John Starbuck, Highland

County of Ventura: Judy Mikels, Ventura County • Andrew Fox, Thousand Oaks • John Melton, Santa Paula • Toni Young, Port Hueneme

Riverside County Transportation Commission: Tom Mullen, Riverside County

Ventura County Transportation Commission: Bill Davis, Simi Valley

Printed on Recycled Paper 9/14/98

December 31, 1998

Received

JAN 4 1999

City of San Dimas
Planning Division

Mr. Lawrence L. Stevens, AICP
Planning Director
City of San Dimas
245 East Bonita Avenue
San Dimas , CA 91773

RE: **Comments on the Notice of Preparation for the Draft Environmental Impact Report for the Northern Foothills Implementation Program - SCAG No. I9800670**

Dear Mr. Stevens:

Thank you for submitting the **Notice of Preparation for the Draft Environmental Impact Report for the Northern Foothills Implementation Program** to SCAG for review and comment. As areawide clearinghouse for regionally significant projects, SCAG assists cities, counties and other agencies in reviewing projects and plans for consistency with regional plans.

In addition, The California Environmental Quality Act requires that EIRs discuss any inconsistencies between the proposed project and the applicable general plans and **regional plans (Section 15125 [b])**. If there are inconsistencies, an explanation and rationalization for such inconsistencies should be provided.

Policies of SCAG's Regional Comprehensive Plan and Guide and Regional Transportation Plan which may be applicable to your project are outlined in the attachment. **We expect the DEIR to specifically cite the appropriate SCAG policies and address the manner in which the Project is consistent with applicable core policies or supportive of applicable ancillary policies. Please use our policy numbers to refer to them in your DEIR. Also, we would encourage you to use a side-by-side comparison of SCAG policies with a discussion of the consistency or support of the policy with the Proposed Project.**

Please provide a minimum of 45 days for SCAG to review the DEIR when this document is available. If you have any questions regarding the attached comments, please contact David Stein at (213) 236-1917.

Sincerely,

Arnold Sherwood

ARNOLD SHERWOOD
Director, Performance Assessment and Implementation

COMMENTS ON THE PROPOSAL TO DEVELOP THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE NORTHERN FOOTHILLS IMPLEMENTATION PROGRAM (CITY OF SAN DIMAS)

PROJECT DESCRIPTION

The proposed Project involves approximately 3,000 acres of primarily undeveloped land in the portion of San Dimas north of Foothill Boulevard. The proposed development strategy would put 127dwelling units on 972 vacant acres.

CONSISTENCY WITH REGIONAL COMPREHENSIVE PLAN AND GUIDE POLICIES

The Growth Management Chapter (GMC) of the Regional Comprehensive Plan and Guide (RCPG) contains the following policies that are particularly applicable and should be addressed in the Draft EIR for the Project.

3.01 The population, housing, and jobs forecasts, which are adopted by SCAG's Regional Council and that reflect local plans and policies, shall be used by SCAG in all phases of implementation and review.

3.03 The timing, financing, and location of public facilities, utility systems, and transportation systems shall be used by SCAG to implement the region's growth policies.

REGIONAL GROWTH FORECASTS

The Draft EIR should reflect the most current SCAG forecasts which are the 1998 RTP (April 1998) Population, Household and Employment forecasts for the SGVCOG subregion and the City of San Dimas. These forecasts follow:

SCAG SGVCOG Forecasts	**2000**	**2005**	**2010**	**2015**	**2020**
Population	1,566,700	1,624,400	1,673,500	1,728,700	1,805,200
Households	447,300	459,200	478,400	497,800	529,500
Employment	586,200	635,000	695,600	739,200	776,300

SCAG City of San Dimas Forecasts	**2000**	**2005**	**2010**	**2015**	**2020**
Population	34,700	35,200	35,700	36,200	36,900
Households	11,500	11,600	11,900	12,200	12,600
Employment	15,400	17,100	19,300	20,800	22,100

REGIONAL TRANSPORTATION PLAN

The Regional Transportation Plan (RTP) also has goals, objectives, policies and actions pertinent to this proposed project. This RTP links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic and commercial limitations. Among the relevant goals, objectives, policies and actions of the RTP are the following:

Core Regional Transportation Plan Goals

1. *Meet the need for mobility and access to transportation of an increased employment and population base in the subregions and region, reduce congestion to 1990 or better levels of performance and enhance the movement of goods.*

2. *Ensure that transportation investments are cost-effective, protect the environment, promote energy efficiency and enhance the quality of life.*

3. *Serve everyone's transportation needs in a safe, reliable and economical way, including those who depend on public transit, such as the elderly, handicapped and disadvantaged.*

4. *Develop regional transportation solutions that complement subregional transportation systems and the needs of cities, communities and subregions.*

5. *Promote transportation strategies that are innovative and market-based, encourage new technologies and support the Southern California economy.*

Core Regional Transportation Plan Objectives (Regional Performance Indicators*)

1. *Mobility - Transportation Systems should meet the public need for improved access, and for safe, comfortable, convenient and economical movements of people and goods.*
   - *Average Work Trip Travel Time in Minutes – 22 minutes*
   - *PM Peak Highway Speed – 33 mph*
   - *Percent of PM Peak Travel in Delay (All Trips) – 33%*

2. *Accessibility - Transportation Systems should ensure the ease with which opportunities are reached. Transportation and land use measures should be employed to ensure minimal time and cost.*
   - *Work Opportunities within 25 Minutes – 88%*

3. *Environment - Transportation Systems should sustain development and preservation of the existing system and the environment. (All Trips)*
   - *Meeting Federal and State Standards – Meet Air Plan Emission Budgets*

4. *Reliability - Reasonable and dependable levels of service by mode. (All Trips)*
   - *Transit – 63%*
   - *Highway – 76%*

4. *Safety - Transportation Systems should provide minimal, risk, accident, death and injury. (All Trips)*
   - *Fatalities Per Million Passenger Miles – 0.008*
   - *Injury Accidents – 0.929*

5. *Livable Communities - Transportation Systems should facilitate Livable Communities in which all residents have access to all opportunities with minimal travel time. (All Trips)*
   - *Vehicle Trip Reduction – 1.5%*
   - *Vehicle Miles Traveled Reduction – 10.0%*

6. *Equity - The benefits of transportation investments should be equitably distributed among all ethnic, age and income groups. (All trips)*
   - *Low-Income (Household Income $12,000)) Share of Net Benefits – Equitable Distribution of Benefits*

7. *Cost-Effectiveness - Maximize return on transportation investment. (All Trips)*
   - *Net Present Value – Maximum Return on Transportation Investment*
   - *Value of a Dollar Invested -- Maximum Return on Transportation Investment*

- The numeric Regional Plan Objectives are not applicable on a project level, since the objectives are based upon performance of the regional system as a whole. Furthermore, several important policy issues are not accommodated in the Regional Plan Objectives, such as environmental impacts other than air quality. Individual projects must be evaluated by the local implementing agency and the goals and policies (i.e. mobility, accessibility, environment, reliability, safety, equity, Livable Communities, and cost-effectiveness) evaluated and weighed during the final project development. Such evaluation could occur via the MIS and/other environmental review processes. Projects are then proposed for funding through the RTIP which must be consistent with the RTP.

Core Regional Transportation Plan Policies

4.01 Transportation investments shall be based on SCAG's adopted Regional Performance Indicators.

4.02 Transportation investments shall mitigate environmental impacts to an acceptable level.

4.03 Major Investment Studies and other studies of regional transportation facilities shall include consideration of freight movement.

4.04 Transportation Control Measures shall be a priority.

4.05 The Regional Transportation Improvement Program (RTIP) shall be developed using the RTP as guidance, and approval shall be based on its implementation of the RTP.

4.06 Implementing transit restructuring, including Smart Shuttles, freight improvements, advanced transportation technologies, airport ground access and traveler information services are RTP priorities.

4.07 Projects proposed for the Regional Transportation Improvement Program (RTIP) that do not indicate a reasonable phasing of construction between segments will not be approved.

4.08 All existing and new public transit services, facilities and/or systems shall be fully accessible to persons with disabilities as required by applicable sections of the 1990 Americans with Disabilities Act.

4.10 All existing and new public transit services shall be provided in a manner consistent with Title VI of the 1964 Civil Rights Act, prohibiting intentional discrimination and adverse disparate impact with regard to race, ethnicity, or national origin.

4.11 All existing and new public transit services, facilities and/or systems shall evaluate the potential for private sector participation through the use of competitive procurement.

4.15 Arterial HOV facilities to support transit and rideshare will be supported and encouraged.

4.16 Maintaining and operating the existing transportation system will be a priority over expanding capacity.

4.17 Alternatives to highway expansion must be evaluated before giving regional approval to expand single occupancy lanes.

Core Regional Transportation Plan Actions

Livable Communities

1. *Study the impact of the Livable Community strategy on VMT and Vehicle Trip Reductions.*

2. *Continue public dialogue and education on the benefits of Livable Communities.*

Non-Motorized

3. *Improve or construct priority bicycle and pedestrian facilities identified in county and subregional Non-Motorized Plans.*

Location Efficient Mortgage

4. *Support continuing efforts by the Center for Neighborhood Technology and Surface Transportation Policy Project to develop and promote LEMs and obtain participation agreements by lending institutions.*

5. *Develop methodologies to evaluate mobility and air quality impacts.*

6. *Work with housing industry, financial institutions, affordable housing interests and agencies to promote the LEM strategy.*

Intelligent Transportation Systems

11. *Refine Priority Corridor institutional relationships to focus on development and deployment of ITS projects consistent with the ITS Strategic Plan, national architecture, and regional performance.*

12. *Develop policies and guidance to incorporate ITS projects in the development, design, and funding of regional projects.*

13. *Work with US Department of Transportation, Caltrans, CTCs, Subregions, local governments and the private sector to identify public and private funding for implementation of ITS projects in the Region.*

14. Expect emphasis of ITS to occur at subregional level.

Advanced Traveler Information

15. All Transportation agencies to pursue their participation in developing ATIS components.

16. *The Southern California Economic Partnership to develop and implement a deployment plan for ATIS.*

Commuter Information and Marketing Services

17. Program funds in the RTIP to maintain the existing carpool market share and increase the number of car-poolers by 8,000 per year, with each county contributing its fair share according to an agreed-upon formula.

Transit Restructuring

18. Work with transit operators and transportation commissions to evaluate restructuring existing services away from least performing lines towards more efficient transit services that meet the regional performance goal by the year 2010.

19. Work with County Transportation Commissions to document and monitor transit restructuring through the Short Range Transit Plan (SRTP) process.

Smart Shuttles

20. Develop a system of demand responsive transit to be implemented at major centers in the Region, providing multi-modal linkages, access within centers, and connections between centers.

Transit Corridors

21. Support an Orange County 15-mile light rail line within the Central Corridor with a feeder system that meets performance objectives and is financially feasible.

22. Support preliminary engineering studies for the Orange County 28 mile light rail line within the Central Corridor. The target ridership goal is 83,000 per day. Ridership will be reevaluated in concert with appropriate County Transportation Commission's staff.

23. Construct exclusive transit corridors to minimize travel time and achieve the ridership in Table 3 of the Regional Transportation Plan.

24. Perform Major Investment Studies on transit corridors.

25. Coordinate with San Bernardino County to review transit corridor serving Redlands and develop recommendations for same.

Transit Centers/Park-n-Ride Facilities

26. *Develop a subregionally focused public education and training program through a regional Livable Places Initiative that promotes successful local urban design examples of land use related transportation planning, that reduces reliance on auto travel and improves community livability, and economic vitality*

27. Continue to refine methodologies to evaluate transit center mobility and air quality impacts.

28. Enhance transit centers, constructing new centers and providing additional park-n-ride facilities to encourage alternatives to single occupant automobiles.

Commuter Rail

29. Increase Metrolink service on all commuter rail lines.

High-Occupancy Vehicle Lanes

31. Close HOV system gaps.

32. Construct High Occupancy Vehicle lane in each direction on SR-22 provided that it will be paid for by savings from Measure M funds.

HOV Connectors

33. Construct freeway-to-freeway connectors.

Mixed Flow

34. Add a number of mixed flow lanes to the freeway system to increase capacity, to provide gap closures and for connectivity.

Roadways

43. Improve arterials that serve regional needs for freight movement or provide capacity within commute sheds. The Plan proposes $1 billion in addition to funds already

identified by Transportation Commissions and Subregions. The $1 billion dollars for arterial projects is not sufficient to meet regional needs and requires further research and funding.

44. *Each County Transportation Commission and IVAG allocates its fair share of funding for arterials to the Subregions within the boundaries of the respective commission and IVAG based upon identified regional mobility needs and SCAG's Performance Indicators.*

Rail Grade Crossings

53. *Support Subregions in obtaining funding for grade crossing studies.*

54. *Construct grade separations at rail lines. Study the funding mechanisms for grade crossing projects to meet the needs of the entire Region.*

55. *Recognize the need for additional funding for grade crossing projects to relieve truck congestion because current program funding needs exceed available public and private funding.*

Vanpooling

61. *Continue to support private provision of vanpool programs.*

62. *Create a strong public-private partnership to increase the number of commuter vanpools from 2,000 to 5,000 through more effective marketing, and through the provision of non-monetary public sector incentives.*

63. *Develop and implement pilot projects to test the concept of replacing low-performing express bus services with non-subsidized vanpools.*

64. *Work with private and public organizations to develop programs that qualify* for *federal, Environmental Protection Agency's implementation strategies.*

Telecommunications

65. *Support policies and programs that facilitate individuals and business employees working at home.*

66. *Support public policies, programs, legislation, ordinances , housing designs and building permits that enable and support self-employed and other private sector employees working at home.*

67. *The Southern California Economic Partnership should pursue partnerships, agreements and marketing techniques that promote work at home and implementation of telecommunications opportunities that help to reduce travel demand.*

Voluntary Implementation (Non-Regulatory) of Emission Reduction Strategies

68. *SCAG and the Southern California Economic Partnership work together with public and private organizations to develop approaches, agreements and institutional arrangements for implementation of the SCAG Telecommunications Strategy, smart shuttles, livable communities, ATIS and alternative fuels as well as for possible inclusion in future SIPs for attainment demonstration.*

Ground Access

73. *Construct improvements on arterials, highway and rail lines to accommodate added freight and passenger movements to and from airports.*

74. *Support subregions in obtaining funding for ground access studies.*

Alternative Fuels and Clean Cities

77. *Support permitting of alternative and zero emission vehicle infrastructure and charging stations.*

78. *The Southern California Economic Partnership to work with public and private organizations to form partnerships, agreements and marketing techniques to accelerate the deployment of zero emission and alternative fuels vehicles.*

Welfare to Work

80. *Provide "one-stop" information centers for welfare recipients entering the work force by linking Advanced Transportation Information Systems directly to job placement/referral and job training centers.*

81. *Develop and implement programs to utilize lower-cost, non-traditional transportation systems (such as shared-ride taxi services, jitneys, etc.) to supplement existing transit services to provide access to employment opportunities for welfare recipients.*

82. *Work with employers, job placement/referral and job training centers to integrate new workers entering the work force into existing employer-based commuter assistance programs.*

83. *Incorporate equity objectives into the RTP's transportation strategy.*

Major Investment Studies (MISs) Corridor Studies, Project Study Reports ND Environmental Documents

84. *Complete the current Major Investment Studies, initiate the proposed/future investment studies, and consider incorporating completed MIS preferred alternatives into the RTP, based on performance indicators and funding availability.*

85. *Complete current corridor studies on projects, corridors and subareas included in the constrained (first priority) and in the unconstrained project list (second priority).*

86. *Complete project study reports, or their equivalent, on projects, corridors, and subareas included in the constrained funding (first priority) and in the unconstrained project list (second priority).*

87. *Complete environmental documents started under option 2 for doing concurrent MISs and Environmental Impact Statements (EIS) or Environmental Assessments (EA) in the constrained part of the RTP.*

Attached is the 98 RTP Constrained Projects List for the 98 Regional Transportation Plan. This Projects List is organized by county, and within each county the list is organized by route/program and by improvement type. The Projects List also provides cost) project limits and costs (Capital, Operations and Maintenance, and Public Costs).

GMC POLICIES RELATED TO THE RCPG GOAL TO IMPROVE THE REGIONAL STANDARD OF LIVING

The Growth Management goals to develop urban forms that enable individuals to spend less income on housing cost, that minimize public and private development costs, and that enable firms to be more competitive, strengthen the regional strategic goal to stimulate the regional economy. The evaluation of the proposed project in relation to the following policies would be intended to guide efforts toward achievement of such goals and does not infer regional interference with local land use powers.

3.04 *Encourage local jurisdictions' efforts to achieve a balance between the types of jobs they seek to attract and housing prices.*

3.05 *Encourage patterns of urban development and land use which reduce costs on infrastructure construction and make better use of existing facilities.*

3.08 *Encourage subregions to define an economic strategy to maintain the economic vitality of the subregion, including the development and use of marketing programs, and other economic incentives, which support attainment of subregional goals and policies.*

3.09 Support local jurisdictions' efforts to minimize the cost of infrastructure and public service delivery, and efforts to seek new sources of funding for development and the provision of services.

3.10 Support local jurisdictions' actions to minimize red tape and expedite the permitting process to maintain economic vitality and competitiveness.

GMC POLICIES RELATED TO THE RCPG GOAL TO IMPROVE THE REGIONAL QUALITY OF LIFE

The Growth Management goals to attain mobility and clean air goals and to develop urban forms that enhance quality of life, that accommodate a diversity of life styles, that preserve open space and natural resources, and that are aesthetically pleasing and preserve the character of communities, enhance the regional strategic goal of maintaining the regional quality of life. The evaluation of the proposed project in relation to the following policies would be intended to provide direction for plan implementation, and does not allude to regional mandates.

3.11 Support provisions and incentives created by local jurisdictions to attract housing growth in job rich subregions and job growth in housing rich subregions.

3.12 Encourage existing or proposed local jurisdictions' programs aimed at designing land uses which encourage the use of transit and thus reduce the need for roadway expansion, reduce the number of auto trips and vehicle miles traveled, and create opportunities for residents to walk and bike.

3.13 Encourage local jurisdictions' plans that maximize the use of existing urbanized areas accessible to transit through infill and redevelopment.

3.14 Support local plans to increase density of future development located at strategic points along the regional commuter rail, transit systems, and activity centers.

3.15 Support local jurisdictions strategies to establish mixed-use clusters and other transit-oriented developments around transit stations and along transit corridors.

3.16 Encourage developments in and around activity centers, transportation corridors, underutilized infrastructure systems, and areas needing recycling and redevelopment.

3.17 Support and encourage settlement patterns which contain a range of urban densities.

3.18 Encourage planned development in locations least likely to cause environmental impact.

3.19 National Forests shall remain permanently preserved and used as open space. SCAG shall support policies and actions that preserve open space areas identified in local, state, and federal plans.

3.20 Support the protection of vital resources such as wetlands, groundwater recharge areas, woodlands, production lands, and land containing unique and endangered plants and animals.

3.21 Encourage the implementation of measures aimed at the preservation and protection of recorded and unrecorded cultural resources and archaeological sites.

3.22 Discourage development, or encourage the use of special design requirements, in areas with steep slopes, high fire, flood, and seismic hazards.

3.23 Encourage mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resources ,measures that would reduce exposure to seismic hazards, minimize earthquake damage, and to develop emergency response and recovery plans.

GMC POLICIES RELATED TO THE RCPG GOAL TO PROVIDE SOCIAL, POLITICAL, AND CULTURAL EQUITY

The Growth Management Goal to develop urban forms that avoid economic and social polarization promotes the regional strategic goal of minimizing social and geographic disparities and of reaching equity among all segments of society. The evaluation of the proposed project in relation to the policy stated below is intended guide direction for the accomplishment of this goal, and does not infer regional mandates and interference with local land use powers.

3.24 Encourage efforts of local jurisdictions in the implementation of programs that increase the supply and quality of housing and provide affordable housing as evaluated in the Regional Housing Needs Assessment.

3.25 Encourage the efforts of local jurisdictions, employers and service agencies to provide adequate training and retraining of workers, and prepare the labor force to meet the challenges of the regional economy.

3.26 Encourage employment development in job-poor localities through support of labor force retraining programs and other economic development measures.

3.27 Support local jurisdictions and other service providers in their efforts to develop sustainable communities and provide, equally to all members of society, accessible and effective services such as: public education, housing, health care, social services, recreational facilities, law enforcement, and fire protection.

AIR QUALITY CHAPTER CORE ACTIONS

The Air Quality Chapter core actions related to the proposed project include:

5.07 Determine specific programs and associated actions needed (e.g., indirect source rules,

enhanced use of telecommunications, provision of community based shuttle services, provision of demand management based programs, or vehicle-miles-traveled/emission fees) so that options to command and control regulations can be assessed.

5.11 Through the environmental document review process, ensure that plans at all levels of government (regional, air basin, county, subregional and local) consider air quality, land use, transportation and economic relationships to ensure consistency and minimize conflicts.

WATER QUALITY CHAPTER RECOMMENDATIONS AND POLICY OPTIONS

The Water Quality Chapter core recommendations and policy options relate to the two water quality goals: to restore and maintain the chemical, physical and biological integrity of the nation's water; and, to achieve and maintain water quality objectives that are necessary to protect all beneficial uses of all waters.

11.02 Encourage "watershed management" programs and strategies, recognizing the primary role of local governments in such efforts.

11.03 Coordinate watershed management planning at the subregional level by (1) providing consistent regional data; (2) serving as a liaison between affected local, state, and federal watershed management agencies; and (3) ensuring that watershed planning is consistent with other planning objectives (e.g., transportation, air quality, water supply).

11.05 Support regional efforts to identify and cooperatively plan for wetlands to facilitate both sustaining the amount and quality of wetlands in the region and expediting the process for obtaining wetlands permits.

11.06 Clean up the contamination in the region's major groundwater aquifers since its water supply is critical to the long-term economic and environmental health of the region. The financing of such clean-ups should leverage state and federal resources and minimize significant impacts on the local economy.

11.07 Encourage water reclamation throughout the region where it is cost-effective, feasible, and appropriate to reduce reliance on imported water and wastewater discharges. Current administrative impediments to increased use of wastewater should be addressed.

11.08 Ensure wastewater treatment agency facility planning and facility development be consistent with population projection contained in the RCPG, while taking into account the need to build wastewater treatment facilities in cost-effective increments of capacity, the need to build well enough in advance to reliably meet unanticipated service and storm water demands, and the need to provide standby capacity for public safety and environmental protection objectives.

OPEN SPACE CHAPTER ANCILLARY GOALS

Outdoor Recreation

9.01 Provide adequate land resources to meet the outdoor recreation needs of the present and future residents in the region and to promote tourism in the region.

9.02 Increase the accessibility to open space lands for outdoor recreation.

9.03 Promote self-sustaining regional recreation resources and facilities.

Public Health and Safety

9.04 Maintain open space for adequate protection of lives and properties against natural and man-made hazards.

9.05 Minimize potentially hazardous developments in hillsides, canyons, areas susceptible to flooding, earthquakes, wildfire and other known hazards, and areas with limited access for emergency equipment.

9.06 Minimize public expenditure for infrastructure and facilities to support urban type uses in areas where public health and safety could not be guaranteed.

Resource Production

9.07 Maintain adequate viable resource production lands, particularly lands devoted to commercial agriculture and mining operations.

Resource Protection

9.08 Develop well-managed viable ecosystems or known habitats of rare, threatened and endangered species, including wetlands.

CONCLUSIONS

All feasible measures needed to mitigate any potentially negative regional impacts associated with the proposed project should be implemented and monitored, as required by CEQA.

ENDNOTE

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

Roles and Authorities

SCAG is a ***Joint Powers Agency*** established under California Government Code Section 6502 et seq. Under federal and state law, SCAG is designated as a Council of Governments (COG), a Regional Transportation Planning Agency (RTPA), and a Metropolitan Planning Organization (MPO). SCAG's mandated roles and responsibilities include the following:

SCAG is designated by the federal government as the Region's ***Metropolitan Planning Organization*** and mandated to maintain a continuing, cooperative, and comprehensive transportation planning process resulting in a Regional Transportation Plan and a Regional Transportation Improvement Program pursuant to 23 U.S.C. §134(g)-(h), 49 U.S.C. §1607(f)-(g) et seq., 23 C.F.R. §450, and 49 C.F.R. §613. SCAG is also the designated ***Regional Transportation Planning Agency***, and as such is responsible for both preparation of the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) under California Government Code Section 65080.

SCAG is responsible for developing the demographic projections and the integrated land use, housing, employment, and transportation programs, measures, and strategies portions of the ***South Coast Air Quality Management Plan***, pursuant to California Health and Safety Code Section 40460(b)-(c). SCAG is also designated under 42 U.S.C. §7504(a) as a ***Co-Lead Agency*** for air quality planning for the Central Coast and Southeast Desert Air Basin District.

SCAG is responsible under the Federal Clean Air Act for determining ***Conformity*** of Projects, Plans and Programs to the Air Plan, pursuant to 42 U.S.C. §7506.

Pursuant to California Government Code Section 65089.2, SCAG is responsible for ***reviewing all Congestion Management Plans (CMPs) for consistency with regional transportation plans*** required by Section 65080 of the Government Code. SCAG must also evaluate the consistency and compatibility of such programs within the region.

SCAG is the authorized regional agency for ***Inter-Governmental Review*** of Programs proposed for federal financial assistance and direct development activities, pursuant to Presidential Executive Order 12,372 (replacing A-95 Review).

SCAG reviews, pursuant to Public Resources Code Sections 21083 and 21087, ***Environmental Impact Reports*** of projects of regional significance for consistency with regional plans [California Environmental Quality Act Guidelines Sections 15206 and 15125(b)].

Pursuant to 33 U.S.C. §1288(a)(2) (Section 208 of the Federal Water Pollution Control Act), SCAG is the authorized ***Areawide Waste Treatment Management Planning Agency.***

SCAG is responsible for preparation of the ***Regional Housing Needs Assessment***, pursuant to California Government Code Section 65584(a).

SCAG is responsible (with the San Diego Association of Governments and the Santa Barbara County/Cities Area Planning Council) for preparing the ***Southern California Hazardous Waste Management Plan*** pursuant to California Health and Safety Code Section 25135.3.

COUNTY OF LOS ANGELES

FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294

(323) 890-4330

P. MICHAEL FREEMAN
FIRE CHIEF
FORESTER & FIRE WARDEN

Received
FEB 19 1999
City of San Dimas
Planning Division

February 19, 1999

Lawrence L. Stevens, AICP
Planning Director
City of San Dimas
245 East Bonita Avenue
San Dimas, CA 91773

Dear Mr. Stevens:

SUBJECT: ENVIRONMENTAL IMPACT REPORT – (CITY OF SAN DIMAS) NOTICE OF PREPARATION OF A DRAFT EIR – THE NORTHERN FOOTHILLS IMPLEMENTATION PROGRAM IN THE CITY OF SAN DIMAS (FROM THE CITY) – EIR #601/1999)

The Notice of Preparation for the Northern Foothills Implementation Program from the City has been reviewed by the Planning, Subdivision, and Forestry Divisions of the County of Los Angeles Fire Department. The following are their comments:

The subject development will receive fire protection and paramedic service from the County of Los Angeles Fire Department. Fire Station #86, located at 520 South Amelia Avenue, Glendora, CA 91740-4027, is the jurisdictional station for this property. It has a three-person engine company and a four-person ladder truck company.

The second closest station to the project area is Station #64, located at 164 Walnut, San Dimas, CA 19773-2620. It has two, three-person engine companies and a two-person paramedic squad.

Section 4.11 on Page 34 erroneously refers to a "City of San Dimas Fire Department." There is no such entity.

Fire protection serving the area appears to be adequate for the existing development/land use; however, each additional development creates greater demands on existing resources. Consequently, the impact that future developments in this project will have on the adequacy of the Fire Department's level of service remains uncertain.

Size, complexity, and projected use of the proposed development may necessitate multiple ingress/egress access for the circulation of traffic, and emergency response issues. This Department may condition future development to provide a second, and in some cases, a third means of access due to the number of units and street widths in the existing development.

The development of this project must comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows, and hydrants.

Single-family detached homes shall require a fire flow of 1,250 gallons per minute at 20 pounds per square inch residual pressure for a two-hour duration. Final fire flows will be based on the size of buildings, their relationship to other structures, property lines, and types of construction used.

This property is located within the area described by the Forester and Fire Warden as a Fire Zone 4, Very High Fire Hazard Severity Zone (VHFHSZ). All applicable code and ordinance requirements for construction, access, water mains, fire hydrants, fire flows, brush clearance, and fuel modification plans must be met.

Specific fire and life safety requirements for the construction phase will be addressed at the plan check phase. Fire Department requirements for access, fire flows, and hydrants are addressed at the Los Angeles County Subdivision Committee Meeting, when approval for tentative subdivision maps are considered.

It is strongly suggested that fire sprinkler systems be installed in all commercial and residential buildings. This will reduce potential fire and life losses. Systems are now technically and economically feasible for residential use.

SINGLE-FAMILY DWELLING UNITS:
Fire Department access shall be provided up to 150 feet of all portions of the exterior walls of the first story of any single unit. If exceeding 150 feet, provide 20 feet paved width "Private Driveway/Firelane" to within 150 feet of all portions of the exterior walls of each unit.

Streets or driveways within the development shall be provided with the following widths:

1. Provide 36 feet width on all collector streets and those streets where parking is allowed on both sides.

2. Provide 34 feet width on cul-de-sacs up to 700 feet in length. This allows parking on both sides of the street.

3. Provide 36 feet width on cul-de-sacs from 701 to 1,000 feet in length. This allows parking on both sides of the street.

Should any questions arise regarding design, construction, and/or water and access, please contact Captain Jeff Vrooman at (323) 890-4243.

The statutory responsibilities of the County of Los Angeles Fire Department include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Fire Zone 4, or Very High Fire Hazard Severity Zone areas, archeological and cultural resources. Potential impacts in these areas should be addressed in the Draft Environmental Impact Report.

Oak tree resources may be included within the project area. The applicant should incorporate innovative design to reduce or eliminate the impact to the Oak resources. Loss of Oak tree habitat should be mitigated for pursuant to the provisions of the City's Oak Tree Ordinance. The flora and fauna analysis should address any rare, endangered and/or sensitive species that exist on the project site. The preservation, relocation and/or construction impacting any of these species should be fully explained in the Environmental Impact Report. An archaeological and historical records check and field survey should be conducted to determine potential impacts to these resources.

As required by Section 1117.2.1 of the County Fire Code a fuel modification plan, a landscape plan and an irrigation plan shall be submitted with any subdivision of land or prior to any new construction, remodeling, modification or reconstruction where such activities increase the square footage of the existing structure by at least 50% within a 12-month period and where said structure or subdivision is located within an area designated as a Very High Fire Hazard Severity Zone or within Fire Zone 4. Said plans shall be reviewed and approved by the Forestry Division of the County of Los Angeles Fire Department for reasonable fire safety. Specific questions regarding fuel modification requirements should be directed to the Fuel Modification Unit at (909) 620-8287.

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

Michael A. Wilkinson

MICHAEL A. WILKINSON, CHIEF, FORESTRY DIVISION
PREVENTION BUREAU

MAW:lc

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San Dimas, CA 91773-3002

Mr. Larry Stevens
City of San Dimas
Planning Department
245 East Bonita Avenue
San Dimas, California 91773

Re: Northern Foothills Implementation Program

Dear Sirs:

This letter is written on behalf of our client NJD, Ltd., owner of 200 acres of land on the west side of the City of San Dimas. This letter expresses our concern over the City's apparently pre-ordained approach to the planning process for the undeveloped 972 acres of land in the North Foothills area, including NJD's property, -- a process that will minimize both the opportunity for public input into the specific plan and development standards and will assure that the barest minimum number of units will be permitted and the development standards to be applied will, as a practical effect, disable construction of even those few units. Our concern flows from the following facts:

* We wrote to the Mayor and City Council Members on November 10, 1998, requesting a copy of the LSA study on the North Foothills. Neither this office nor any other representative of our client was provided a copy of the document. Rather we were repeatedly told by Mr. Stevens that the document was not available, and we were told by LSA that they had been instructed not to release the document. Kim Scott had even called the Mayor twice to try to get a copy of the document. On January 12, 1999, Mr. Stevens again stated that the document was not finished. Only after I stated that the document was referred to in the Notice of Hearing received by us did he agree that we could obtain a copy of the document. Mr. Stevens further stated that he had given lots of copies of the document to various property owners. Despite that claim, the owner of

over 20% of the undeveloped property under consideration was affirmatively denied access to this document for over two months.

* On December 3, 1998, the undersigned was told by Mr. Stevens that "nothing was happening yet" in regard to the EIR and that "nothing would happen" until a scoping meeting in January to define what the project would be. In fact, the Notice of Preparation of the draft EIR is dated December 18, 1998, and contains a project description, including "to outline development policies and requirements specific to the Northern Foothills area consistent" with the LSA document.

* Mr. Stevens and I discussed arranging a site visit of NJD's property for the EIR consultants so that they would have the necessary first hand information to adequately analyze and address the actual development potential of this property. Although Mr. Stevens stated he would call back with potential dates for such a visit, both the call and the site tour have yet to occur. We could would share such information important to your EIR efforts such as the topographical, geological and utility documentation our client has gathered.

* The Initial Study for the project, dated December 17, 1998, "incorporates" the LSA document. The Initial Study further states that "These documents were utilized throughout this Initial Study/Environmental Checklist and are available for review at the City of San Dimas."

* We were assured by City staff that the process would include the consideration of transfers of development rights - a device that has been repeatedly found to enhance the ability to retain undisturbed open space while preserving economic viability for property owners. The City's own Planning Commission recognized this fact and approved the LSA document with the recommendation regarding establishing such transferable development rights. The Initial Study and the project description, however, are devoid of any mention of transferable development rights. Also lacking is any mention of the ability to cluster units - another proven way to preserve open space and to avoid carving up slopes with roads, water and sewer lines, and power and telecommunications service.

* Finally, although we were at last provided with a copy of the LSA document, the copy provided is not the November 1998 draft referred to and incorporated within the Initial Study. As the date tracers at the bottom of each page of the document reveal, the document is current at its most recent sections as of June 3, 1998, with other sections being no more recent than April 1997. The essential chapter 5 on the Development Strategy for the Area dates from May 1998. Where is the mythical November 1998 draft supposedly available for review by the public?

Although the City's semi-covert actions may seem to be technically just inside the requirements of the law, we are concerned that the City is not only bent on a course that will deprive our client of its rights but will also work an injustice to the City as a whole. NJD is submitting a concept plan that meets all of the objectives of good planning - including clustering, establishment of local parks, provision of equestrian and hiking trails, retention of the equestrian center, and development of a rural character. The plan has virtually no visibility from the rest of the City, is serviced through and accessed from the Glendora side of the property and would have no negative impacts on the City of San Dimas. Obviously, this property could be a candidate recipient of transferred development rights -- but only if the development standards applied to this property allow clustering and other devices to create a thoughtfully planned neighborhood. As the City's own documentation admits, the NJD property is physically capable of taking more units than even currently shown on the City's existing plans. Yet, the actions of the City bespeak a determination to dramatically down zone the property without any reasonable factual basis for doing so.

NJD has a great deal of information about its property - information which would be useful to the City's own consultants. Neither the City nor NJD would be well served if the City continues on a path of non-cooperation. If the City's goal is good planning with a minimum impact, then our goals are the same. If the City's agenda is to cast in concrete a pre-determined goal of no feasible development, it will continue on the path followed thus far. We hope that we can work cooperatively in this process and request not only the public notice required by law but a genuine exploration of alternatives to further responsible development.

In the mean time, we have no option but to request that we be immediately provided with copies of any and all tapes of City Council meetings or study sessions whereat the land use planning for this area was discussed - whether as a formal agenda item or elsewhere during the meeting. We also request that all further discussion of these items occur only in connection with duly noticed agenda items. To the extent that NJD's property is discussed with other governmental entities, NJD requests the opportunity to be present such meetings. In any event, we request copies of any and all meeting notes and agendas for and resulting from such meetings to the extent that NJD's property is involved in that discussion.

The following pages contain our initial comments on the Initial Study. Please make this letter part of the record of proceeding on the City's Project.

Very truly yours,

Karen J. Lee

Karen J. Lee

Enclosure
cc: Robert Bein, William Frost & Associates
Attn. Collette L. Morse
Mr. Kim Scott

Comments on Initial Study

by NJD, Inc.

page 2-3: The incorporated and utilized document *Northern Foothills Development and Infrastructure Study* was still represented to be incomplete and in draft as of January 12, 1999, and the opportunity to review even a draft of document was denied to NJD, Inc. until January 12, 1999. Although we were at last provided with a copy of the LSA document, the copy provided is not the November 1998 draft referred to and incorporated within the Initial Study. As the date tracers at the bottom of each page of the document reveal, the document is current at its most recent sections as of June 3, 1998, with other sections being no more recent than April 1997. The essential chapter 5 on the Development Strategy for the Area dates from May 1998. Therefore, it is difficult (and perhaps impossible) to make meaningful comments on this dis-information.

page 8 paragraph C: The recommendation to change the land use designation of all privately-owned land currently designated Single Family Residential to Very Low Estate does not take into account the topography of the NJD property, the ability to cluster development thereon in order to maximize open space, and the facts that development of the this property would receive its water and sewer service through the City of Glendora, all traffic would enter and exit the property

through Glendora and virtually no part of the City of San Dimas would even see clustered development on this property. Additionally, such broad-brush down-zoning leave certain property owners with no economically viable use of their properties.

page 8 paragraph 2.3 - The objective is internally inconsistent in that developing homes on large lots requires heavy infrastructure that cuts through natural open space

page 11 paragraph 9 - This section fails to recognize that the NJD property is adjacent to the City of Glendora, has road access through other property owned by NJD to Glendora and is within the service districts served by Glendora.

page 22 4.2 - The findings regarding impacts on housing fail to discuss housing needs in the area. In fact, in the draft of the LSA document provided to NJD, units are assigned to the property owned by the Forest Service - units that obviously will never be built.

page 30 paragraph (f) - The concept plan provided by NJD allows for expansion of equestrian trails and an equestrian center. The low density would make provision of these amenities financially infeasible.

15.2 Service and Utility Correspondence

BONITA UNIFIED SCHOOL DISTRICT

115 West Allen Avenue
San Dimas, California 91773
(909) 599-6787 FAX (909) 592-8703

FAX COVER LETTER

DATE: 2-19-99

NUMBER OF PAGES: 6
(Including cover)

TO: Colette Morris

FROM: Donna Martin

COMPANY/DEPT: R Bein, W Frost & Assoc

DEPARTMENT: Business Svcs

FAX #: (949) 837-4122

PHONE #:

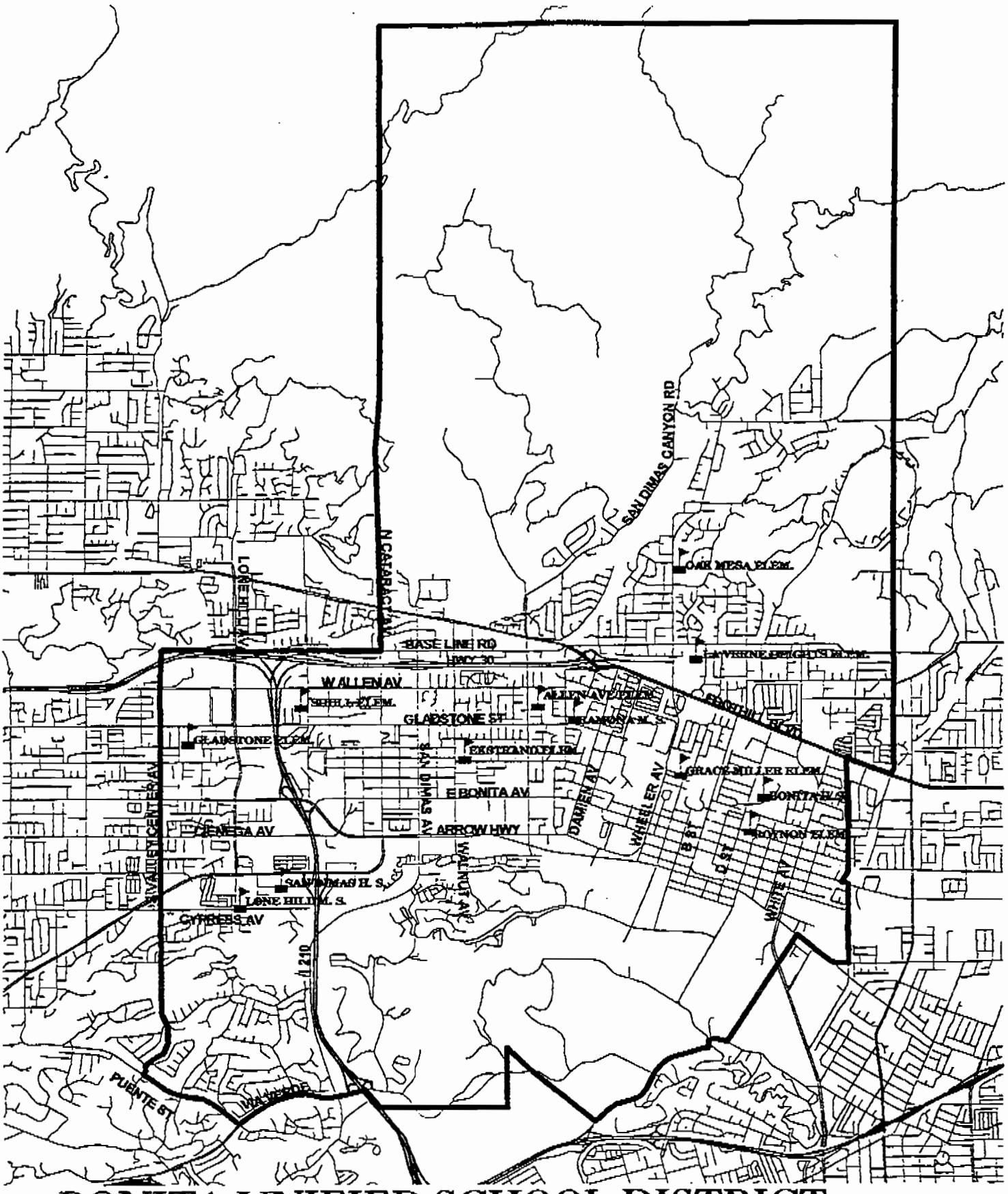
MESSAGE

Following are district maps + recent enrollment reports. Sites are at capacity now

Transportation concerns:
U turns are not possible for 40' buses
Need a way in + out of development
if gated community - buses
must be provided with access codes, etc.

IF YOU DID NOT RECEIVE ALL PAGES

PLEASE CALL (909) 599-6787 EXT. _____



BONITA UNIFIED SCHOOL DISTRICT

District Boundary

0.5 0 0.5 Miles

BONITA UNIFIED SCHOOL DISTRICT
ENROLLMENT REPORT

	1998-99										1997-98										
	10/2	10/30	11/27	12/25	1/22	2/19	3/19	4/16	5/14	6/11	9/26	10/24	11/21	12/19	1/16	2/13	3/13	4/10	5/8	6/5	6/11
BONITA HIGH SCHOOL																					
9th Grade	450	442	436	437	439						441	437	431	425	423	425	418	413	415	412	412
10th Grade	436	424	417	413	414						420	417	410	402	401	401	399	396	390	385	359
11th Grade	380	381	379	375	377						420	415	409	410	408	393	390	383	381	379	379
12th Grade	377	371	367	365	362						335	335	329	326	324	319	314	313	312	312	312
SDC	20	19	18	17	17						16	17	15	15	15	16	15	17	15	14	16
	1657	1637	1615	1607	1609	0	0	0	0		1632	1621	1594	1578	1571	1554	1536	1522	1513	1502	1477
SAN DIMAS HIGH SCHOOL																					
9th Grade	396	398	399	394	389						418	418	415	416	411	412	378	374	371	367	367
10th Grade	387	384	379	377	377						309	310	306	298	300	297	306	305	305	302	302
11th Grade	296	289	289	291	290						276	276	278	277	277	277	288	283	283	281	281
12th Grade	290	291	288	286	283						275	282	279	276	276	284	286	278	276	277	274
SDC/CH	21	19	19	19	18						25	17	18	18	18	18	18	18	19	18	18
	1390	1381	1374	1367	1357	0	0	0	0	0	1303	1305	1298	1285	1282	1288	1276	1258	1254	1245	1242
CHAPARRAL HIGH SCHOOL																					
9th Grade		1	1	1	1						2	2	2	2	2	1					
10th Grade	7	8	13	14	13						24	26	24	21	19	24	24	27	30	32	32
11th Grade	42	46	50	48	54						54	53	61	62	65	76	74	74	73	71	70
12th Grade	57	54	54	53	53						83	75	70	67	66	61	59	54	54	30	26
	106	109	118	116	121	0	0	0	0	0	163	156	157	152	152	161	157	155	157	133	128
VISTA SCHOOL																					
Independent Study & Pregnant Minor Programs																					
K-5	11	11	9	7	6																
6th Grade			2	1	1																
7th Grade	2	2	1	1	1																
8th Grade	1	2	2	2	1																
9th Grade				1	1						3	3	3	3	2	3	3	3	3	3	3
10th Grade	12	11	11	13	17						13	13	13	23	24	26	25	29	34	38	38
11th Grade	51	52	54	49	54						21	27	31	31	32	35	41	42	40	31	31
12th Grade	76	73	70	59	60						48	48	50	50	49	31	31	31	29	13	8
	153	151	149	133	139	0	0	0	0	0	85	91	97	107	107	95	100	105	106	85	80
Opportunity Program																					
7th Grade	2	3	4	4	4						1	2	3	3	4	6	6	4	3	3	3
8th Grade	4	3	3	4	7						6	5	3	3	3	4	4	5	6	6	6
9th Grade	6	6	7	10	8						9	8	9	10	9	6	8	10	9	9	9
	12	12	14	18	19	0	0	0	0	0	16	15	15	16	16	16	18	19	18	20	20
Opportunity Independent Study Program																					
6th Grade																		1	1	1	1
7th Grade	1	1	1	1	2													3	4	5	5
8th Grade	1	2	2	2	3						2	4	4	4	4	4	2	6	6	6	7
9th Grade	1	2	1	2	3						2	3	3	4	5	5	4	6	10	12	11
	3	5	4	5	8	0	0	0	0	0	4	7	7	8	9	9	6	16	21	24	24

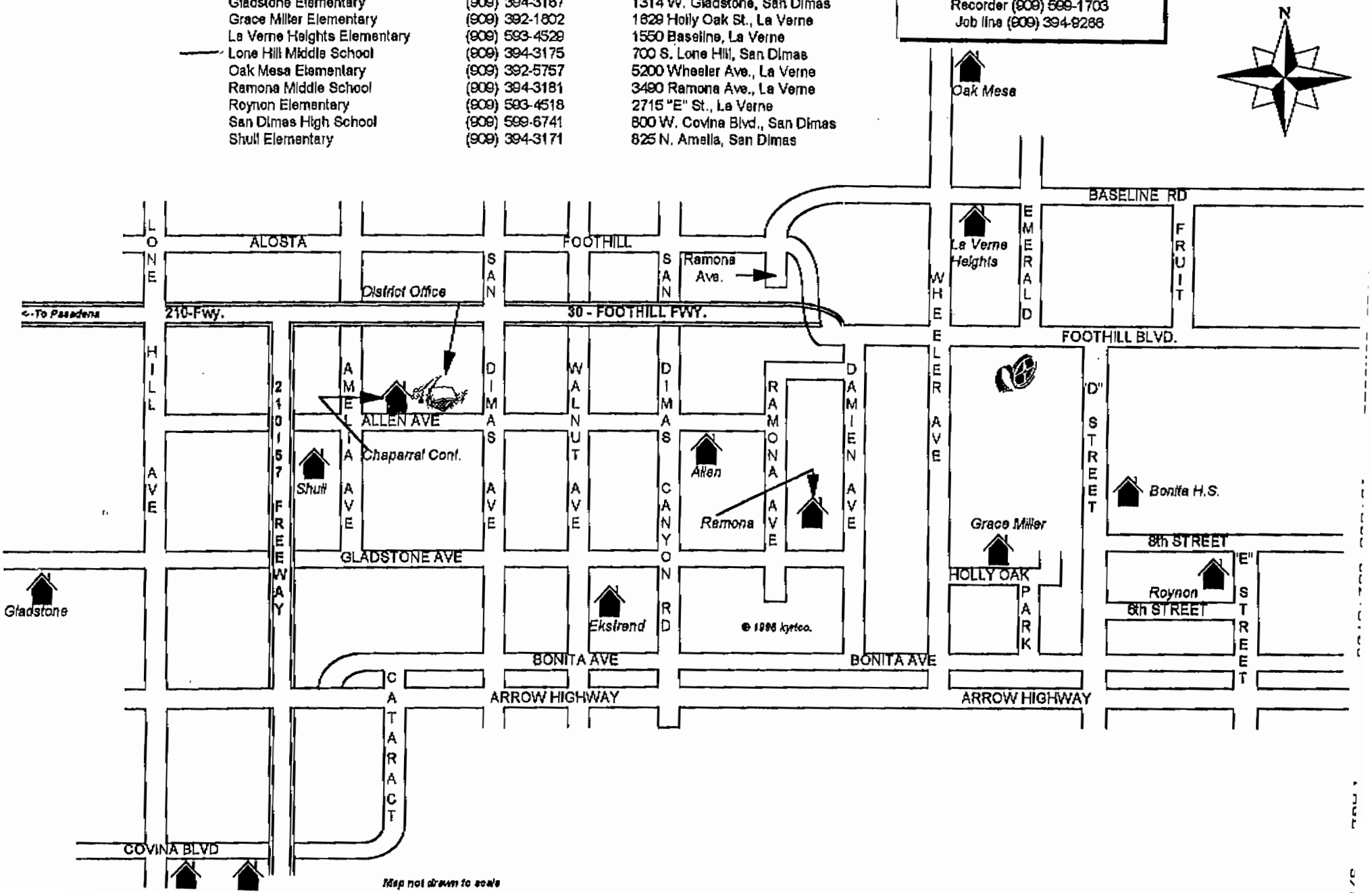
BUNITA UNIFIED SCHOOLS DEPT FROM:(909)971-8525 09/18/98 09:01

BONITA UNIFIED SCHOOL DISTRICT
ENROLLMENT REPORT
PAGE 2

	1996-98										1997-98										
	10/2	10/30	11/27	12/25	1/22	2/19	3/19	4/16	5/14	6/11	9/26	10/24	11/21	12/19	1/16	2/13	3/13	4/10	5/8	6/5	6/11
LONE HILL MIDDLE SCHOOL																					
6th Grade	306	310	307	313	317						313	317	318	318	318	320	320	318	315	313	312
7th Grade	329	330	330	325	326						349	350	353	349	350	357	357	347	346	348	346
8th Grade	346	346	353	356	355						353	354	351	349	352	354	353	354	354	353	353
CH	16	15	15	15	16						16	14	13	14	13	14	14	15	15	15	15
SDC	17	16	15	15	16						13	13	13	12	11	10	11	11	11	11	11
	1014	1017	1020	1024	1030	0	0	0	0	0	1044	1048	1048	1042	1042	1055	1055	1043	1041	1040	1037
RAMONA MIDDLE SCHOOL																					
6th Grade	457	459	465	465	464						427	426	429	428	427	430	429	427	426	429	429
7th Grade	439	443	444	445	441						437	437	433	430	426	431	432	432	433	430	430
8th Grade	440	441	442	441	439						447	446	448	446	446	447	447	442	442	436	435
SDC	19	16	16	14	14						29	28	26	28	25	24	24	25	25	25	25
	1355	1359	1367	1365	1358	0	0	0	0	0	1340	1337	1336	1330	1324	1332	1332	1326	1328	1320	1319
TOTALS (not including special programs)																					
GRADES K-5	4372	4359	4356	4359	4369						4391	4395	4404	4400	4412	4403	4391	4392	4397	4390	4385
GRADES 6-8	2317	2329	2341	2345	2342						2326	2330	2332	2320	2317	2339	2336	2318	2319	2309	2305
GRADES 9-12	3112	3089	3072	3054	3052						3057	3047	3014	2979	2973	2971	2938	2900	2891	2848	2838
Special Programs																					
IND. STUDY	144	146	142	127	139						67	73	79	89	88	78	84	91	92	78	73
PRG. MINOR	12	10	11	11	8						19	18	18	18	19	17	15	14	13	12	8
OPPORTUNITY	12	12	14	16	19						16	15	15	16	16	16	24	19	18	20	20
SDC/CH	196	193	190	194	196						186	190	187	168	166	167	173	176	176	175	177
Grand Totals	10167	10136	10126	10108	10125	0	0	0	0	0	10082	10088	10049	9990	9991	9991	9963	9910	9906	9832	9806

Allen Avenue Elementary	(909) 394-3159	740 Allen Ave., San Dimas
Bonita High School	(909) 593-4501	3102 "D" St., La Verne
Chaparral Continutation	(909) 394-2116	121 W. Allen Ave., San Dimas
Ekstrand Elementary	(909) 394-3163	400 Walnut Ave., San Dimas
Gladstone Elementary	(909) 394-3167	1314 W. Gladstone, San Dimas
Grace Miller Elementary	(909) 392-1802	1629 Holly Oak St., La Verne
La Verne Heights Elementary	(909) 593-4529	1550 Baseline, La Verne
Lone Hill Middle School	(909) 394-3175	700 S. Lone Hill, San Dimas
Oak Mesa Elementary	(909) 392-5757	5200 Wheeler Ave., La Verne
Ramona Middle School	(909) 394-3181	3490 Ramona Ave., La Verne
Roynon Elementary	(909) 593-4518	2715 "E" St., La Verne
San Dimas High School	(909) 599-6741	800 W. Covina Blvd., San Dimas
Shull Elementary	(909) 394-3171	825 N. Amelia, San Dimas

Bonita Unified School District
115 W. Allen Avenue
San Dimas, California 91773
(909) 599-6787
Recorder (909) 599-1703
Job line (909) 394-9266



BONITA UNIFIED SCHOOL DISTRICT

115 West Allen Avenue San Dimas, California 91773 (909) 599-6787 Fax (909) 592-8703

Superintendent
John E. Rieckewald, Ph.D.

Assistant Superintendents
Lorna Horton, Ph.D. - Instruction
Lonnie L. McConnell, Ed.D. – HRD
Joe Gillentine – Pupil Serv. / Spec. Ed.
Michele McClowry, CPA - Business

Board of Education
Diana Au
Robin Carder
Bruce Colburn
Ed Jones
Robert Olander II

January 25, 1999

Mr. Lawrence L. Stevens, AICP
Planning Director
City of San Dimas
245 E. Bonita Avenue
San Dimas, CA 91773

Re: Northern Foothills Implementation Program

Dear Mr. Stevens:

After a quick review of the recent Notice of Preparation of a Draft Environmental Impact Report for the project study area of 3,000 acres just north of Foothill, my only concern is the impact that approximately 63 additional students may have upon local elementary schools in the Bonita Unified School District.

On page 35 of this report it states that the impact to the schools would be less than significant. However, at this time the enrollment in most of our classrooms has reached the maximum number of students allowed by law, especially in kindergarten through third grade due to the class size reduction restriction of 20 students per teacher.

We would greatly appreciate your cooperation in expressing our concern as it relates to this project.

Sincerely,

Michele McClowry
Assistant Superintendent
Business Services

MM:ddm

Cc: Dr. John E. Rieckewald

The Bonita Unified School District is an equal opportunity employer and does not discriminate on the basis of any class protected by law.

SOUTHERN CALIFORNIA
EDISON
An EDISON INTERNATIONAL Company

February 2, 1999

Collette L. Morse, AICP
Robert Bein, William Frost, & Associates
14725 Alton Parkway
Irvine, CA 92618-2069

Subject: E.I.R.

Dear Ms. Morse,

We have recently received notice of your intent to proceed with the subject E.I.R. It is a privilege to assist you in providing information you requested. The primary voltage is 12KV for the area in question. Attached, please find the inventory maps showing the locations of Edison facilities in the area.

If I can be of further assistance, please contact me at 909-592-3712.

Sincerely,

Ron Gonzalez/cw

Ron Gonzalez
Customer Service Planner

RG/cw

800 W. Cienega Ave.
San Dimas, CA 91773

SOUTHERN CALIFORNIA
EDISON
An *EDISON INTERNATIONAL* Company

February 2, 1999

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FEB - 3 1999
ROBERT BEIN, WM FROST

Collette L. Morse, AICP
Robert Bein, William Frost, & Associates
14725 Alton Parkway
Irvine, CA 92618-2069

Subject: **Northern Foothills Implementation Program**

We have been requested to advise you that the Southern California Edison Company stands ready to install/serve electrical distribution facilities known as Northern Foothills Implementation Program, County of Los Angeles, State of California, in accordance with the then-applicable tariff schedules which are the effective rates and rules of the Southern California Edison Company on file with and approved by the California Public Utilities Commission and subject to the receipt of such permits or other authorizations from public agencies as may be required for such installation. Also, rules hereinafter referred to in this letter include such changes, modifications, and amendments which the Public Utilities Commission may from time to time direct in the exercise of its jurisdiction.

Should a shortage of energy and/or generating capacity ever occur, the Utility will apportion its available supply of electricity among its customers as set forth in Rule No. 14, Shortage of Supply and Interruption of Delivery.

Requirements for advances from the developer for underground lines to reach the subdivision are set forth in Rule No. 15. An underground service lateral from the installed underground distribution system within the development to individual parcels will be in accordance with Rule No. 16.

Should an individual applicant require service to his parcel prior to the installation of an underground distribution system to and within development, as may be installed at the expense of a developer, or within a development for which the developer has undertaken no obligation for the installation of an underground distribution system, an advance will be required from the individual as set forth in Rule No. 15.

Should you have any questions, please do not hesitate to call me at (909) 592-3712.

Sincerely,

Ron Gonzalez/cw

RON GONZALEZ
Customer Service Planner

RG/cw

800 W. Cienega Ave.
San Dimas, CA 91773

The Gas Company®

RECEIVED

FEB - 1 1999

ROBERT BEIN, WM FROST

January 28, 1999

Robert Bein, William Frost & Associates
P. O. Box 57057
Irvine, CA 92619-7057

Attn: Collette L. Morse, AICP

Re: Program Environmental Impact Report for the Northern Foothills Implementation Program, City of San Dimas
Gas Co. Reference No. 99-018-PZ

Southern California Gas Company
1981 Lugonia Avenue
Redlands, CA
Mailing Address:
Box 3003
Redlands, CA
92373-0306

Thank you for the opportunity to respond to the above-referenced item. Please note that Southern California Gas Company has facilities in the area where the above named project is proposed. Gas service to the project could be provided without any significant impact on the environment. The service would be in accordance with the Company's policies and extension rules on file with the California Public Utilities Commission at the time contractual arrangements are made.

You should be aware that this letter is not to be interpreted as a contractual commitment to serve the proposed project, but only as an informational service. The availability of natural gas service, as set forth in this letter, is based upon present conditions of gas supply and regulatory policies. As a public utility, The Southern California Gas Company is under the jurisdiction of the California Public Utilities Commission. We can also be affected by actions of federal regulatory agencies. Should these agencies take any action which affects gas supply or the conditions under which service is available, gas service will be provided in accordance with revised conditions.

Typical demand use for:

a. Residential (System Area Average/Use Per Meter) Yearly

Single Family	799 therms/year dwelling unit
Multi-Family 4 or less units	482 therms/year dwelling unit
Multi-Family 5 or more units	483 therms/year dwelling unit

These averages are based on total gas consumption in residential units served by Southern California Gas Company, and it should not be implied that any particular home, apartment or tract of homes will use these amounts of energy.

b. Commercial

Due to the fact that construction varies so widely (a glass building vs. a heavily insulated building) and there is such a wide variation in types of materials and equipment used, a typical demand figure is not available for this type of construction. Calculations would need to be made after the building has been designed.

We have Demand Side Management programs available to commercial/industrial customers to provide assistance in selecting the most effective applications of energy conservation techniques for a particular project. If you desire further information on any of our energy conservation programs, please contact our Commercial/Industrial Support Center at 1-800-GAS-2000.

Sincerely,

Ronald E. Reed
Technical Supervisor

GTE Network Services

1400 E. Phillips Blvd.
Pomona, CA 91766-5432
CAA21NC

RECEIVED
FEB - 3 1999
ROBERT BEIN, WM FROST

February 1, 1999

Robert Bein, William Frost & Associates
14725 Alton Parkway
Irvine, CA 92618-2069

Attention: Collette Morse

Re: EIR for the Northern Foothills Implementation Program

Dear Ms. Morse,

GTE California has received your environmental impact questionnaire for the referenced project.

GTE has existing aerial and underground facilities within the referenced area. The existing facilities may not have the capacity to accommodate growth. GTE will provide adequate facilities to support future growth. It will be the developer's responsibility to provide a path for future facilities, i.e. trench and/or telephone conduit, manholes, etc. The cost of any required undergrounding of existing aerial telephone facilities will also be paid by the developer.

If you have any questions, please call Lauretta Balderston at 909/469-6343.

Very truly yours,

Michael P. Riley
Section Manager - Access Design

MR:dfa

SOUTHERN CALIFORNIA WATER COMPANY

FOOTHILL DISTRICT
401 S. SAN DIMAS CANYON ROAD
SAN DIMAS, CALIFORNIA 91773
(909) 592-4271 • FAX (909) 592-8690

February 1, 1999

Ms. Collette L. Morse, AICP, Project Manager
Robert Bein, William Frost & Associates
14725 Alton Parkway
Irvine, CA 92618-2069

Reference: **Program Environmental Impact Report for the Northern Foothills Implementation Program - San Dimas**
TRANSMITTED VIA FAX

Dear Ms. Morse:

In conformance with your request for information concerning the referenced development we offer the following information:

1. What is the current and projected water capacity for the district; annual use in acre-ft., daily flow in cfs and peak demand in MGD?

Water demand for the San Dimas System in 1998 was approximately 12,937 acre-feet. Average daily demand is approximately 11.5 million gallons per day. Maximum day demand is approximately 22.3 million gallons per day.

2. What is the projected water demand for the project based on the information provided (i.e., generation factors for residential (all types), neighborhood commercial, general commercial, office and mixed development uses)?

Water demand for the project area will depend upon the buildable area and the area to be landscaped but will be approximately 1 acre-foot (326,829 gallons) per service per year.

3. Please indicate any existing facilities on/near the project site.

SCW San Dimas has the following facilities in or near the project area:

1) A pipeline in Terrebonne Avenue from San Dimas Canyon Road to the end of Terrebone, and pipelines and appurtenances in or bordering the project area to the east, south and southwest.

2) Reservoirs and wells located at the following addresses:

Well Name	Street Address	Reservoir Name	Street Address	Reservoir Capacity
Artesia #2	713 E. Foothill Blvd. San Dimas	Baseline	709 E. Baseline Rd., San Dimas	40,000 gal
Artesia #3	1127 N San Dimas Cyn Rd., San Dimas	Eaglecliff	1947 Fernridge Drive, San Dimas	1,500,000 gal
Baseline#3	709 E. Baseline Rd., San Dimas	Highway	715 E. Foothill Blvd., San Dimas	214,000 gal.
Baseline#4	636 E. Baseline Rd., San Dimas	Terrebonne	1532 N. Terrebonne Av. San Dimas	257,000 gal
City Well	2180 N San Dimas Cyn Rd., San Dimas			
Highway#1	713 E. Foothill, San Dimas			
Malone # 1	2085 N San Dimas Cyn Rd., San Dimas			
Malone # 2	2083 N San Dimas Cyn Rd., San Dimas			

4. What is the current rate of local groundwater extraction and existing groundwater quality?

The wells listed above accounted for approximately 4855.6 acre-feet of water in 1998.

Will the proposed project have an impact on groundwater quality?

No impact is anticipated if sanitary seweage collection systems are installed. Degradation of groundwater could result if septic tank disposal systems are permitted in the project area.

5. Will be proposal require new facilities were additions to existing facilities? If so, please list/summarize any changes.

The following new facilities will be required:

Waterlines in the streets; waterline appurtenances including hydrants and house services; pumping facilities; pressure regulating facilities; and a terminal reservoir at the high point of the project for fire protection and reliability. Accurate and detailed development plans will be necessary to determine the project needs with specificity.

6. What is the possibility of water lines being extended into the more remote areas of the project area to service new residential uses?

Extending waterlines to the remote areas is possible but will be expensive. The expense will depend upon the length and size of the waterlines to be extended, and the flows and appurtenances required by local agencies concerned with fire service. The elevations of the areas to be served may dictate the installation of local facilities for pumping and/or pressure regulation.

7. Do you have any required assessment fees or other required or recommended mitigation measures for project impacts?

At this time the San Dimas system does not assess impact fees. Facilities required for service to the areas to be developed will be borne by the developer under either refundable or non-refundable (depending upon improvement type) agreements with Southern California Water Company.

8. According to SB 901 requires a "water supply assessment" be provided by the affected water agency for incorporation into the EIR? As such, please identify whether the demand created by the proposed project has been considered in your agency's most recently adopted water management plan. The assessment should indicate whether the water demand associated with the proposed project can be served by your agency's supplies available during "normal, single-dry, and multiple-dry water years", in addition to the demand for water from existing and other planned uses.

Southern California Water Company- San Dimas has sufficient water supplies to serve development within the project area during normal, single-dry, and multiple-dry water years.

9. Is there any other relevant information regarding potential significant effects of the project?

No other information.

If we may provide additional information at this time, please feel free to contact our Foothill District Office.

Very truly yours,

Chet F. Anderson, P.E.
District Engineer

cc: LeRoy Barker; Bill McDonald
File: 1600.00.326.2 & 2100.07

COUNTY OF LOS ANGELES

FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294

(323) 890-4330

RECEIVED

FEB 17 1999

ROBERT BEIN, WM FROST

P. MICHAEL FREEMAN
FIRE CHIEF
FORESTER & FIRE WARDEN

February 16, 1999

Collette L. Morse, AICP
Project Manager
Robert Bein, William Frost & Associates
14725 Alton Parkway
Irvine, CA 92618-2069

Dear Ms. Morse:

SUBJECT: ENVIRONMENTAL IMPACT REPORT – (CITY OF SAN DIMAS) (DEVELOPER'S) PROGRAM EIR FOR THE NORTHERN FOOTHILLS IMPLEMENTATION PROGRAM, GPA & ZC – (EIR #600/1999)

The request for information for the Program Environmental Impact Report for the Northern Foothills Implementation Program has been reviewed by the Planning, Subdivision, and Forestry Divisions of the County Los Angeles Fire Department. The following are their comments:

The subject development will receive fire protection and paramedic service from the County of Los Angeles Fire Department. Fire Station #86, located at 520 South Amelia Avenue, Glendora, CA 91740-4027, is the jurisdictional station for this property. It has a three-person engine company and a four-person ladder truck company.

The second closest station to the project area is Station #64, located at 164 Walnut, San Dimas, CA 19773-2620. It has two, three-person engine companies and a two-person paramedic squad.

Fire protection serving the area appears to be adequate for the existing development/land use; however, each additional development creates greater demands on existing resources. Consequently, the impact that future developments in this project will have on the adequacy of the Fire Department's level of service remains uncertain.

Size, complexity, and projected use of the proposed development may necessitate multiple ingress/egress access for the circulation of traffic, and emergency response issues. This Department may condition future development to provide a second, and in some cases, a third means of access due to the number of units and street widths in existing development.

The development of this project must comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows, and hydrants.

Single-family detached homes shall require a fire flow of 1,250 gallons per minute at 20 pounds per square inch residual pressure for a two-hour duration. Final fire flows will be based on the size of buildings, their relationship to other structures, property lines, and types of construction used.

This property is located within the area described by the Forester and Fire Warden as a Fire Zone 4, or Very High Fire Hazard Severity Zone (VHFHSZ). All applicable code and ordinance requirements for construction, access, water mains, fire hydrants, fire flows and brush clearance, must be met.

Specific fire and life safety requirements for the construction phase will be addressed at the plan check phase. Fire Department requirements for access, fire flows, and hydrants are addressed at the Los Angeles County Subdivision Committee Meeting, when approval for tentative subdivision maps are considered.

It is strongly suggested that fire sprinkler systems be installed in all commercial and residential buildings. This will reduce potential fire and life losses. Systems are now technically and economically feasible for residential use.

SINGLE-FAMILY DWELLING UNITS:

Fire Department access shall be provided up to 150 feet of all portions of the exterior walls of the first story of any single unit. If exceeding 150 feet, provide 20 feet paved width "Private Driveway/Firelane" to within 150 feet of all portions of exterior walls of unit.

Streets or driveways within the development shall be provided with the following widths:

1. Provide 36 feet width on all collector streets and those streets where parking is allowed on both sides.

2. Provide 34 feet width on cul-de-sacs up to 700 feet. This allows parking on both sides of the street.

3. Provide 36 feet width on cul-de-sacs 701 to 1,000 feet. This allows parking on both sides of street.

Should any questions regarding design, construction, and/or water and access, please contact Captain Jeff Vrooman at (323) 890-4243.

The statutory responsibilities of the County of Los Angeles Fire Department include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Fire Zone 4 or Very High Fire Hazard Severity Zones, archeological and cultural resources. Potential impacts in these areas should be addressed in the Draft Environmental Impact Report.

Oak tree resources may be included within the project area. The applicant should incorporate innovative design to reduce or eliminate the impact to the Oak resources. Loss of Oak tree habitat should be mitigated for pursuant to the provisions of the City's Oak Tree Ordinance. The flora and fauna analysis should address any rare, endangered and/or sensitive species that exist on the project site. The preservation, relocation and/or construction impacting any of these species should be fully explained in the Environmental Impact Report. An archaeological and historical records check and field survey should be conducted to determine potential impacts to these resources.

As required by Section 1117.2.1 of the County Fire Code a fuel modification plan, a landscape plan and an irrigation plan shall be submitted with any subdivision of land or prior to any new construction, remodeling, modification or reconstruction where such activities increase the square footage of the existing structure by at least 50% within a 12-month period and where said structure or subdivision is located within an area designated as a Very High Fire Hazard Severity Zone or within Fire Zone 4. Said plans shall be reviewed and approved by the Forestry Division of the County of Los Angeles Fire Department for reasonable fire safety. Specific questions regarding fuel modification requirements should be directed to the Fuel Modification Unit at (909) 620-8287.

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

Michael A. Wilkinson

MICHAEL A. WILKINSON, CHIEF, FORESTRY DIVISION
PREVENTION BUREAU

MAW:lc

County of Los Angeles
Sheriff's Department Headquarters
4700 Ramona Boulevard
Monterey Park, California 91754 - 2169
(909) 599-1261

LEROY D. BACA, SHERIFF

January 15, 1999

RECEIVED

JAN 2 0 1999

ROBERT BEIN, WM FROST

Collette L. Morse, AICP
Project Manager
14725 Alton Parkway
Irvine, CA 92618-2069

Dear Ms Morse:

This letter is in response to your request concerning a Program Environment Impact Report you are presently preparing for the Northern Foothills Implementation Program in the City of San Dimas.

Presently, the Los Angeles County Sheriff's Department, San Dimas Station, provides law enforcement services to the City of San Dimas under a service contract. San Dimas Station is located at 122 N. San Dimas Ave., San Dimas, and is approximately 3 miles S/W of the Project Area as outlined in your letter. San Dimas Station also provides law enforcement service's to the unincorporated county areas north of the San Bernardino Freeway (I/S10), including Covina, Azusa, Glendora, La Verne, and Claremont. Additionally, we provide service to the San Gabriel Mountains and the Angeles National Forest area. We service an area of approximately 190 square miles, and a population of approximately 84,000.

We field three patrol shifts in the City of San Dimas, which includes twenty-three sworn peace officer's assigned to work patrol within the city limits. We also have two civilian community service officers' who handle report calls and parking enforcement. Presently, routine police response times average fifteen minutes, and emergency response times are less than four minutes in the City of San Dimas.

As you are aware, there is only one public ingress/egress on Terrebonne Ave and the surrounding residential neighborhoods. I view this with concern, as it presents a potential problem with a large scale evacuation of the area in the event this becomes necessary. Recent hillside fires and a temporary road closure by Fire Department equipment, illustrated these concerns. Although a locked exit gate can be opened and residents may exit via the Sycamore Flats Motorway to Sycamore Canyon Road, this could present additional

problems with heavy traffic on this roadway. Sycamore Canyon Road is a closed end roadway, and is the primary ingress/egress for several residents and a Los Angeles County Probation Camp. Past experiences have demonstrated that this roadway is also partially blocked by Fire Department and emergency vehicles in the event of a large brush fire, and vehicles exiting the Terrebonne tract via this emergency exit will exacerbate this situation.

Although it is projected that the proposed addition in residential dwellings will increase the number of law enforcement services required, no significant impact is anticipated that would be insurmountable at providing an acceptable level of law enforcement services to the project area.

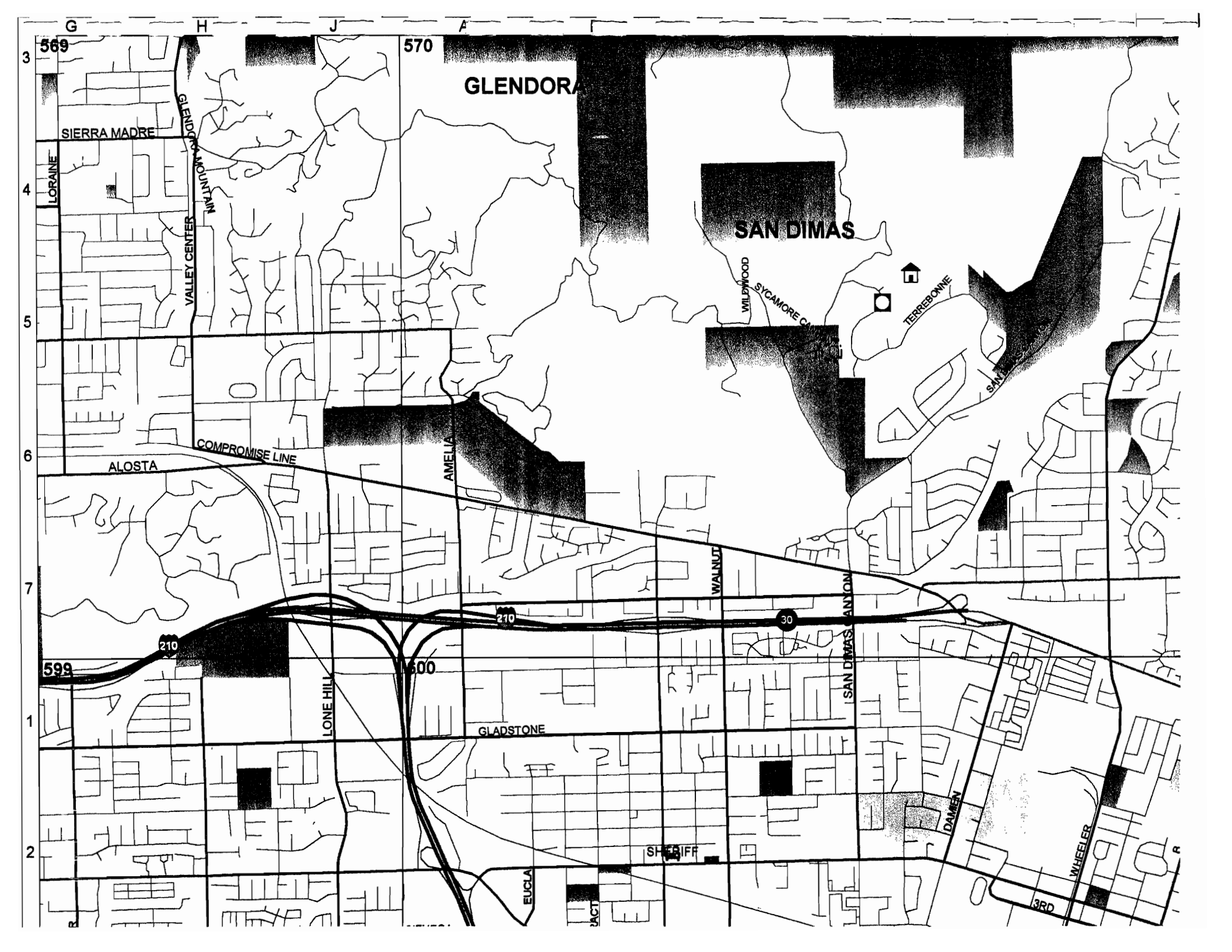
If additional information or clarification is needed, please contact Sergeant Larry Wineinger at San Dimas Station (909-971-2401).

Sincerely,

LEROY D. BACA, SHERIFF

Russ Collins

Russ Collins, Lieutenant
San Dimas Local Station Commander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COUNTY OF LOS ANGELES ▪ DEPARTMENT OF HEALTH SERVICES
PUBLIC HEALTH PROGRAMS AND SERVICES
ENVIRONMENTAL HEALTH
BUREAU OF ENVIRONMENTAL PROTECTION
2525 Corporate Pl. Rm. 150, Monterey Park, CA 91754-7631 ▪ (213)881-4011

January 29, 1999

RECEIVED
FEB 11 1999
ROBERT BEIN, WM FROST

Collette L. Morse, AICP
Robert Bein, William Frost & Associates
P.O. Box 57057
Irvine, California 92619-7057

Re: PROGRAM ENVIRONMENTAL IMPACT REPORT - NORTHERN FOOTHILLS IMPLEMENTATION PROGRAM, CITY OF SAN DIMAS

Dear Ms. Morse:

This is in response to your January 14, 1999 request for information regarding county standards related to water wells and private sewers/septic systems as they relate to the Northern Foothills Implementation Program in the City of San Dimas.

Generally, this Department discourages the use of on-site sewage disposal systems and private water supplies. The use of on-site sewage systems or private water wells is inconsistent with sound public health practices. Given the above, we submit the following comments to your questions:

1. **What are the County's standards related to the installation of private water wells?**

   Title 11 of the Los Angeles County Code (adopted by the City of San Dimas) and the California Water Code require that a permit be obtained before a water well is drilled. As the enforcement agency, an application must be submitted to this Department for the permit(s). The standard for the construction of water wells is set forth in the California Department of Water Resources' Bulletin 74. All water wells must be drilled by person who possesses an active C-57 contractor's license.

   Before applying for a water well permit, the applicant should be able to show "rights" to said ground water. Most of the basin has been adjudicated and the Upper San Gabriel Water Master must be consulted.

   Some groundwater along the foothills of the San Gabriel Mountains contain concentrations of fluorides and/or nitrates exceeding safe drinking water standards.

2. **What are the County's standards related to the installation of private sewers, particularly septic systems.**

If on-site sewage disposal is to be proposed for any given subdivision, the applicant must show that it is feasible to construct said systems, meeting the requirements of the Uniform Plumbing Code, on each lot before tentative map approval.

Before a building permit can be issued, this Department must review plans for each lot to make sure the proposed system meets the requirements of the Uniform Plumbing Code as adopted by the City of San Dimas and approve said plans for each on-site sewage disposal system.

Applicant must also consult with the California Regional Water Quality Control Board to determine the need to obtain waste discharge requirements for the project.

3. **Is soil testing required prior to the installation of either a private water well or septic sewer system?**

Soil testing and applicable geological reports will be required prior to the approval of any on-site sewage disposal system. Geology reports may be required before a drilling permit is issued.

4. **Please provide any additional information pertinent to private water wells or sewer systems, including any additional County requirements not noted in the responses to Questions 1 and 2.**

No further comments at this time.

If you have any questions or need additional information, please let me know.

Very truly yours,

Jack Petralia, Director
Bureau of Environmental Protection

j:northsandimas

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100

HARRY W. STONE, Director

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

RECEIVED
JAN 29 1999
ROBERT BEIN WM FROST

January 26, 1999

IN REPLY PLEASE
REFER TO FILE: W-9

Ms. Collete L. Morse, AICP
Robert Bein, William & Frost Associates
14725 Alton Parkway
Irvine, CA 92618-2069

Dear Ms. Morse:

REQUEST FOR COMMENTS
PROGRAM ENVIRONMENTAL IMPACT REPORT (EIR) FOR
NORTHERN FOOTHILLS
CITY OF SAN DIMAS

As requested, we have reviewed the Program EIR for the proposed project and offer the following answers to your questionnaire.

1. The City of San Dimas owns, and the Los Angeles County Department of Public Works Consolidated Sewer Maintenance District (CSMD) maintains, the local sanitary sewers within the project area. Maintenance services are provided by the CSMD's East Yard, located at 2849 S. Myrtle Avenue in Irwindale. We have enclosed a copy of our Sewer Maintenance Index Map Nos. 2384, 2385, 2427, and 2428 showing the location of the existing local sewer lines maintained by this Division. As-built sewer plans showing the size and depth of these lines can be obtained from the City of San Dimas.

   The trunk line and treatment plant affected by the proposed project are owned and operated by the County Sanitation Districts of Los Angeles County.

2. The applicable wastewater generation rates for residential development can be found in Los Angeles County Code Title 20, Division 2 and 3. See enclosures.

3. Please contact the City of San Dimas for the information regarding the possibility of sewer lines being extended into the more remote areas of the project area.

4. The proposed project is subject to annexation to the CSMD for the collection of annual sewer service charges to operate and maintain sewer facilities.

5. Implementation of the proposed project will create a significant increase in service demand. This should, however, not significantly impact overall operation of the CSMD.

If you have any questions, please contact Mr. Hu Yi at (626) 458-7174.

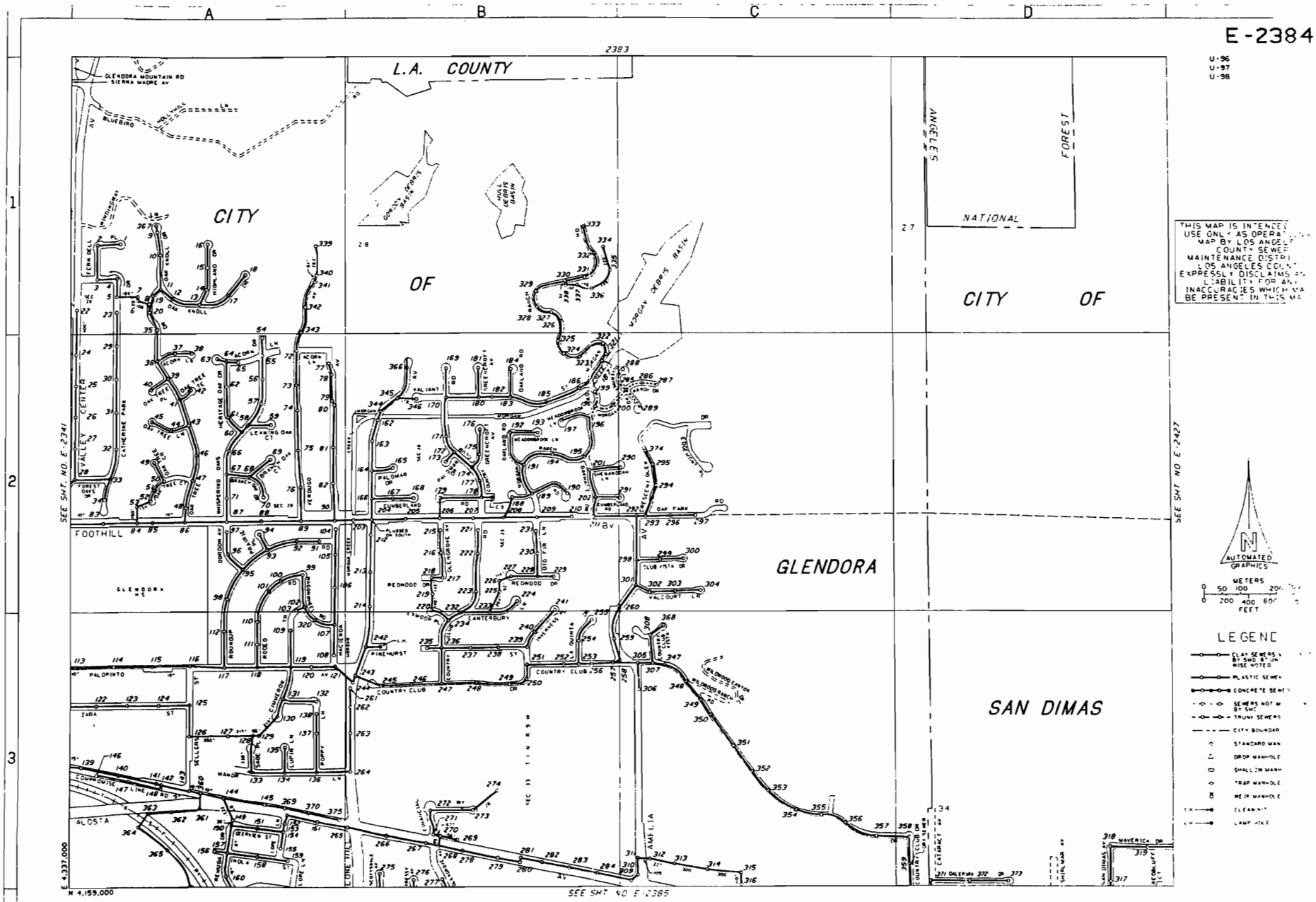
Very truly yours,

HARRY W. STONE
Director of Public Works

for DEAN D. EFSTATHIOU
Assistant Deputy Director
Waterworks and Sewer Maintenance Division

HY:tm
SM7762

Enc.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FOOTHILL
VALLEY CENTER
CATHERINE PARK
GLENDORA HS
PALOMINO
ZARA
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COMMONWEALTH
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TRAP MANHOLE
WEIR MANHOLE
CLEANOUT
LAMP HOLE

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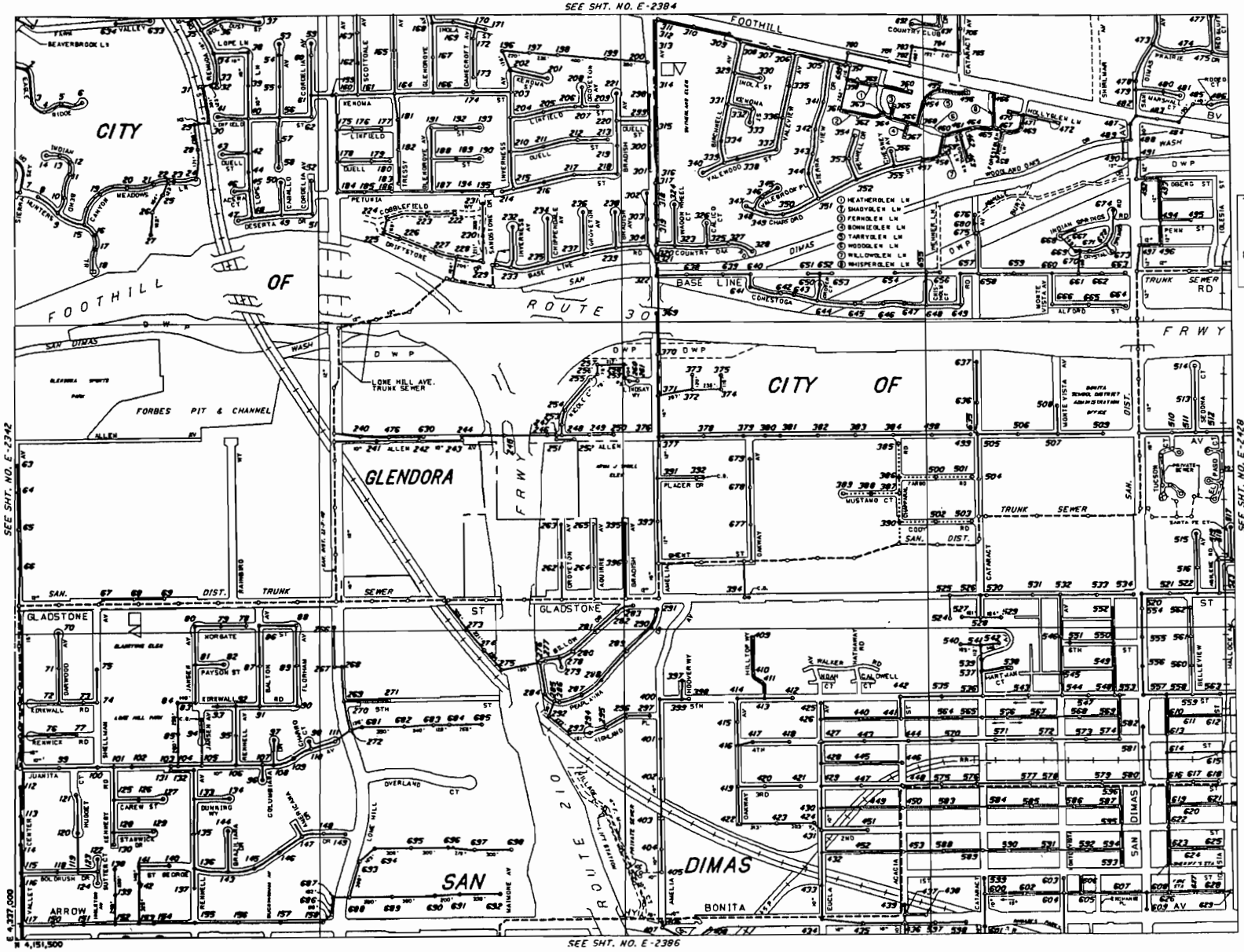

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THIS MAP IS INTENDED FOR USE ONLY AS OPERATIONAL MAP BY LOS ANGELES COUNTY SEWER MAINTENANCE DISTRICTS. LOS ANGELES COUNTY EXPRESSLY DISCLAIMS ANY LIABILITY FOR ANY INACCURACIES WHICH MAY BE PRESENT IN THIS MAP.

AUTOMATED GRAPHICS

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- CONCRETE SEWERS
- SEWERS NOT MAINTAINED BY SMD
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- DROP MANHOLE
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- WEIR MANHOLE
- CLEANOUT

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DATA BASE REV
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SEE SHT. NO. E-2384
SEE SHT. NO. E-2470
SEE SHT. NO. E-2428

THIS MAP IS INTENDED FOR USE ONLY AS OPERATIONS MAP BY LOS ANGELES COUNTY SEWER MAINTENANCE DISTRICTS. LOS ANGELES COUNTY EXPRESSLY DISCLAIMS ANY LIABILITY FOR ANY INACCURACIES WHICH MAY BE PRESENT IN THIS MAP

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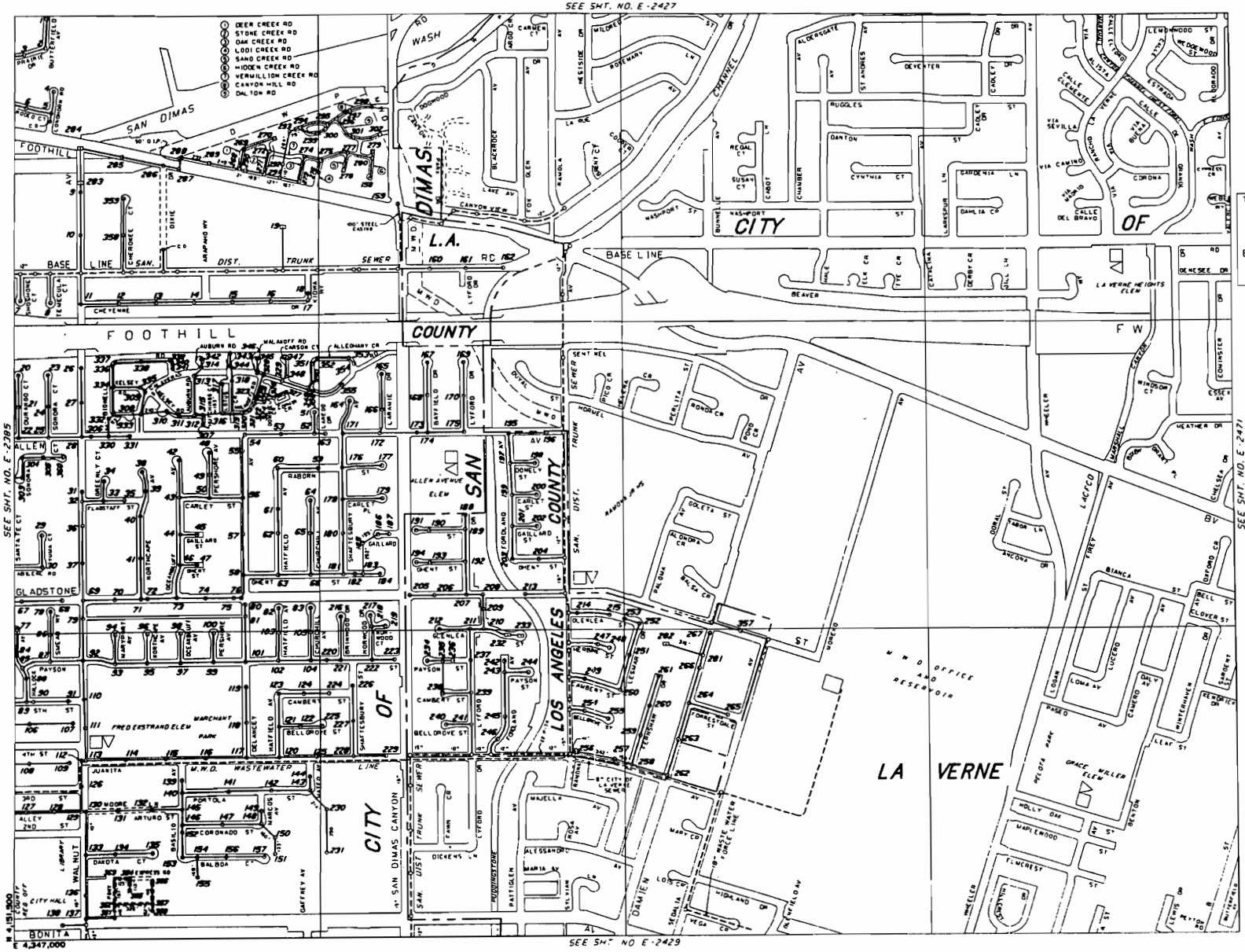

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THIS MAP IS INTENDED FOR USE ONLY AS OPERATIONS MAP BY LOS ANGELES COUNTY SEWER MAINTENANCE DISTRICTS. LOS ANGELES COUNTY EXPRESSLY DISCLAIMS ANY LIABILITY FOR ANY INACCURACIES WHICH MAY BE PRESENT IN THIS MAP.

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MAP REV
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DATA BASE REV
07-17-89

CONSOLIDATED S.M.D.

E-2428

E. Resubmission of abandoned and expired plans shall be subject to new plan check fees as specified in Section 20.32.230. (Ord. 11716 § 26, 1978: Ord. 10020 § 3 (part), 1970: Ord. 8690 § 10 (part), 1964: Ord. 6130 Part 5 Ch. 6 § 5605, 1952.)

20.32.430 Sewer easement requirements. A. A person desiring to construct a sewer in an easement under the provisions of this Division 2 shall present to the county engineer a request for processing, sufficient information to enable the preparation of a written description, and the fee specified in Section 20.32.240.

B. The location and dimensions of sanitary sewer easements shall be sufficient to provide present and future sewer service to abutting areas and adequate access for maintenance as determined by the county engineer.

C. Until the required easements have been properly executed and recorded:

1. No plans shall be approved by the county engineer for sewer facilities to be constructed by any person across the property of others;

2. No sewer facilities shall be accepted for public use, nor placed in use by any person. (Ord. 10020 § 3 (part), 1970: Ord. 8690 § 11, 1964: Ord. 6130 Part 5 Ch. 6 § 5605.1, 1952.)

20.32.440 Main-line sewers — Size specifications. A. The size of main-line sewer pipe shall be determined by standards of design and the coefficients listed below, but in no case shall it be less than eight inches inside diameter.

For zoning in the following categories for residential areas:	**Coefficient Cu. ft. per sec. per acre**
R-1	0.004
R-2	0.008
R-3	0.012
R-4	0.016*
For commercial areas:	
C-1 through C-4	0.015*
For heavy industrial areas:	
M-1 through M-4	0.021*

*Individual building, commercial or industrial plant capacities shall be the determining factor when they exceed the coefficients shown.

B. The coefficient to be used for any zoned area not listed will be determined by the county engineer based upon the intended development and use.

C. The county engineer shall determine which of the coefficients or combination of coefficients shall be used for design, as determined by the established or proposed zoning in the study area. Any modifications to these coefficients due to topography, development or hazard areas shall be approved by the county engineer. (Ord. 8690 § 12 (part), 1964: Ord. 6130 Part 5 Ch. 6 § 5606, 1952.)

20.32.450 Main-line sewers — Minimum velocity. A mainline sewer shall be designed to provide a minimum velocity of two feet per second for pipes flowing

WASTEWATER RECLAMATION
SOLID WASTE MANAGEMENT

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422

CHARLES W. CARRY
Chief Engineer and General Manager

January 12, 1999

File No: 22-00.04-00

RECEIVED
JAN 14 1999
ROBERT BEIN, WM FROST

Ms. Collette L. Morse, AICP
Project Manager
Robert Bein, William Frost & Associates
14725 Alton Parkway
Irvine, CA 92618-2069

Dear Ms. Morse:

Northern Foothills Implementation Program, San Dimas

This is in reply to your letter which was received by the County Sanitation Districts of Los Angeles County (Districts) on January 6, 1999. We offer the following comments regarding sewerage service:

1. A portion of the area in question is outside the jurisdictional boundaries of the Districts and will require annexation into District No. 22 before sewerage service can be provided to the proposed development. For specific information regarding the annexation procedure and fees, please contact Ms. Margarita Cabrera, extension 2708.

2. Because of the project's location, the flow originating from the proposed project would have to be transported to the Districts' trunk sewer by local sewer(s) which are not maintained by the Districts. If no local sewer lines currently exist, it is the responsibility of the developer to convey any wastewater generated by the project to the nearest local sewer and/or Districts' trunk sewer.

3. The following is a list of Districts' trunk sewers within the vicinity of the project area.

Name	Location	Size (dia.)	Design Capacity (mgd)	Peak Flow (mgd)	Last Measured
Loraine Trunk Sewer, Section 3	in a railroad right of way north of Alosta Avenue at Vladimir Street	12"	1.6	0.3	1996
Sunflower Trunk Sewer	in San Dimas Canyon Road at Foothill Boulevard	12"	1.8	0.2	1996

4. The wastewater generated by the proposed project will be treated at the San Jose Creek Water Reclamation Plant (WRP), located adjacent to the City of Industry. The San Jose Creek WRP has a design capacity of 100 mgd and currently processes an average flow of 89.5 mgd. Wastewater flows which exceed the capacity of the San Jose Creek WRP, and all sludge, are diverted to and treated at the Joint Water Pollution Control Plant (JWPCP) located in the City of Carson.

Recycled Paper

5. A copy of the Districts' average wastewater generation factors is enclosed to allow you to estimate the volume of wastewater the project will generate.

6. The Districts are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' Sewerage System or **increasing the existing strength and/or quantity of wastewater attributable to a particular parcel or operation already connected**. This connection fee is required to construct an incremental expansion of the Sewerage System to accommodate the proposed project which will mitigate the impact of this project on the present Sewerage System. Payment of a connection fee will be required before a permit to connect to the sewer is issued.

7. The design capacities of the Districts' wastewater treatment facilities are based on population forecasts adopted in the Southern California Association of Governments' (SCAG) 1994 Regional Comprehensive Plan and Guide (RCPG). The RCPG is part of the 1994 South Coast Air Quality Management Plan (AQMP). The AQMP and RCPG are jointly prepared by the South Coast Air Quality Management District (SCAQMD) and SCAG as a requirement of the Federal Clean Air Act (CAA). In order to conform with the AQMP, all expansions of Districts' facilities must be sized and service phased in a manner which will be consistent with the Growth Management Element of the RCPG. The Growth Management Element contains a regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial which was prepared by SCAG. Specific policies included in the RCPG which deal with the management of growth will be incorporated into the AQMP strategies to improve air quality in the South Coast Air Basin. The available capacity of the Districts' treatment facilities will, therefore, be limited to levels associated with approved growth identified in the RCPG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise you that the Districts intend to provide this service up to the levels which are legally permitted and to inform you of the currently existing capacity and any proposed expansion of the Districts' facilities.

We offer the following responses to questions regarding possible solid waste disposal impacts due to the proposed project.

Response to Question 1:

The choice of which landfill to use is made by the hauler that serves the project. The closest landfill operated by the Sanitation Districts available to serve the project is the Spadra Landfill. The Spadra Landfill is anticipated to close in approximately mid-1999. The next closest landfill operated by the Sanitation Districts is the Puente Hills Landfill. Currently, both landfills close early on a regular basis due to permit-imposed tonnage restrictions. Permitted capacity and other information for these two landfills are detailed in the enclosed fact sheets. A map is also enclosed which shows the locations of all Sanitation Districts landfills, recycle centers, and the transfer station.

Response to Question 2:

The Sanitation Districts do not develop solid waste generation rates. For this information, please contact Ms. Shari Afshari of the Los Angeles County Department of Public Works at (626) 458-3572.

Response to Question 3:

For this information, please contact the City of San Dimas, Administrative Services Department, at (909) 394-6210.

Response to Question 4:

The County of Los Angeles is facing a serious disposal crisis, both in terms of the daily capacity and long term disposal capacity available, that requires every effort to minimize the amount of wastes generated. Any new development exacerbates an already serious disposal capacity shortfall. Wastes generated from new development projects may displace the wastes already coming to regional landfills, accelerate the landfill closures or cause a more distant site to be used. As a result, this project could have a significant cumulative impact on solid waste management in Los Angeles County.

Response to Questions 6 and 7:

The California Integrated Waste Management Act, AB 939, requires cities to divert 25 percent and 50 percent of the wastestream away from land disposal by the years 1995 and 2000, respectively. In order to assist in meeting these goals the Sanitation Districts recommend that the proposed development incorporate storage and collection of recyclables into each project design. It is recommended that refuse collection contracts include collection of recyclables. All occupants should be encouraged to recycle, at a minimum, newspaper, glass bottles, aluminum and bi-metal cans, and P.E.T. bottles. Recycling should be included in the design of the project by reserving space appropriate for the support of recycling, such as adequate storage areas and access for recycling vehicles. It should be recognized that, even with recycling, adequate regional capacity is needed to accommodate new developments. If you have any further questions about recycling, please contact Mr. Bill George, who is the Recycling Coordinator for the Sanitation Districts, at extension 2427.

If you have any questions regarding sewerage service or solid waste disposal, please contact the undersigned at (562) 699-7411, extension 2717, or Ms. Connie Christian at extension 2434.

Very truly yours,

Charles W. Carry

Ruth I. Charles

Ruth I. Charles
Engineering Technician
Planning & Property Management Section

RIC:eg

Enclosure

c: C. Christian

SPADRA LANDFILL AND RESOURCE CONSERVATION PROJECT

LOCATION: 4125 W. Valley Boulevard
Pomona, California 91789

The Spadra Landfill and Resource Conservation Project is located within the City of Pomona and unincorporated Los Angeles County, southwest of the intersection of the San Bernardino (I-10) and Orange (57) Freeways.

PROJECT DESCRIPTION: The 323 acre Spadra Landfill and Resource Conservation Project is operated by the County Sanitation Districts of Los Angeles County under a Joint Powers Agreement with the California State Polytechnic University, Pomona (Cal Poly) and the County of Los Angeles. The sanitary landfill portion of the project is open to public access from 8:00 a.m. to 5:00 p.m., six days a week (Monday through Saturday) with the exception of certain holidays. The landfill is subject to early closure on occasion when tonnage limits specified in its operating permits are met.

The landfill is operated in compliance with Federal, State and local standards and is designed to eliminate or control any potential impacts on nearby residents. Refuse accepted for disposal is compacted by crawler tractors, and at the end of each workday all refuse is covered with 9 to 12 inches of suitable cover material. Various specific measures are employed to control potential nuisances due to noise, odor, litter, dust, and vectors, and to minimize landfill traffic impacts and overall visual impacts. In addition, specific systems have been constructed to monitor and control landfill gas migration and to monitor and protect groundwater quality.

BACKGROUND: Since the landfill first began disposal operations in 1957, approximately 16 million tons of refuse have been placed. The site accepts only non-hazardous municipal solid waste. The disposal of liquid or hazardous wastes is not allowed.

The landfill operation handles about 600 vehicles each day and accepts approximately 2,500 tons of refuse per day (6-day average). The existing conditional use permit limits the maximum amount of refuse accepted at the Spadra site to 15,000 tons per week. Based on the current level of refuse disposal, the remaining capacity of the site should allow refuse disposal through approximately mid-1999.

PERMITS: Spadra Landfill operates in compliance with the following permits and requirements:

- Conditional Use Permit (CUP No. 85-008-(1)), issued by the County of Los Angeles.
- Conditional Use Permit (Resolution No. 6138), issued by the City of Pomona.
- Solid Waste Facilities Permit (No. 19-AA-0015), issued by the Los

Angeles County Department of Health Services.

- Waste Discharge Requirements (Order Numbers 57-91 and 93-062), issued by the California Regional Water Quality Control Board - Los Angeles Region.

PROJECT DESIGN FEATURES:

The Sanitation Districts have installed several sophisticated environmental control systems, which are extended as necessary, and have implemented several operational programs to eliminate or control possible landfill impacts. These measures include:

- Gas collection and monitoring system. The natural decomposition of refuse produces a gas composed primarily of equal quantities of carbon dioxide and methane. To prevent migration of gas generated in the landfill, the gas is collected through a system of wells and trenches, conveyed through pipes to a central location, then used to fuel a steam turbine to produce energy with gas flares serving as backup. The odor associated with the gas is destroyed in the combustion process at the steam turbine facility or in the flares. To monitor the effectiveness of the gas control system, subsurface gas monitoring probes have been installed around the perimeter of the site. In addition, surface gas monitoring on landfilled areas is performed on a regular basis.

- Groundwater protection systems. A composite liner system has been installed in the current operating area of the landfill, and all subsequent phases of landfill activity will include a composite liner. This system prevents subsurface water from contacting refuse and will be able to remove potential leachate to prevent its release to surface water or groundwater. A system of five underground barriers has been constructed around the site to prevent subsurface canyon water from contacting the surrounding groundwater. Barrier water extraction wells have been installed with dedicated pumps on the upgradient side of the barriers where canyon water may become impounded. These wells remove water accumulated on the landfill side of the barriers. The water is treated then used at the landfill to control dust. Groundwater monitoring wells have also been installed on the downgradient side of the barriers and around the landfill to sample groundwater quality. Additionally, the design and operation of the landfill allows for the rapid, controlled runoff of rainwater without infiltration into the refuse.

- Landscape and irrigation system. Finished slopes of the landfill have been landscaped and irrigation systems have been installed. Additional landscaping and irrigation systems will be installed as landfill operations progress.

- Water conservation measures. Reclaimed municipal wastewater is used for irrigation system demands and for dust control purposes. Treated canyon water is also used for dust control. Revegetation of final fill slopes is accomplished using drought-tolerant species of trees and shrubs.

- **Dust and litter control**. Control of dust and litter is carried out on a continuous basis. Water trucks spray the access roads and excavation areas to control dust from truck traffic and landfill operations. Litter is controlled by litter fences and by the daily application of cover material. Sanitation Districts employees routinely police the area for litter and debris. Additionally, the Sanitation Districts enacted an ordinance which requires customers using the landfill to cover their loads or pay an additional surcharge and be cited. Following three citations for uncovered loads, the customer faces suspension of disposal privileges. This ordinance acts as a deterrent to the littering of roadways leading to the landfill.

- **Illegally deposited wastes**. The Sanitation Districts continuously monitor the disposal area for illegally deposited hazardous, toxic, or infectious wastes. The Sanitation Districts have also instituted a load checking program consisting of a random selection of at least two loads each day for a thorough search. If unacceptable wastes are found, they are transferred to appropriate off-site disposal facilities. The hauler whose load contained the waste is charged for the cost of proper disposal, and for repeated violations faces suspension of disposal privileges. This program acts as a strong deterrent to illegal disposal of wastes at the landfill.

- **Resource recovery**. The Sanitation Districts have instituted a resource recovery program at the landfill. Asphalt is accepted free of charge and is reused for onsite road construction. Clean loads of green waste, such as grass and tree trimmings, are accepted at a reduced rate at the landfill. The Sanitation Districts grind the green waste and use it for daily cover, weed abatement, or to produce compost. The green waste recovery program saves valuable landfill capacity and cover soil, and provides an immediate beneficial use for cities implementing separate green waste collection programs. A program to recover refrigerants containing CFC's and recycle refrigerators and air conditioners was initiated in July 1992. In January 1994, this program was expanded to include the salvage of all recoverable large metallic items and appliances.

- **Gas-to-energy**. The Sanitation Districts operate the Spadra Gas-to-Energy Facility that utilizes landfill gas to generate electricity. The facility combusts landfill gas in a boiler to produce superheated steam which drives a steam turbine. The steam turbine turns a generator to produce a maximum of approximately 10 megawatts (net) of electricity. This is equivalent to the electrical energy consumed by approximately 12,000 homes. The facility, when compared to the backup flares, produces approximately 30% less air emissions.

ULTIMATE USE: Cal Poly has the primary responsibility for master planning the ultimate use of the entire landfill area. Input to the planning process is from a committee composed of representatives from Cal Poly, the County of Los Angeles and the Sanitation Districts. Recreational and educational facilities which are being considered by Cal Poly for use at the site after its closure include: jogging trails, equestrian trails, a botanical research and demonstration area, turf grass plots and wildlife

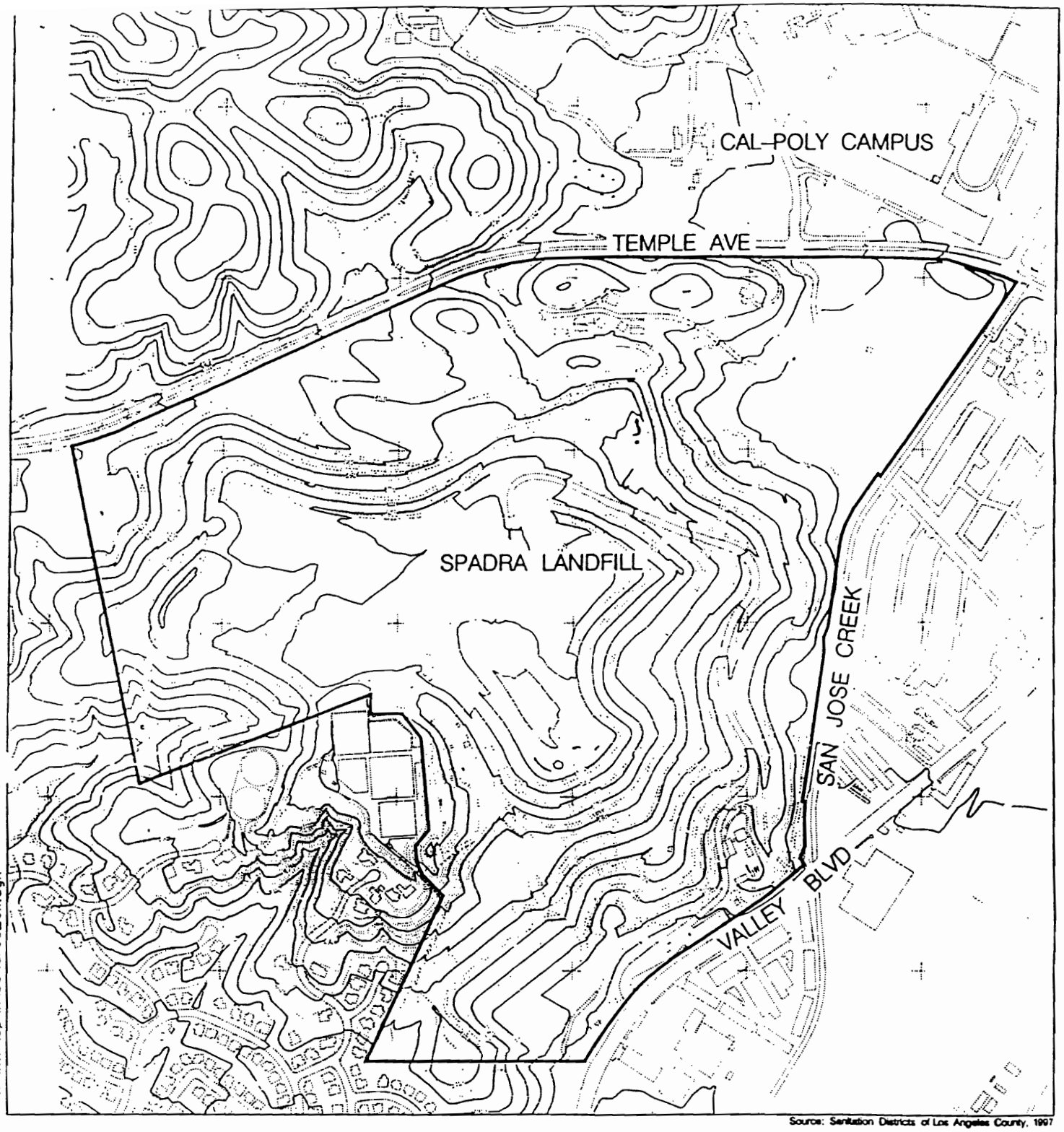
areas, recycling education center, visitor center and a golf course, all in keeping with the site's greenbelt status.

Cal Poly has devised the name LandLab to describe the University's educational and research involvement in the Spadra project. The Center For Regenerative Studies, which is located off Temple Avenue, forms the centerpiece for the LandLab Project. The Center currently houses approximately twenty students and staff of the University. As part of the program, the residents focus on utilizing onsite resources in becoming as self-sufficient as possible, including growing their own food, producing their own energy, and utilizing a variety of other experimental technologies.

Landfills are necessary repositories for solid wastes and are expected to remain an integral component of the waste management process even as society transitions into a greater degree of recycling and other waste diversion and energy recovery methods. As alternate waste management methods are developed residual material produced will still require land disposal. The Spadra Landfill and Resource Conservation Project provides an important disposal location in the regional waste management system.

FOR ADDITIONAL INFORMATION CONTACT:

County Sanitation Districts of Los Angeles County
Solid Waste Management Department
1955 Workman Mill Road
P.O. Box 4998
Whittier, CA 90607
(562) 699-7411



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Source: Sanitation Districts of Los Angeles County, 1997

-N-

SPADRA LANDFILL

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

TOPOGRAPHY DATE: 4-25-97

SCALE: 1" = 800'

FACT SHEET
PUENTE HILLS LANDFILL

LOCATION:

2800 South Workman Mill Road
Whittier, CA 90601

Immediately southeast of the intersection of the San Gabriel Valley (I-605) Freeway and the Pomona (SR-60) Freeway, in unincorporated Los Angeles County.

PROJECT DESCRIPTION:

The 1365-acre Puente Hills Landfill site is owned and operated by the Sanitation Districts of Los Angeles County (Sanitation Districts) in compliance with federal, state and local standards. With the exception of certain holidays, the site is open to the public six days a week (Monday through Saturday) from 6:00 a.m. to 5:00 p.m.

The landfill operation is designed to eliminate or minimize any potential impacts on nearby residents. Refuse accepted for disposal is compacted by crawler tractors and covered at the end of each workday. All refuse receives daily cover 9 to 12 inches in depth. Various specific measures are employed to control potential nuisances due to noise, odor, litter, dust, and vectors and to minimize landfill traffic impacts and overall visual impacts.

BACKGROUND:

The site was first permitted as a privately owned landfill in 1957. In 1970, the Sanitation Districts purchased the site and took over operation of the landfill. Puente Hills Landfill accepts only non-hazardous solid and inert waste; the disposal of hazardous or liquid waste is not allowed. Over 80 million tons of refuse have been disposed of at the site.

The existing local land use permit, which was issued on August 30, 1994, authorizes a fill design of 37 million tons. This permit is valid through November 1, 2003, at which time it will have to be renewed in order to continue operations.

Puente Hills Landfill operates in compliance with the following permits and requirements:

- Conditional Use Permit (CUP No. 92-250-(4)) issued by the Los Angeles County Board of Supervisors.
- Solid Waste Facilities Permit (No. 19-AA-053) issued by the County of Los Angeles - Department of Health Services.
- Waste Discharge Requirements (Order No. 90-046, 91-035, 93-062 and 93-070) issued by the California Regional Water Quality Control Board, Los Angeles Region.
- Air quality permits issued by the South Coast Air Quality Management District.

PROJECT DESIGN FEATURES:

The Sanitation Districts have constructed engineered environmental control systems to eliminate, or reduce to minimal levels, potential impacts on the environment and surrounding areas from landfill activity, including:

- Gas Collection and Monitoring Systems. Landfill gas and odor control and monitoring systems have been installed and will be maintained throughout the filling period, and after landfill closure, to minimize gas migration and odor releases. These systems include: gas collection wells on the slope areas, a series of horizontal gas collection trenches on the deck area, and thirty-two (32) gas monitoring probes around the perimeter of the landfill. A landfill gas-to-energy facility has been constructed at the site which recovers energy from the gas collected on site. Landfill gas is burned in a boiler, and a steam turbine-generator is used to generate up to 50 megawatts (gross) of electricity. This is equivalent to the electricity consumed by approximately 100,000 homes.

- Groundwater Protection System. Sophisticated liner systems are constructed over the bedrock and canyon bottoms to prevent potential contact of moisture contained in the refuse from groundwater. Subsurface barrier systems have also been installed to prevent water from moving off-site. Water that collects at a barrier is removed and treated before being discharged to the Sanitation Districts' sewer system. Thirty (30) groundwater monitoring wells have been installed at and around the landfill to sample groundwater quality. These wells are routinely monitored and the water quality is evaluated on an on-going basis.

- Dust and Litter Control. Control of dust and litter is carried out on a continuous basis. Water trucks spray the access roads and excavation areas to control dust from truck traffic and landfill operations. Litter is controlled by litter fences and by the daily application of cover material. Sanitation Districts employees routinely police the area for litter and debris. The Sanitation Districts enacted an ordinance which requires vehicles using Puente Hills Landfill to cover their loads or pay an additional surcharge and be cited. Following three citations for uncovered loads, the customer faces suspension of disposal privileges. This ordinance acts as a deterrent to the littering of roadways on and off the Sanitation Districts' property.

- Illegally Deposited Wastes. The Sanitation Districts and the County of Los Angeles - Department of Health Services monitor the disposal area on a continuous basis for illegally deposited hazardous, toxic or infectious wastes. The Sanitation Districts have also instituted a load checking program consisting of a random selection of at least seven loads each day for a thorough search. If illegal wastes are found, they are transferred to appropriate off-site disposal facilities. The hauler whose load contained the illegal waste is charged for proper disposal and, for repeated violations, faces suspension of disposal privileges. This program acts as a strong deterrent to illegal disposal of wastes at the Puente Hills Landfill.

- Landscape and Irrigation System. Finished slopes of the landfill are landscaped, and irrigation systems are installed. Additional landscaping and irrigation systems will be installed as landfill operations progress. The Sanitation Districts have worked actively with surrounding communities to develop appropriate landscaping

- Resource Recovery. The Sanitation Districts have instituted a comprehensive resource recovery program at Puente Hills Landfill. Asphalt and clean dirt are accepted free of charge for reuse on site. Asphalt is used for road construction, and clean dirt is used as daily cover. Clean loads of green waste (grass and tree trimmings) are accepted at a reduced rate at the landfill. The Sanitation Districts grind the green waste and use it for daily cover. The green waste recovery program saves valuable landfill capacity and cover soil and provides an immediate market for cities implementing separate green waste collection.

  The Sanitation Districts also operate a recycling center at the west entrance to the landfill. The recycling center, which is open to the public Wednesday through Saturday from 8:30 a.m. to 4:00 p.m., accepts glass, aluminum and tin cans, paper, plastic beverage containers, and waste oil.

NATIVE HABITAT PRESERVATION AUTHORITY:

The Puente Hills Landfill Native Habitat Preservation Joint Powers Authority (JPA) has been established for the purpose of acquiring, restoring and/or maintaining open space lands in the La Puente/Whittier Hills/Hacienda Heights area, adjacent to the landfill. The JPA, which is governed by a Board of Directors composed of representatives from the Sanitation Districts, the County of Los Angeles, the City of Whittier and the Hacienda Heights Improvement Association, is funded by an annual payment by the Sanitation Districts of one dollar per ton of refuse disposed of at the landfill during the landfill operation under CUP No. 92-250-(4). To date, over 921 acres of valuable native habitat within the region surrounding the landfill have been preserved and are being maintained by the Authority.

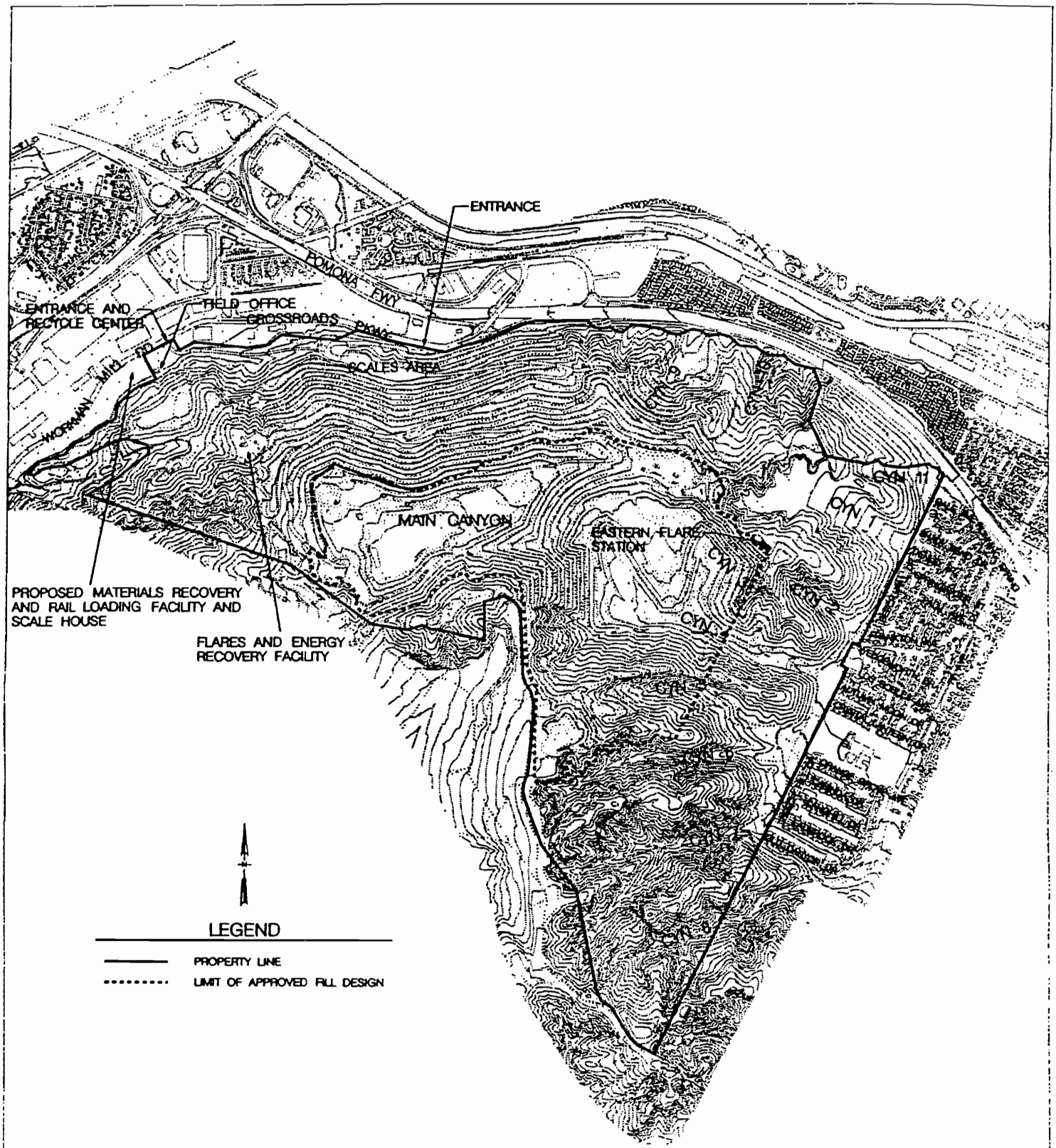
ULTIMATE USE OF THE SITE:

After landfilling is completed, the site will be ultimately dedicated for park and recreational use, the specifics of which will be the subject of future planning between the surrounding community and the County Department of Parks and Recreation. Funding for park planning and development will be provided by the Sanitation Districts through the tipping fee charged at the landfill.

Despite the fact that top priority must be given to recycling and waste diversion activities (programs which are encouraged and supported by the Sanitation Districts through the resource recovery programs at the Puente Hills Landfill), adequate disposal capacity must be provided for those materials not recycled or diverted. The Puente Hills Landfill is an important disposal facility in the regional solid waste management system.

FOR ADDITIONAL INFORMATION, CONTACT:

Sanitation Districts of Los Angeles County
Solid Waste Management Department
1955 Workman Mill Road
P. O. Box 4998
Whittier, CA 90607
(562) 699-7411



PUENTE HILLS LANDFILL

SCALE 1" = 2000'

TOPOGRAPHY DATE MAY 1996

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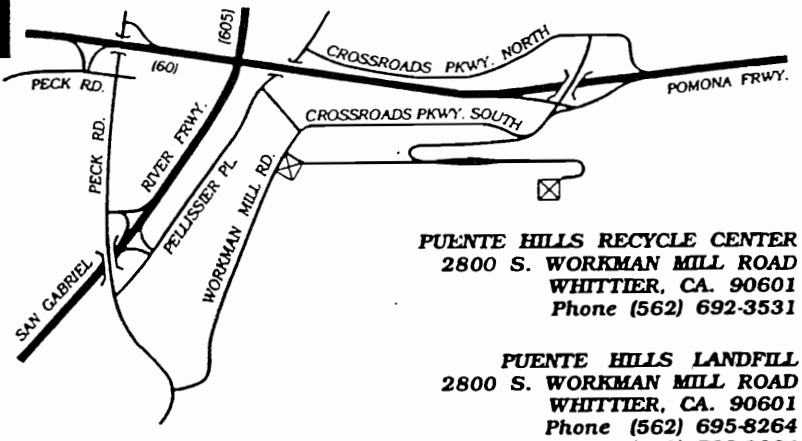
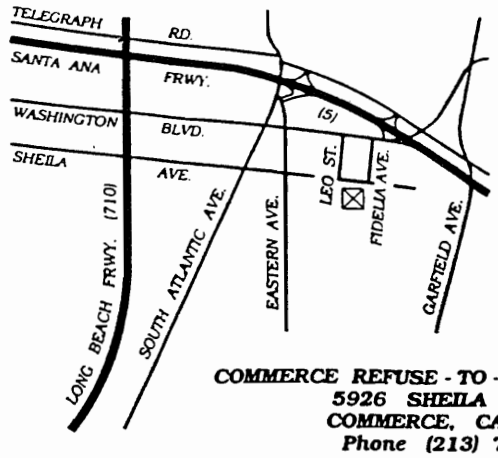


PUENTE HILLS RECYCLE CENTER
2800 S. WORKMAN MILL ROAD
WHITTIER, CA. 90601
Phone (562) 692-3531

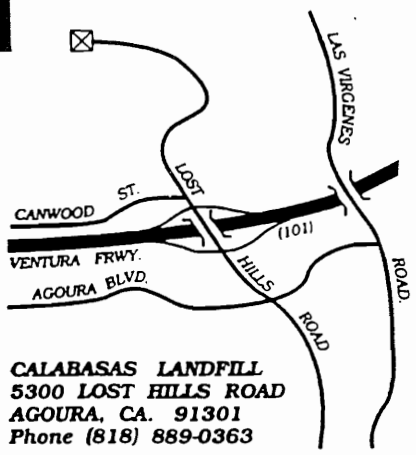
PUENTE HILLS LANDFILL
2800 S. WORKMAN MILL ROAD
WHITTIER, CA. 90601
Phone (562) 695-8264
(213) 723-9264

2



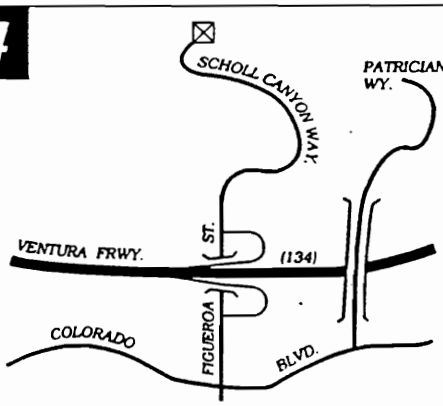
COMMERCE REFUSE - TO - ENERGY
5926 SHEILA STREET
COMMERCE, CA. 90040
Phone (213) 721-2022

3

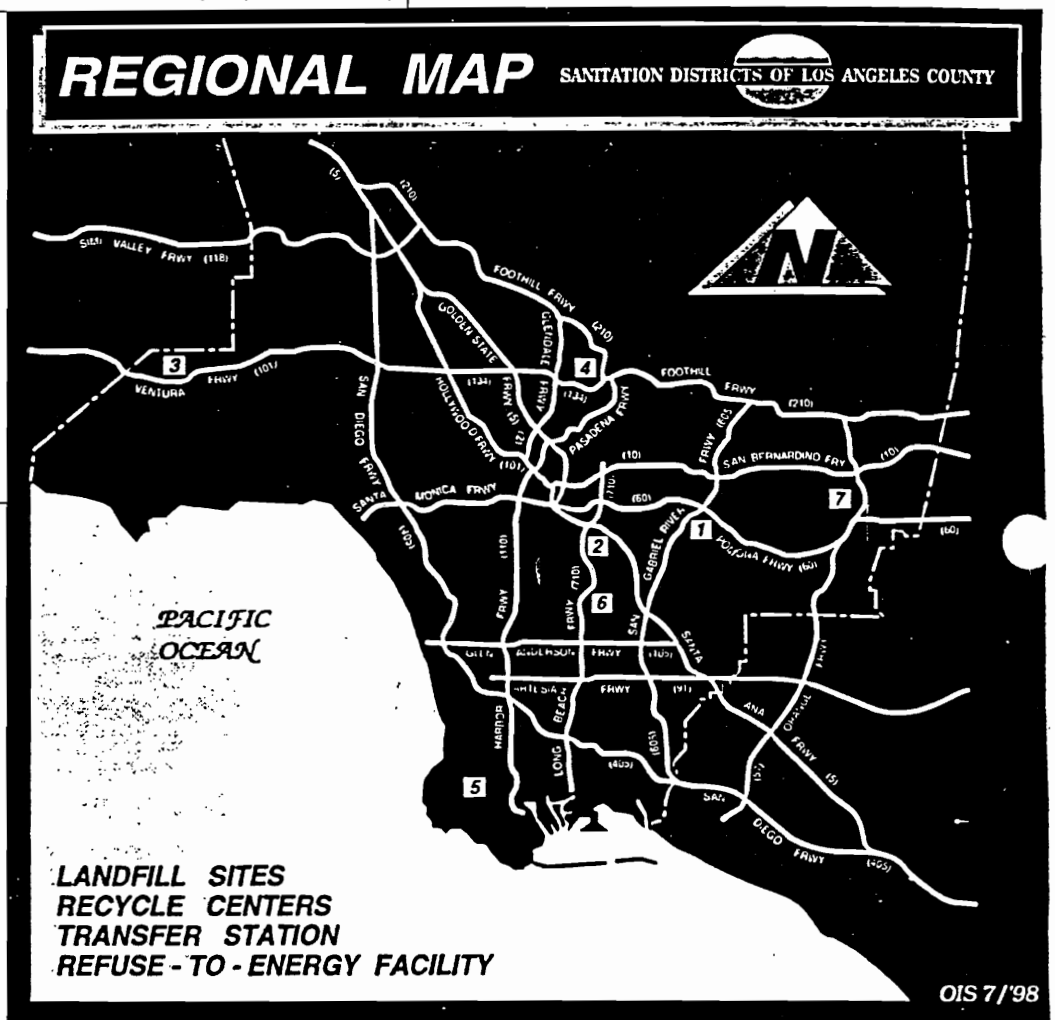


CALABASAS LANDFILL
5300 LOST HILLS ROAD
AGOURA, CA. 91301
Phone (818) 889-0363

4



SCHOLL CANYON LANDFILL
3001 SCHOLL CANYON ROAD
GLENDALE, CA. 91206
Phone (213) 245-9865



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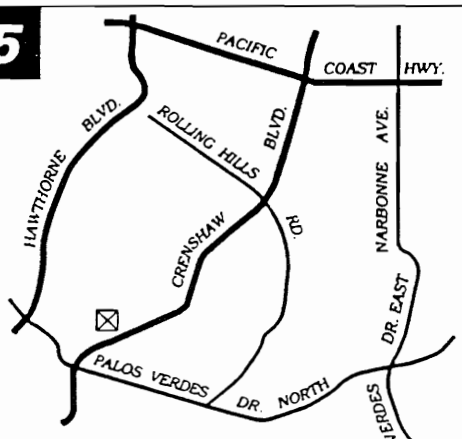
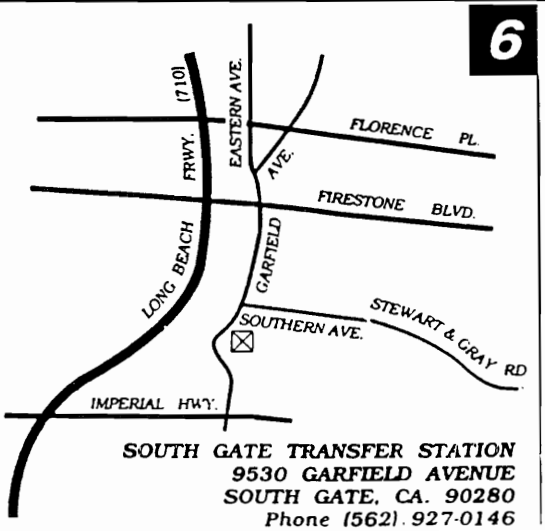


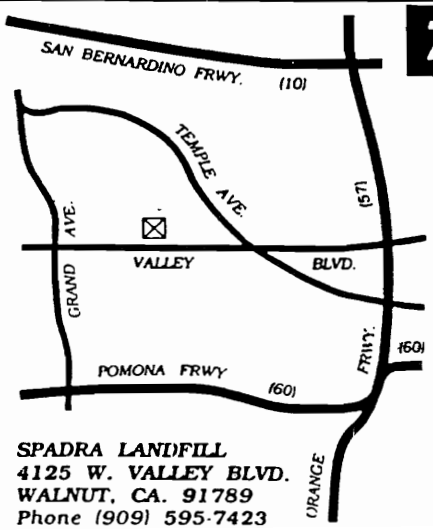
PALOS VERDES RECYCLE CENTER
26301 S. CRENSHAW BLVD.
ROLLING HILLS ESTATES, CA. 90274
Phone (310) 375-6094

6



SOUTH GATE TRANSFER STATION
9530 GARFIELD AVENUE
SOUTH GATE, CA. 90280
Phone (562) 927-0146

7



SPADRA LANDFILL
4125 W. VALLEY BLVD.
WALNUT, CA. 91789
Phone (909) 595-7423

BONITA UNIFIED SCHOOL DISTRICT

115 West Allen Avenue San Dimas, California 91773 (909) 599-6787 Fax (909) 592-8703

Superintendent
John E. Rieckewald, Ph.D.

Assistant Superintendents
Lorna Horton, Ph.D. - Instruction
Lonnie L. McConnell, Ed.D. – HRD
Joe Gillentine – Pupil Serv. / Spec. Ed.
Michele McClowry, CPA - Business

Board of Education
Diana Au
Robin Carder
Bruce Colburn
Ed Jones
Robert Olander II

February 24, 1999

RECEIVED
FEB 2 6 1999
ROBERT BEIN, WM FROST

Ms. Collette L. Morse, AICP
Project Manager
Robert Bein, William Frost & Associates
P.O. Box 57057
Irvine, CA 92619-7057

Subject: Program Environmental Impact Report for the Northern Foothills Implementation Program

Dear Ms. Morse:

In response to your request for information for the project in the foothills, I am enclosing maps of the District Boundaries and for the schools of Bonita High School, Ramona Middle School, Allen Elementary, Oak Mesa Elementary and Shull Elementary.

Attached is a list of the schools with their grades, addresses and current enrollment. I don't have the information regarding the distance of the school from the area and for questions three and four.

I hope this information is helpful to you. Please feel free to contact me if you have additional questions.

Sincerely,

Pat Fint

Pat Fint
Pupil Services

Attachment

The Bonita Unified School District is an equal opportunity employer and does not discriminate on the basis of any class protected by law.

Bonita Unified School District

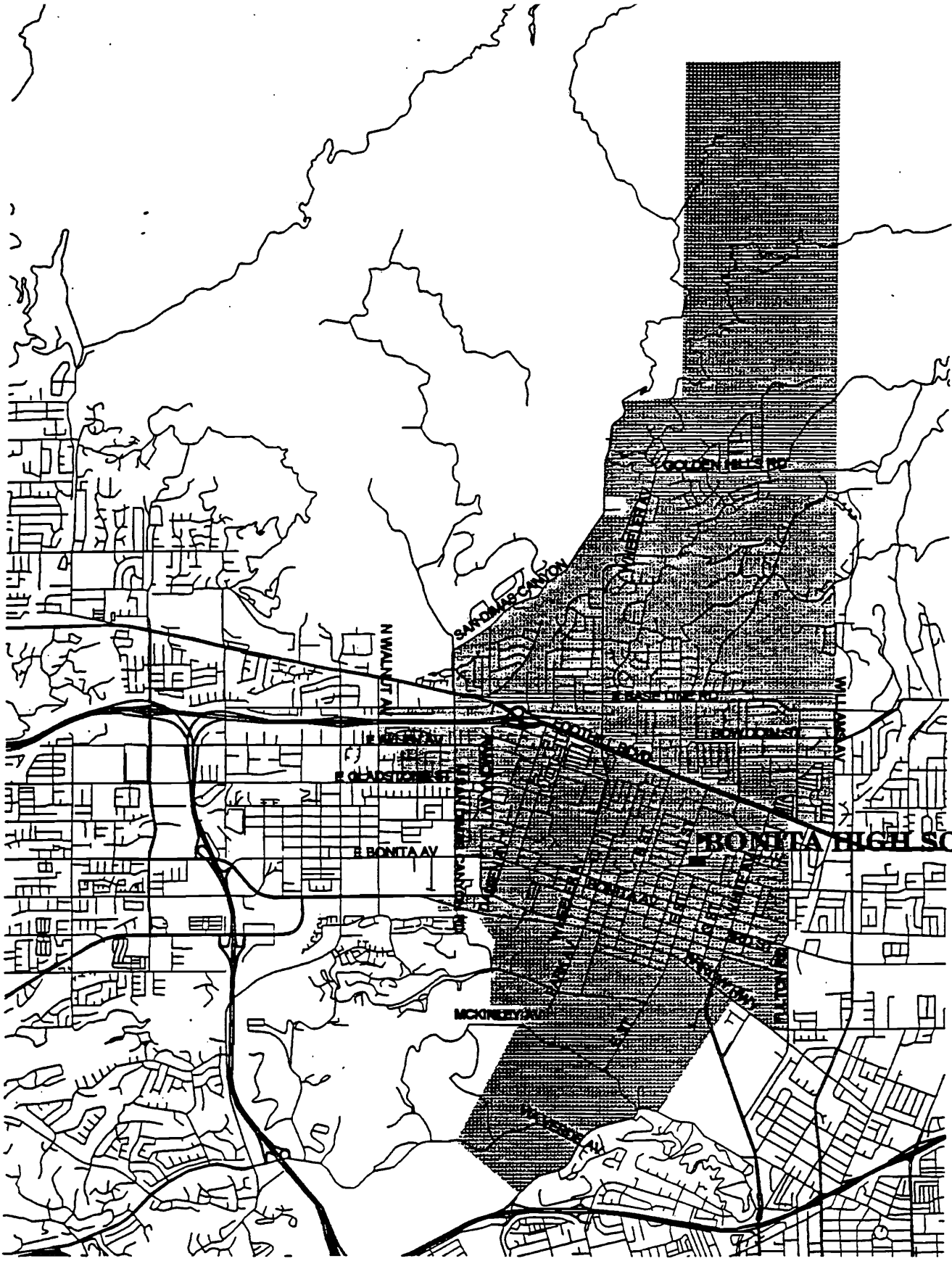
Allen Avenue
740 E. Allen Ave.
San Dimas, CA 91773
(909) 394-3159
Grades: k-5
Enrollment - 506
Capacity – 534

La Verne Heights
1550 Baseline
La Verne, CA 91750
(909) 593-4529
Grades: K-5
Enrollment - 376
Capacity – 348

Ramona Middle School
3490 Ramona Avenue
La Verne,,CA 91750
(909) 394-3181
Grades: 9-12
Enrollment - 1357
Capacity - 1375

Oak Mesa
5200 Wheeler Avenue
La Verne, CA 91750
(909) 392-5757
Grades: K-5
Enrollment - 580
Capacity - 584

Bonita High School
3102 N. "D" Street
La Verne, CA 91750
(909) 593-4501
Grades: 9-12
Enrollment -1604
Capacity – 1650



BONITA UNIFIED SCHOOL DISTRICT

Bonita HighSchool

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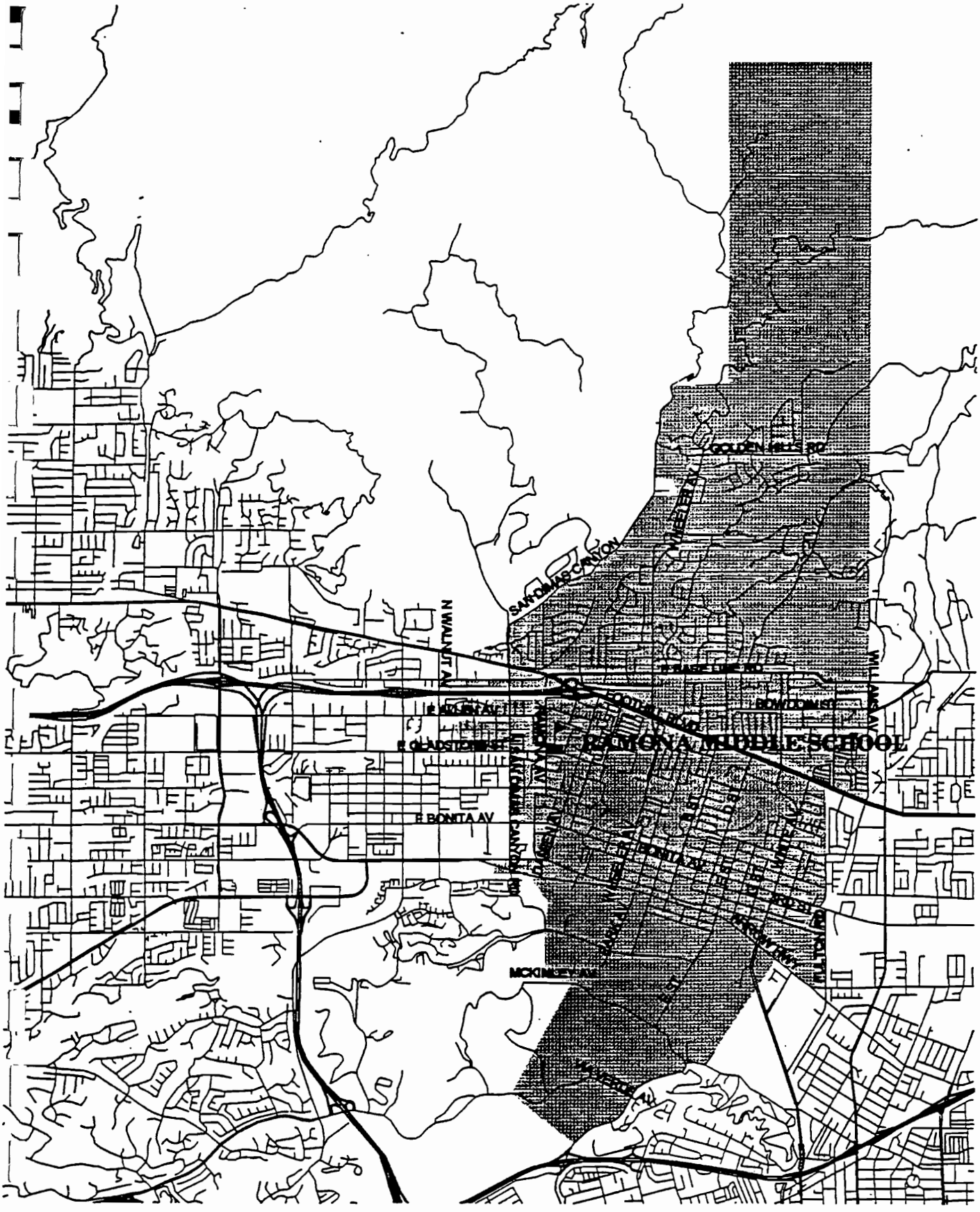
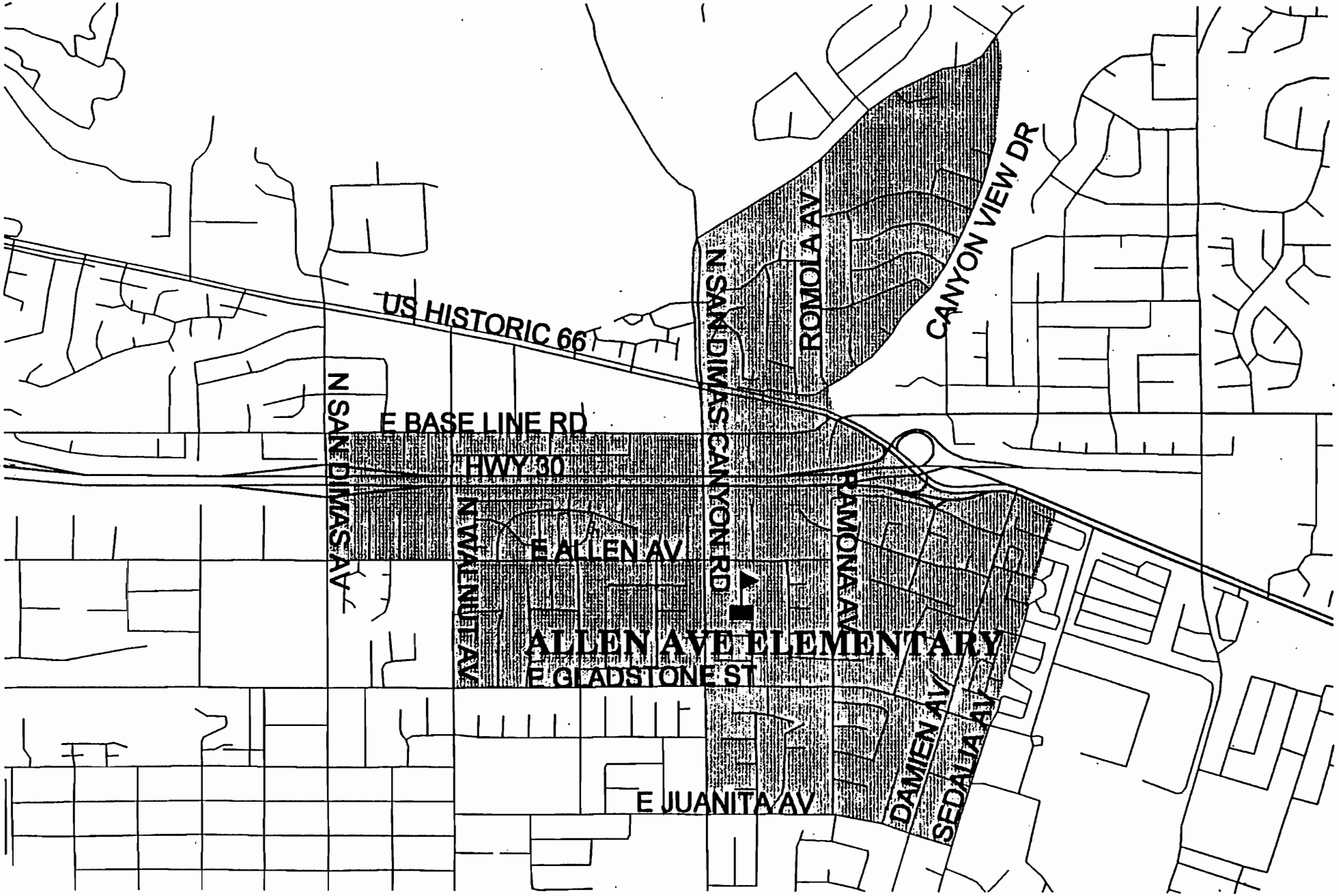


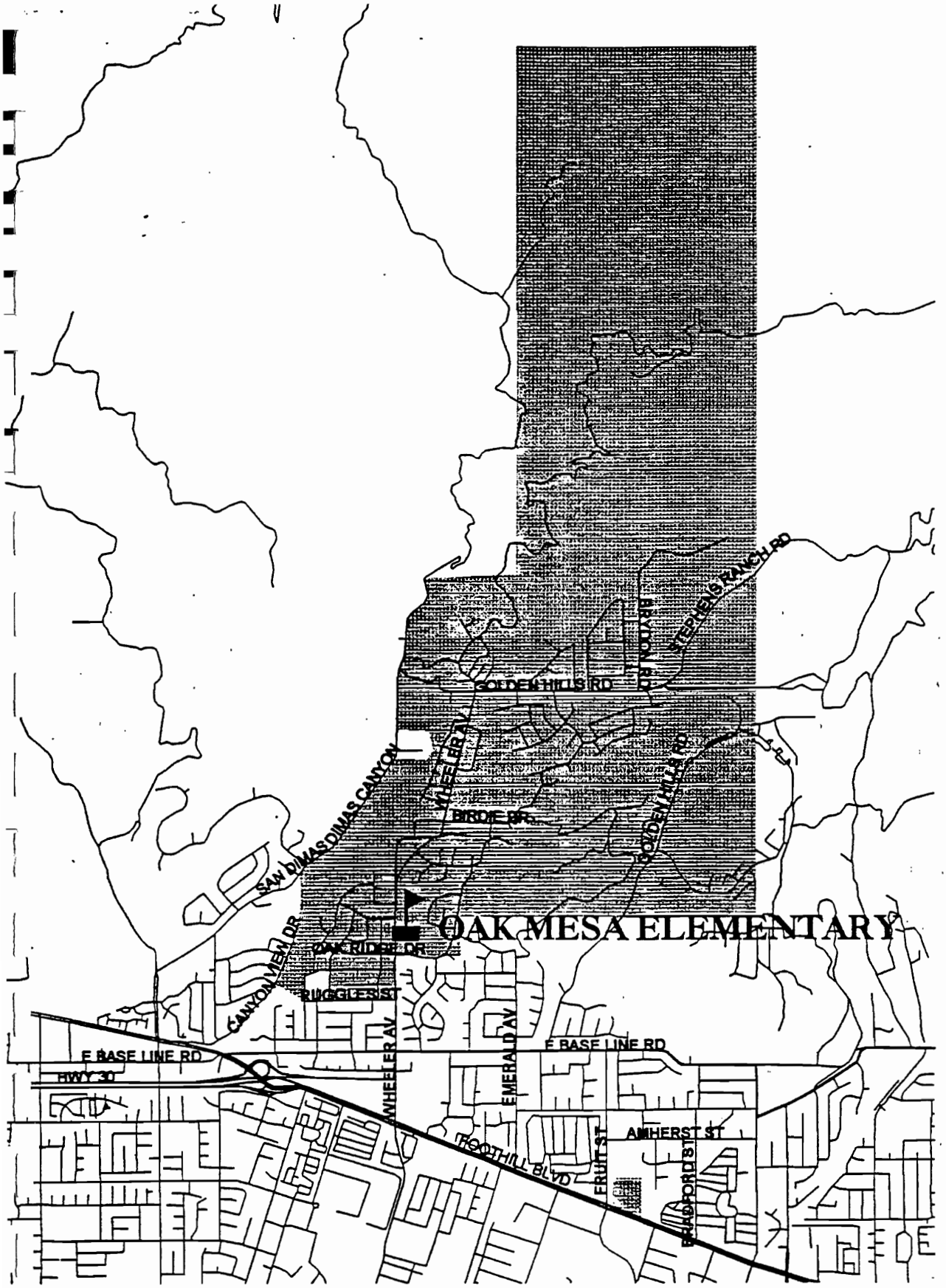
BONITA UNIFIED SCHOOL DISTRICT

Ramona Middle School



BONITA UNIFIED SCHOOL DISTRICT

Allen Ave. Elementary



BONITA UNIFIED SCHOOL DISTRICT

Oak Mesa Elementary

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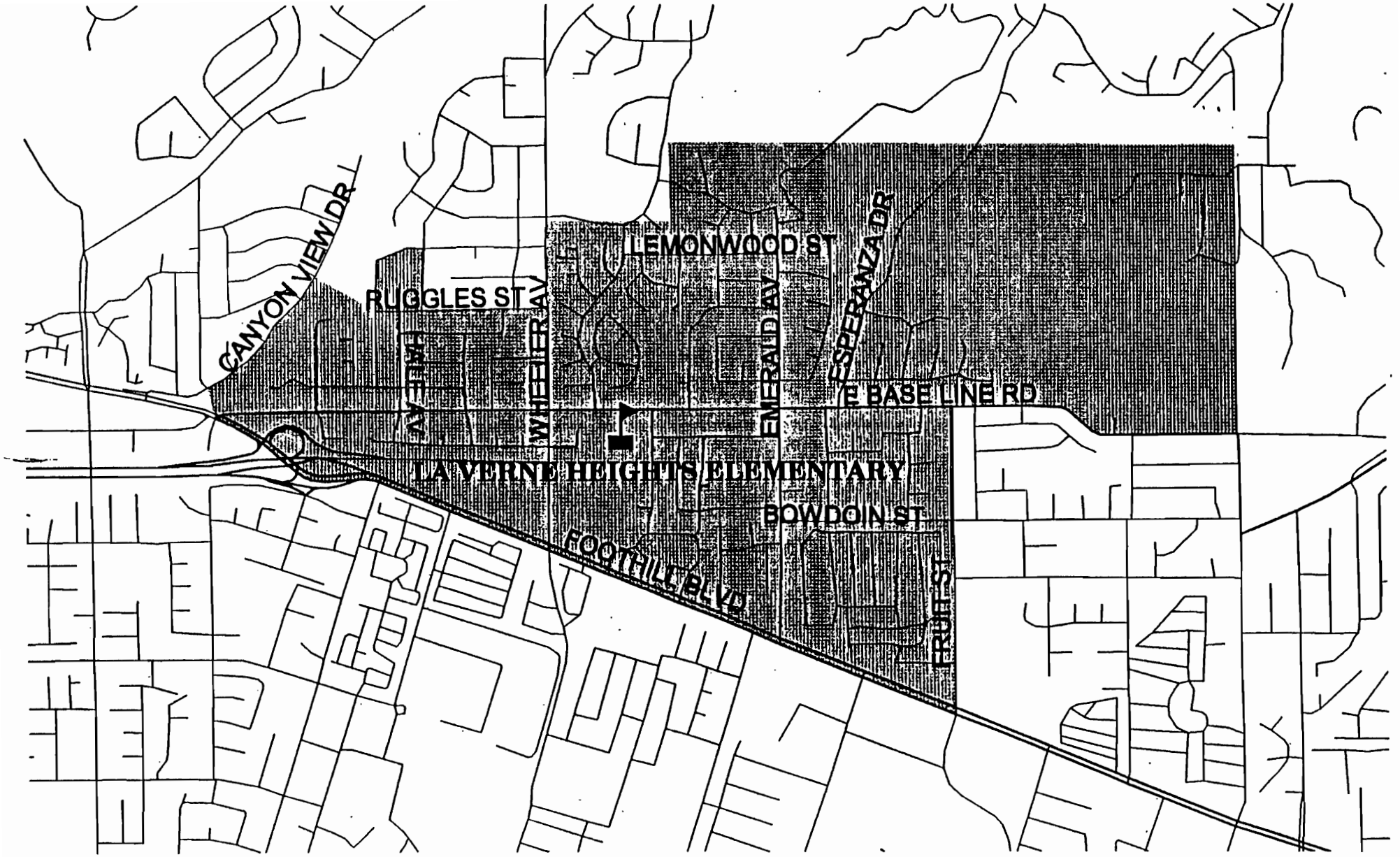
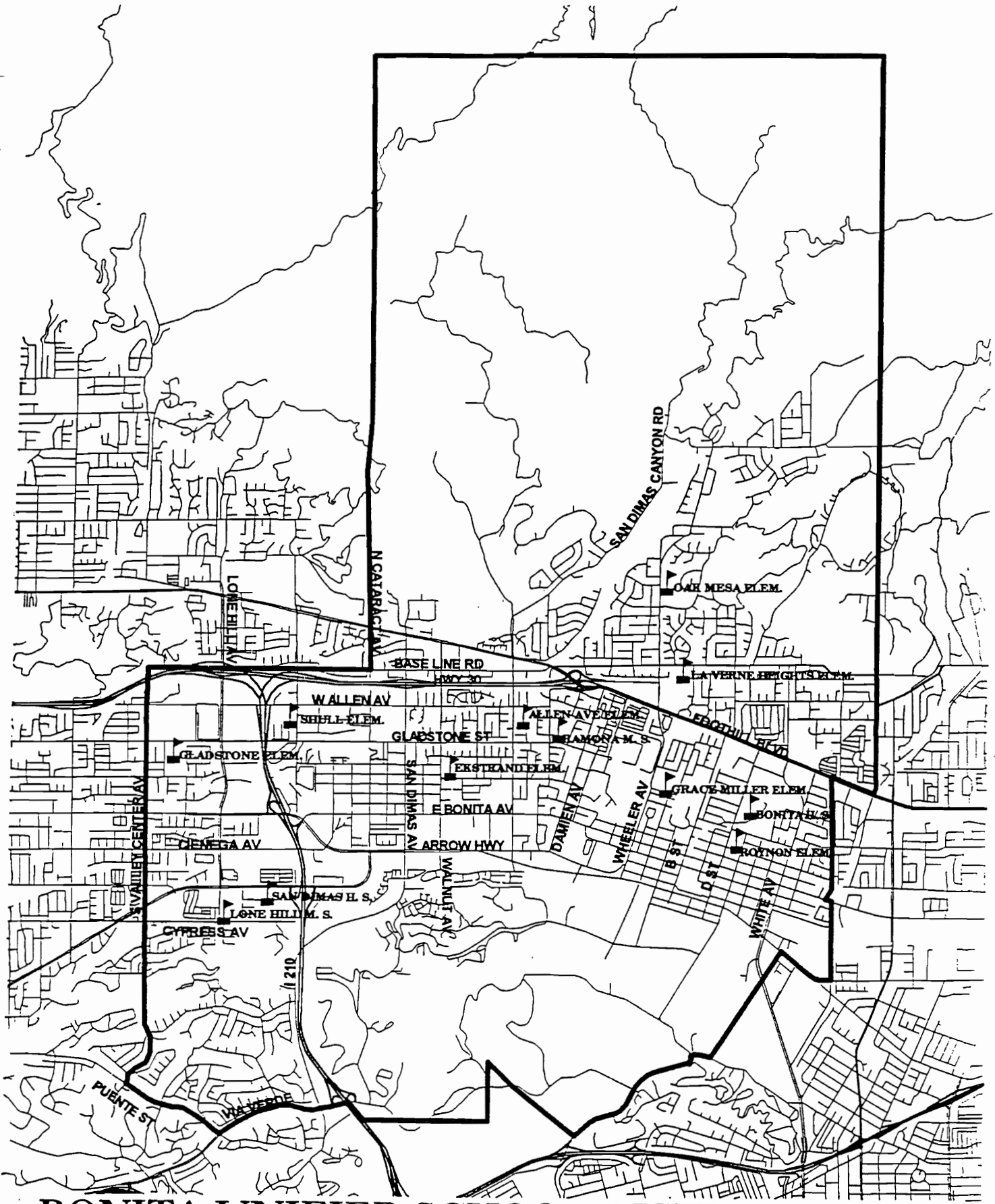


BONITA UNIFIED SCHOOL DISTRICT

La Verne Heights Elementary



BONITA UNIFIED SCHOOL DISTRICT

District Boundary

0.5 0 0.5 Miles

N W E S

BONITA UNIFIED SCHOOL DISTRICT - SCHOOL CAPACITY AND ENROLLMENT NUMBERS

School	Maximum Capacity	Enrollment (Jan. 1999)
Allen Avenue Elementary	534	506
Oak Mesa Elementary	584	580
La Verne Heights Elementary	398	376
Ramona Middle School	1,375	1,357
Bonita High School	1,650	1,604

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15.3 Geotechnical Report

CONVERSE CONSULTANTS
ORANGE COUNTY

REPORT OF GEOTECHNICAL SERVICES

Support of Environmental Impact Report
Northern Foothills Development
San Dimas, California

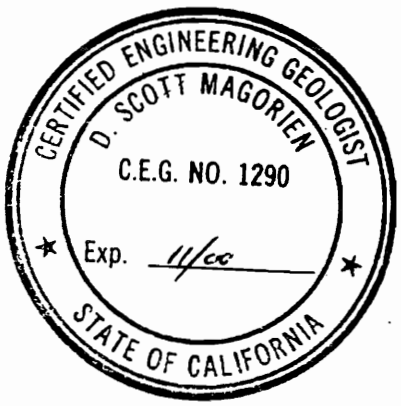
Converse Project No. 98-32910-01
January 15, 1999

REPORT OF GEOTECHNICAL SERVICES
Support of Environmental Impact Report
Northern Foothills Development
San Dimas, California

Prepared For:

Ms. Collette Morse
Robert Bein, William Frost & Associates
14725 Alton Parkway
Irvine, California 92618-2069

PREPARED BY: _____
D. Scott Magorien, C.E.G. 1290
Principal Geologist



REVIEWED BY: _____
Thomas J. Scheil, R.G.E. 753
Vice President & Principal Engineer

Converse Consultants

Over 50 Years of Dedication in Geotechnical Engineering and Environmental Sciences

January 15, 1999

Ms. Collette Morse
Robert Bein, William Frost & Associates
14725 Alton Parkway
Irvine, California 92618-2069

Subject: **Report of Geotechnical Services in**
Support of Environmental Impact Report
Northern Foothills Development
San Dimas, California
(Converse Project No. 98-32910-01)

Dear Ms. Morse:

In accordance with Converse's scope of work outlined in our proposal dated October 14, 1998 and your authorization on December 16, 1998, we present the attached EIR-level report. This report discusses existing conditions, geologic hazards, impacts and mitigation measures as they relate to the geology, soils and seismicity issues for the site.

We appreciate the opportunity to be of service to RBF and the City of San Dimas during the environmental review process of the project. If you have any questions or require additional information or clarification of the attached report, please call the undersigned.

Respectfully submitted,

CONVERSE CONSULTANTS

D. Scott Magorien, C.E.G. 1290
Principal Geologist

DSM:vy

Attachment: Geology, Soils and Seismicity Report

185 East Paularino Avenue, Suite B, Costa Mesa, California 92626
Telephone: (714) 444-9660 ◆ Facsimile: (714) 444-9640 ◆ e-mail: occonv@aol.com
Accounting Facsimile: (714) 444-9651

Printed on Recycled Paper

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GEOLOGY, SOILS AND SEISMICITY REPORT

1.0 GEOLOGY, SOILS AND SEISMICITY

1.1 Topography

Topographically, the Northern Foothills project area is represented by a semicircular shaped landform which protrudes southward from the more linear base of the San Grabriel Mountains, which is part of the Transverse Ranges physiographic province of southern California. This topographic "protrusion" of the San Gabriel Mountains foothill region is bounded by San Dimas Canyon on the east, Big Dalton Canyon and its broad alluvial fan on the west, and on the south by the San Dimas Wash and the adjacent Los Angeles basin. The most prominent features of the area are Johnstone Peak, the highest point (elevation 3,178 msl) at the northern margin of the site, and the steep sided, deeply entrenched, Sycamore and Ham Canyons which drain the majority of the site. Three smaller canyons, Shuler, Shay and Wildwood Canyons drain the southerly westernmost corner of the site. The majority of surface flow from the site is southward toward San Dimas Wash. Surface drainage from Shuler, Shay and Wildwood Canyons flows westward along the East Branch of Dalton Wash. Only a very limited portion of the northerly westernmost corner of the site drains directly into Big Dalton Canyon.

There are four major topographic regions within the Northern Foothills area. They include: (1) the very gently sloping San Dimas Wash; (2) the more moderately sloping, uplifted and weakly to moderately incised terrace-like surface along the base of the foothills; (3) an uplifted, deeply incised area of rounded hill tops and ridges situated within the southwest corner of the site; and (4) the steep mountainous-type terrain which characterizes approximately 80 percent of the project area.

The very gently sloping alluviated San Dimas Wash flows south and southwest and has an overall surface gradient of about 0.2 percent, or about 70 feet per mile. Much of this active alluvial drainage is occupied by flood control features, as well as, the eastern portion of San Dimas Golf Course. The adjacent uplifted terrace surface separates the active wash from the sharp, steep face of the foothills region. This 1000 to 1500 foot wide terrace-like strip flanks the entire base of the

foothills, with surface elevations that range from about 1040 to 1400 feet msl, and slopes towards the basin at inclinations between about 5 percent to as much as 40 percent within the uppermost incised portions at the base of the foothills. The majority of this terrace-like area is developed with single-family homes, San Dimas Canyon Park, an equestrian center (Horsethief Canyon Park), and the western two-thirds of San Dimas Golf Course.

The topography within the southwest corner of the foothills, characterized by rounded hilltops and ridgelines, is controlled largely by the soft bedrock formation (Puente Formation) which underlies this area. Both Shay and Shuler Canyons have formed deep incisions into this area which have produced canyon walls/slopes as steep as 1:1 (horizontal to vertical) along the base of the canyons. More commonly, natural slopes vary between 5:1 to 2:1. Land surface elevations in this area range from a low of 1200 feet msl along the base of the hills to a high of about 1630 at the top of Shay Peak (informal name), located between Shay Canyon and the mouth of Sycamore Canyon.

The remaining and largest portion of the project area consists of relatively steep, mountainous-type terrain with deeply incised canyons, namely Sycamore and Ham Canyons, which extend into the project area over a distance of 2 miles (north to south) from the base of the foothills. The most prominent topographic features within this area are a roughly east-west trending ridgeline, located at the head of Sycamore and Ham Canyons, which include an area known as Sycamore Flat, and to the north the highest peak within the area, namely Johnstone Peak (elevation 3178 feet msl). Natural slopes within this portion of the project area vary from gently sloping (i.e. 5 to 10 percent) along the tops of ridges, to 2:1 to 1:1 (50 to 100 percent) on most slopes, and steepen to near vertical near the bottom of the major canyons. The land surface elevation ranges from about 1400 to about 3180 feet msl along the crest of Johnstone Peak.

Man-made improvements within the project area include: a 55± acre housing tract and adjacent County Juvenile Camp located easterly of Sycamore Canyon; radio/relay towers on Sycamore Flat and Johnstone Peak; several above ground concrete water tanks and dilapidated wood frame structures (on Foster Ranch); a water tunnel constructed above the only documented spring located within Sycamore Canyon (elevation 1680 feet msl), along with small diameter, above ground pipeline which conveys water from the tunnel to a ranch at the head of Shay Canyon; and a

number of U.S. Forest Service maintained graded dirt roads (referred to as Bluebird and Sycamore Flat Motorways) which provide access to the higher regions of the site.

The topography of the 10 Potential Development Areas (PDAs) generally coincides with either the top of intermediate ridges and terrace-like surfaces within the central portion of the site (i.e. PDA nos. 1, 2, 3 and 4), with the remaining PDAs, except for PDA no. 5, situated on hilltops and subdued ridgelines, and within a gently rolling upland valley-like areas. PDA no. 5 area is situated near the mouth of Ham Canyon and atop a dissected terrace surface located at the base of a steep mountainous region in the southeast corner of the site. All but PDA no. 8 is bordered above or below by steep, unstable terrain.

1.2 Soils

The only "soils maps" available for this study are two very generalized soils maps. The earliest map is the "Soils Map California, Reconnaissance Survey — Central Southern Area — Western Sheet (dated 1917) prepared by University of California Agricultural Research Station for U.S. Department of Agriculture, Bureau of Soil at a scale of 1:250,000. This map shows the site as mantled by only two soil types, Yolo loams along the base of the foothills and the remaining 90 percent of the project area labeled as Rock land/broken ground. The latest soils map is the "Report and General Soil Map (scale - 1:750,000) Los Angeles County, California prepared by U.S. Department of Agriculture, Soil Conservation Service (dated Revised December 1969, and the soils map dated April 1994). This latest soil map delineates Vista-Amargosa type soils occupying the lower most portion of the foothills and Hanford-type soils occupying the low-lying alluvial terrace and San Dimas Wash.

In an effort to better define the various soil associations (types) which are likely present within the project area, those soil types listed in the 1969 USDA soils report which appear to closely approximate the soil types observed during Converse's field reconnaissance are shown on Drawing No. 1 and include the following USDA soils associations/types using USDA terminology:

- *Hanford — Yolo Association*: The soils of this association occur on gently sloping (2 to 5 percent), alluvial fans between elevations from 1020 to 1140 feet msl within the site.

Hanford soils are over 60 inches deep, are well drained, and have moderately rapid subsoil permeability. They have coarse sandy loam surface layers about 8 inches thick underlain by gravelly loamy coarse sand and coarse sandy loam substratum. Available water holding capacity is 5.0 to 7.5 inches for 60 inches of soil depth.

Yolo soils are over 60 inches deep, are well drained and have moderate subsoil permeability. They have loam surface layers about 18 inches thick, underlain by an equal thickness of silty loam. Available water holding capacity is 8.5 to 10.5 inches for 60 inches of soil depth.

Hanford soils make up about 80 percent of the association, with Yolo soil (20 percent) making up the remainder. PDA no. 5 is underalin by Hanford type soils.

- *Diablo-Altamont Association*: These soils have formed atop 30 to 50 percent slopes underlain by siltstone, shale and sandstone bedrock of the Puente Formation located near the base of the foothills. Soils of this association are about 20 to 39 inches deep, are well drained, and have generally slow subsoil permeability. They have dark grey, neutral clay surface layers about 12 to 20 inches thick underlain by dark grayish brown- brown calcareous clay subsoils which are highly expansive. Available water-holding capacity is 2.5 to 5.5 inches. Runoff from these soils is rapid and the erosion hazard is high.

  PDA nos. 9, 10 and a portion of 8 are underlain by these soils.

- *Vista-Amargosa Association:* The soils of this association occur in the steep (30 to 50 percent slopes), mountainous areas which are underlain by metamorphic bedrock between elevations of 1,300 and 3,180 feet msl. Vista soils are 28 to 38 inches deep, are well drained, and have moderately rapid subsoil permeability. They have a coarse, sandy loam surface layer about 12 inches thick. The subsoil is a sandy loam about 12 inches thick and contains 2 to 3 percent more clay than the surface layer. Below is coarse sandy loam on hard bedrock. Available water holding capacity is 2.5 to 3.5 inches for 28 to 38 inches of soil depth.

Amargosa soils are 14 to 20 inches deep, are excessively drained, and have moderately rapid subsoil permeability. They have a coarse sandy loam surface layer about 13 inches thick. Below is a gravelly sandy loam layer, containing about 20 percent by volume gravel, resting on hard bedrock at about 14 to 20 inches. Sheet and rill erosion have been moderate on these soils, removing from 25 to 40 percent of the original surface soil. Available water-holding capacity is 1.0 to 1.5 inches for 14 to 20 inches of soil depth.

There are no. PDAs situated with the areas occupied by these soils.

- *Soper and Ramona Association (undifferentiated)*: These soils occur on, and are associated with, the highly erodible tuff breccia volcanic bedrock areas (Map symbol Tgt on Drawing 2 - Geologic Map). Soper soils are 36 to 60 inches deep, are well drained, and have moderately slow subsoil permeability. They have grayish-brown, neutral gravelly loam surface layers about 12 inches thick. The subsoil is a brown and light yellowish brown mildly alkaline and neutral gravelly, sandy clay loam about 24 inches thick. The volcanic breccia bedrock occurs at depths from 36 to 60 inches. Available water-holding capacity is 4.0 to 7.5 inches for 36 to 60 inches of soil depth. Runoff from these soils is rapid and their erosion hazard is high.

  Ramona soils, which comprise about 10 to 20 percent of the association are over 60 inches deep, and well drained and have slow subsoil permeability. They are characterized by brown to reddish-brown, heavy loam, loam, or sandy loam surface layers about 18 inches thick. Subsoils are brown to reddish brown, dense clay loam or clay about 30 inches thick. Areas with up to 60 percent by volume of stones and cobbles also occur. Available water holding capacity is 8 to 10 inches for 60 inches of soil depth. Runoff from these soils is slow to medium and their erosion hazard is moderate to high.

  PDA nos. 1, 2, 3, 4, 6, and a portion of 8 are underlain by these soils.

- *Gilroy soils*: These soils are found on 15 to 50 percent slopes and overlie two isolated areas of basaltic bedrock (labeled Tgb on the Geologic Map), are 22 to 40 inches deep and are well drained, and have moderately slow subsoil permeability. They have a dark grayish-brown, slightly acid clay loam surface layer about 18 inches thick. The subsoil is a brown heavy clay loam and light brownish gray loam about 22 thick. Available water holding capacity is 4.5 to 7.0 inches for 22 to 40 inches of soil depth. Runoff from these soils is rapid and they have a high erosion hazard.

  A portion of PDA no. 4 may be situated within an area of Gilroy soils.

- *Rock land:* Rock land is characterized by very shallow soils and rock outcrops covering about 50 percent of the west central portion of the site. The outcrops consist entirely of volcanic rocks as shown on the Geologic Map. Surface runoff is very rapid and the erosion hazard is severe.

  A portion of PDA no. 8 is situated in close proximity to a Rockland area.

1.3 Geologic Setting

The project area lies along the southern base of the San Gabriel Mountains, part of the Transverse Ranges physiographic province of southern California. The San Gabriel Mountains represent a structurally high block of ground which has been uplifted to its current height by tectonic uplift associated with the San Fernando — Sierra Madre — Cucamonga Fault zone along its southern base, and the San Andreas Fault which lies along the northern base of the mountain range. There are also numerous faults and shear zones within the range, especially near the base of the mountains. The largest of these internal faults is the San Gabriel Fault zone which transects the entire mountain range from east to west. The San Gabriel Mountains are composed largely of volcanic, granitic and metamorphic rocks, with subordinate amounts of ancient marine sedimentary rocks along the southern front of the range.

The various rock units which comprise the study area include, from oldest to youngest, metamorphic rocks, volcanic rocks assigned to the Glendora Volcanics of early to middle Miocene Age, marine sedimentary rocks of the upper Miocene age Puente Formation, uplifted Quaternary age steam terrace deposits, and recent slopewash and alluvium contained with active steam channels, landslide deposits, and artificial (man-made) fill.

The most common geologic hazards within the project area are active and inactive landslides, the high potential for seismically induced strong ground motion/shaking from future nearby earthquakes, and possibly ground surface rupture on any number of faults/shears within the site during a major earthquake on the nearby Sierra Madre — Cucamonga Fault zone. Although the California Division of Mines and Geology has indicated that no "active" faults projecting towards or transecting the project area, the site is bounded directly on the south by the potentially active Cucamonga Fault (zone) and on the north (actually within the project area below Johnstone Peak) by the northern branch of the potentially active Sierra Madre Fault zone.

1.3.1 Geologic Materials

Surficial Materials

Surficial materials within the project area, listed in order of increasing age are: artificial fill, slopewash and alluvium, and Quaternary age stream terrace deposits. The distribution of these materials is shown on Drawing No. 2 — Geologic Map. The designations shown below, in parenthesis, correspond to those shown on the geologic map.

Artificial Fill (not designated)

Artificial fill consists of native soil and bedrock materials which have been excavated and placed as compacted engineered fill during development of the residential areas, the County juvenile camp, golf course and park sites. The majority of these man-made fills are probably on the order of 5 to 30 feet thick and overlie older stream-land terrace deposits and limited areas underlain by volcanic rock units. Some amount of fill soils also underlie portions of small ranches above Horsethief Canyon Park.

Slopewash (Qsw)

Slopewash represents the accumulation of recently eroded soil and bedrock debris which has accumulated along the base of the foothills and within the major drainages (i.e. Sycamore and Ham Canyons). The composition of these soil-like materials are governed largely by the soil/bedrock materials from which they are derived. Along the base of the foothills, westerly from the mouth of Sycamore Canyon, the deposits consist largely of sandy silt/silty sand which is commonly loose highly porous, dry and contains abundant decaying organic debris. These soils range in thickness from several feet to about 10 feet.

Slopewash materials easterly of Sycamore Canyon are composed largely of coarse grained soil and rock debris eroded from volcanic and metamorphic bedrock areas. Similar to the other areas, these soil-like deposits are commonly loose, highly porous, dry, contain decaying organic debris, and attain thicknesses of greater than 10 feet. PDA no. 5 is blanketed by these deposits.

Alluvium (Qal)

Alluvial deposits occupy the active channel bottoms within Sycamore and Ham Canyons, and San Dimas Wash. These materials consist of unconsolidated, crudely stratified, layers and lenses of silt, sand, gravel, cobbles and mixtures thereof. They are generally highly porous/permeable, interfinger with slopewash deposits and are subject to rapid erosion. A portion of PDA no. 5 is underlain by alluvial soils, primarily within the low-lying portions of Ham Canyon.

Quaternary Stream Terrace Deposits (Qt)

Uplifted stream terrace deposits of late Quaternary age occupy the southernmost portion of the site between the base of the foothills and San Dimas Wash. These deposits, which consist of partially consolidated alluvial-type soils, formed as ancient alluvial fan deposits which have subsequently been tectonically uplifted to heights of as much as 120 feet above the level of San Dimas Wash. There are also two small areas of terrace deposits along the lower flank of Sycamore and Wildwood Canyons. The deposits are composed of clay, silt, sand, gravel, cobbles and scattered small boulder size rock fragments, and are being actively eroded due to continual, episodic uplift

during movement on the nearby Cucamonga Fault zone. These stream terrace deposits occupy portions of PDA nos. 5 and 8.

Bedrock Formations

The project area is underlain by, in order of increasing age, marine bedrock assignment to the Puente Formation, volcanic rocks designated as the Glendora Volcanics, and a much older complex of metamorphic rocks which have been intruded by granitic-type igneous rocks. The principle bedrock types within the Potential Development Areas are mostly volcanic rocks and to a lesser degree marine sedimentary strata. The location and extent of the various bedrock units are shown on Drawing No. 2 — Geologic Map.

Puente Formation (Tp)

The Puente Formation consists principally of interbedded marine siltstone, shale, siliceous shale, sandstone and subordinate amounts of conglomerate of late Miocene age. These ancient sedimentary rocks occupy the southernmost foothill region west of the mouth of Sycamore Canyon. An isolated area of exposed Puente Formation also lies just east of the mouth of Sycamore Canyon above San Dimas Canyon Park.

Where exposed, these rocks are typically thin to medium bedded, very fractured, have a platy appearance, produce highly expansive soils, and are often highly folded adjacent to the faulted contact on the north with the Glendora Volcanics. Within the project area the exposed thickness of the Puente Formation is about 2,000 feet.

PDA nos. 9, 10 and a portion of 8 are underlain by the Puente Formation.

Glendora Volcanics (Tg)

The Glendora Volcanics exposed within the project area constitute but a small, much faulted and eroded remnant of a Middle Miocene age volcanic field whose original extent covered at least 35 miles from north to south and almost as much as east to west. In the project area the Glendora Volcanics consist of, in decreasing order of abundance, a series of andesite flows, tuff breccia,

and basaltic flows. The following presents a brief description of each of these rock types. The approximate location and extent of these various rocks is shown on Drawing No. 2 — Geologic Map.

Fine-grained Andesite (Tgf on map)

The oldest exposed rock unit of the Glendora Volcanics is a fine-grained to very fine-grained, massive andesite and associated red colored tuffaceous breccia. These rocks are usually light to dark gray on fresh (broken) surfaces and pale yellowish gray to greenish gray where weathered. Flow structure is almost always present, indicated by platy partings, with corrugations on weathered surfaces or the alignment of small mineral grains (i.e. feldspar) or collapsed vesicles. Close jointing/fracturing of these rocks facilitates disintegration so that smooth slopes characterize areas underlain by this member.

PDA nos 6 and 7 may be underlain by fine-grained andesite bedrock.

Calcic Andesite Flows (Tga on Map)

Calcic andesite flows represent one of the most abundant rock types associated with the Glendora Volcanics. It is typically gray, often with a lavender tint, and studded with abundant small feldspar crystals. In outcrop, the rock is well jointed/fractured, and flow banding can be seen locally. A rusty-weathering massive breccia of calcic andesite fragments, some of which are markedly vesicular, is locally associated with these rocks.

Portions of PDA nos. 3, 7, and 8 are situated above these calcic andesite flow rock units.

Tuff Breccia (Tgt on Map)

There are at least three sequences of tuff breccia within the project area. The northernmost exposure lies just south of Johnstone Peak and contains numerous scattered subangular fragments and blocks ranging in diameter from a fraction of an inch to over 10 feet in maximum dimension. The proportions of blocks to tuff matrix ranges from about 10 to 50 percent. The partly consolidated nature of these rocks results in weak topographic

expression, few outcrops, and susceptibility to landsliding. In most road cut outcrops, the deposit is generally chaotic with no sign of bedding. Occasional lenses and thin streaking of bedded tuff matrix occurs locally, whereas parts of the tuff breccia appears as volcanic mud flows and other tuff breccias. Located within the southern and central portion of the site are tuff breccias similar to that described above but contain a lower proportion of tuff matrix to blocks and also contain abundant shiny black needles of the mineral hornblend.

PDA nos. 1 and 2 are situated atop a large landslide derived from the tuff breccia, whereas portions of nos. 3, 4 and 8 lie atop these tuff breccia/volcanic rocks.

Basalt Flows (Tgb on Map)

A distinctive dark basaltic lava is exposed between Johnstone Peak and Sycamore Flat where it occurs as a single mass composed of several flows. Basaltic rocks are also found above the "spring" in Sycamore Canyon and in the vicinity of PDA no. 4. The basalt is black and vesicular, generally weathering dark purplish brown or dull gray, is moderately well jointed, hard and is the rock which produces the spring flow in Sycamore Canyon. Vesicles may be lined with opal, or filled with opal, calcedony, or calcite.

PDA no. 4 is the only development area situated above these basaltic rocks.

Throughout the area occupied by the Glendora Volcanics, intrusive diabase (i.e. dark colored granitic-type rocks) dikes cut the calcic andesite and basaltic lava in Sycamore Canyon, the tuff breccia near Johnstone Peak as well as the older metamorphic rocks which occupy the northernmost and eastern margin of the project site.

Metamorphic and Igneous Rocks (gn and gr on Map)

The oldest rocks within the project area, which are commonly referred to as "basement rocks" because they underlie all other rock types, consist of metamorphic (map symbol gn) and intrusive granitic-type igneous rocks (map symbol gr). In the area surrounding Johnstone Peak the dominant rock type consists of metamorphic rocks represented by

biotite feldspar angen gneiss which has been intruded (locally) by reddish colored granitic-type igneous rocks (mainly a dark colored medium to fine-grained hornblend diorite).

Elsewhere, the metamorphic basement rock complex within the eastern portion of the site, consists largely of quartz feldspar gneiss and biotite hornblend gneiss. These rocks have also been intrenched by granitic-type igneous rocks, as well as intrusive volcanic rocks associated with the younger Glendora Volcanics.

All of these metamorphic and igneous rocks lie within the National Forest boundaries. PDA no. 5 lies adjacent to steep mountainous terrain composed of these rocks.

Bedrock Structure

The bedrock structure within the project area is represented by much structural complexity insofar as geologic contacts are concerned. Rock units within the Glendora Volcanics that are fairly continuous locally become pinched off, and minor faulting is abundant. In fact, J.S. Sheldon (1955), who mapped much of the area, labeled it as "Zone of Faulting and Sliding" due to the complex geologic nature of geologic contacts and abundant landslides. It appears that the complex geologic structure within the project is the result of: (1) interconnected and interfingering volcanic flows and ancient flow avalanches (i.e. volcanic mud flows) and landslides; and (2) the fact that the project area is being "squeezed" between two faults, the Cucamonga Fault on the south and the northern branch of the Sierra Madre Fault on the north below Johnstone Peak. Internal to this structural block which is being squeezed on two sides, the geologic contacts between the Puente Formation and Glendora Volcanics, and the metamorphic rocks and Glendora Volcanics are fault contacts which dip steeply toward the mountains. Where observed, the fault contact between the Puente Formation and Glendora Volcanics is represented by a 20-foot ($\pm$) wide zone of intense brecciation and allied shearing. Given the apparent compressional (i.e. squeezing) faulting, bedrock strata within the Puente Formation has been highly folded within about one hundred feet of the fault contact with the Glendora Volcanics. This fault contact, as well as a branching fault splay, transects the southern portion of PDA no. 8. Similar east-west trending fault traces are

suspected within the north central portion of the site within the volcanic rocks, and border PDA nos. 1, 2 and 3.

Given the overall structural complexity of the site, the majority of the bedrock units, and possible even the older stream terrace deposits, have been rotated with bedding/layering dipping northerly (into the mountain) at moderate to steep angles (20 to 67 degrees). More steeply dipping strata/layers are noted in close proximity to the larger faults within the project area. Jointing and fracturing of both the sedimentary and volcanic rocks is very pervasive especially within the fine-grained andesite (symbol Tgf on the Geologic Map) and andesite flows (symbol Tga).

Economic Mineral Potential

There are no documented mines or mineral deposits located within the project area. Some quarrying/surface mining is reported to have occurred within the Glendora Volcanics, specifically within the area labeled "Tg" on the Geologic Map (Drawing No. 2). According to Mr. Sandy McHenry (personal communication, January 31, 1998), local quarrying of the volcanic rocks was performed in the past for railroad ballast. No information regarding production quantities are known.

The California Division of Mines and Geology (CDMG, 1987) has classified that portion of the project area underlain by volcanic, metamorphic and igneous rocks as a "Mineral Resource Zone (MRZ), MRZ-3" for sand and gravel/aggregate. MRZ-3 areas in hilly or mountainous terrain are underlain by sedimentary deposits of Tertiary age, crystalline basement rock or volcanic rock. Very little subsurface or surface data of the type needed to evaluate the suitability of these rocks for use in Portland cement is available. MRZ-3 areas located in areas underlain by alluvial deposits of Quaternary age, such as along the southern margin of the site, contain sand and gravel but not enough is known to delineate material suitable for aggregate.

Due to the presence of chalcedony, opal, and corbantes found in vesicle fillings and disseminated within the volcanic rocks, the deleterious nature of these substances (for production of aggregate for Portland cement) makes them generally unsuitable for exploitation as aggregate. The

metamorphic rocks on the other hand, may be suitable for crushed aggregate, according to the CDMG (1987).

The Quaternary age alluvial deposits within San Dimas Wash contain clean, coarse aggregate material to depths of 30 to 70 feet (CDMG, 1987). Alluvial materials from San Dimas Wash are carried to and mix with alluvium in the San Grabrial (alluvial) fan to the west, which is mined for aggregate. However, given the limited extent and current level of development in and around the San Dimas Wash, the economic potential of these deposits is considered to be low. Given the fine-grained nature of the rocks comprising the Puente Formation within the project area, the aggregate potential of these deposits are nil.

Groundwater

Groundwater within the project area is contained primarily within fractures in the volcanic rocks and within the quaternary alluvium and recent alluvial deposits beneath the San Dimas Wash. There is no indication that the metamorphic rocks contain appreciable amounts of groundwater. The only perennial springs in the area emanate from fractured volcanic rocks within Sycamore and Wildwood Canyons. Spring flow in Sycamore Canyon has been captured via a man-made tunnel and pipeline which reportedly extends several hundred feet, or more, horizontally into the mountain. The flow from this groundwater source is reported to be on an average about 7 gallons per minute. A small diameter above ground pipeline conveys a portion of this spring flow to a small ranch near the head of Shay Canyon. The amount of groundwater flow from the spring in Wildwood Canyon was not measured, but is likely to be similar to the spring flow in Sycamore Canyon.

In the vicinity of Sycamore Flat there are several above ground concrete water tanks that are reportedly fed by horizontal wells which have been drilled into the volcanic rocks a number of years ago. These horizontal wells likely top groundwater-bearing fractures within the tuff breccia unit of the Glendora Volcanics and yield only several gallons per minute. The current status of these wells is not known.

Groundwater within the Quaternary gravels and recent alluvial deposits in San Dimas Wash and near the mouth of Ham Canyon lies within the Foothill Groundwater Basin and represents the major source of groundwater within the project area. A number of wells have been drilled into these deposits over the past 70 years by various water purveyors.

Depth to groundwater within the foothills portion of the project area is not known with much certainty. It is likely that, based on the occurrence of groundwater captured from the various horizontal wells, the groundwater table within the volcanic bedrock areas occurs between 100 and 200 feet below the major ridgelines and within 20 to 50 feet of the ground surface within the lower reaches of the major canyons.

Depth to groundwater within the Quaternary gravels on the north side of the Cucamonga Fault and recent alluvium along the southern margin of the site is on the order of 20 to 50 feet below ground surface. The Cucamonga Fault acts as a barrier to groundwater flow, whereby groundwater levels are much ligher on the north side of the fault than those on the south.

1.4 Geologic Hazards

1.4.1 General

The geologic hazards within the project area are those associated with landslides and earthquakes. The landslide hazard within the project area is documented by at least 14 existing landslides, as shown on the Geologic Map, and the areas of potential earthquake induced landslides as shown on Drawing No. 3 — Seismic Hazards Zone Map.

Hazards associated with earthquakes include primary hazards (ground shaking and surface rupture) and secondary hazards (liquefaction, seismic settlement, seismically induced landsliding, tsunamis and seiches).

1.4.2 Faulting and Seismicity

The project area, like all of the Los Angeles Basin, is part of a very seismically active region. A number of faults in the Los Angeles area have been identified as active or are considered

potentially active. An active fault is defined by the State Mining and Geology Board as one which has "had surface displacement within Holocene time (about the last 11,000 years)" This definition does not of course, mean that faults lacking evidence for surface displacement within Holocene time are necessarily inactive. A fault may be presumed to be inactive based on satisfactory geologic evidence; however, the evidence necessary to prove inactivity is sometimes difficult to obtain and locally may not exist.

A potentially active fault is a fault which shows evidence of surface displacement during Quaternary time (last 1.6 million years). Two potentially active faults, the Cucamonga Fault on the south and the North Branch of the Sierra Madre Fault on the north, pass through the site and could produce surface rupture on these, and possibly other faults within the property. The potential exists for sympathetic movement (fault rupture triggered by an earthquake on a nearby fault) to occur on other faults and/or bedding plane shears within the project area. A major earthquake on the Sierra Madre or Cucamonga fault would likely be similar to the 1971 San Fernando or 1994 Northridge earthquake. During the 1971 San Fernando earthquake, the San Gabriel Mountains above Sylmar were raised up to 3 feet from their pre-earthquake elevation. Along with this uplift came limited, yet widespread secondary/sympathetic ground rupture in the foothills within several miles of the main fault trace. A major earthquake on the Cucamonga Fault, located beneath San Dimas Wash, could produce similar ground rupture effects within the project area.

Ground shaking accompanying earthquakes on any number of faults could be expected to be felt within the property. However, the intensity of ground shaking would depend upon the magnitude of the earthquake, the distance to the epicenter, and the geology of the area between the epicenter and the property, and topographic position within the site. A listing of recognized active faults and potentially active faults, their closest distances to the property, and the maximum expected earthquake along each fault is presented in Table 1. Also presented are generalized evaluations of maximum ground shaking on site for the maximum earthquakes and generalized predictions of the likelihood of such events occurring.

Table 1
Summary of Fault and Generalized Earthquake Information for Northern Foothills Development
San Dimas, California

Fault	Distance from Site (miles)	Largest Expected Earthquake (Moment Magnitude)	Expected Level of Ground Shaking at Site	Likelihood of Occurrence
Cucamonga	0.5	7.0	High to Very High	Moderate
Sierra Madre	0.5	6.7	High to Very High	Moderate
San Jose	5	6.5	High	Low
Clamshell-Sawpit	8	6.5	Moderate to High	Moderate
Elysian Park (Blind) Thrust Fault	10	6.7	Moderate to High	Moderate
Raymond	13	6.5	Moderate	Low
Whittier-Elsinore	14	6.8	Moderate	Moderate
San Andreas	17	7.8	Moderate to High	High
Malibu Coast/ Hollywood	21	6.4	Moderate	Low
Elsinore	24	6.8	Low to Moderate	High
Compton (Blind) Thrust Fault	25	6.8	Moderate	Moderate
San Jacinto	25	6.8	Low to Moderate	High
Newport-Inglewood	31	6.9	Low to Moderate	Moderate
Palos Verdes	37	7.1	Low to Moderate	Moderate

The most severe ground shaking within the site would be expected to accompany a large earthquake on either the Cucamonga or Sierra Madre Fault (zone). According to the 1997 Unified Building Code (UBC), the seismic ground-motion hazard within the site is based on a probablistic ground motion which would have a 10 percent probability of exceedance in 50 years (475 year return period). Ground motion is generally described as peak horizontal ground acceleration in percent "g" (gravity). For the project area, the peak horizontal ground acceleration for 10 percent probability in 50 years ranges between 0.5 to 0.8g (Petersen et al, 1997). The highest ground acceleration (i.e. 0.8g) would likely occur along the ridgetops within the site. It is in these sharply

defined topographic areas where the phenomena known as "ridgetop shattering" occurs due, in part, to amplification of the ground acceleration. The effects of shattering (i.e. significant fracturing) of the rock along ridgetops/lines is evident within the site where roadcuts have exposed the highly fractured volcanic rocks beneath steep sided ridgetops.

1.4.3 Landslides

There are at least 14 significant landslides within the project area. As shown on the Geologic Map, these landslides cover an area of several acres, up to about 130 acres. The largest of the mapped landslides shown on the Geologic Map encompasses all of PDA nos. 1 and 2. Other smaller, but no less significant, landslides border, or are contained within, PDA nos. 5, 8, 9 and 10. As can be noted on the Geologic Map, the areas most susceptible to landsliding are underlain by: (1) the tuff breccia unit of the Glendora Volcanics (map symbol Tgt); (2) on northwesterly-facing slopes underlain by the Puente Formation, and; (3) north-facing slopes underlain by metamorphic rocks. The majority of the landslides within the project area are historical in nature. However, as shown on Drawing No. 3, the majority of the area within and surrounding PDAs are considered susceptible to earthquake induced landsliding. It is very likely that the more significant landslides which have been mapped within the site occurred during major earthquakes in the vicinity of the property.

Factors conducive to the formation of the landslides within the area include: (1) the inherently weak nature and highly fractured (due to faulting) character of the tuff breccia unit in the Glendora Volcanics; (2) unsupported bedding planes in the Puente Formation and layers within the metamorphic rocks; and (3) the location and extent of faults which commonly form either the lateral margin(s) or headscarp area of the larger landslides. The faults essentially act as a continuous plane of weakness whereupon landslides may originate. Oversteepening of slopes, as well as, elevated groundwater levels are also likely contributors to the formation of the landslides.

1.4.4 Liquefaction

Liquefaction is defined as the transformation of a granular material from a solid state into a liquefied state as a consequence of increased pore water pressure which occurs during an

earthquake. Four types of general failure commonly result from liquefaction: lateral spreading, flow failure, ground oscillation and loss of bearing strength.

According to the 1997 Seismic Hazard Zone Map prepared by the California Division of Mines and Geology (see Drawing No. 3), the alluvial soils within and surrounding PDA no. 5 are considered to be potentially liquefiable and subject to permanent ground displacement. Based on probable site conditions in areas identified as having a potential for liquefaction, any one of the four types of permanent ground displacement discussed above could occur with the area.

1.4.5 Tsunamis

Given the great distance between the ocean and the project area, the likelihood of a tsunamis affecting the site is nil.

1.4.6 Seiche

Seiche is a term that is used to describe oscillatory waves that are created within an enclosed body of water (i.e. lake or reservoir) due to strong vibratory ground motion during an earthquake. The closest inland body of water to the project site is the San Dimas Reservoir, located about 3,000 feet northerly of PDA no. 5. Based on the location of the reservoir and the unlikely potential for failure of the supporting dam, the likelihood of a seiche impacting the site is considered low.

2.0 IMPACT

The geologic and landform information contained herein is adequate to analyze the potential effects on earth resources and landforms. However, there have been no site specific geotechnical studies performed within any of the PDAs. Design-level studies will be required in order to provide the adequate level of information to assess appropriate mitigation concepts and properly design and engineer any future development.

Based on the current project description, the proposed development will include residential development within the 10 areas known as "Potential Development Areas (PDAs). At the present time the development parcels within the various PDAs will vary from about 1.5 to 5 acres. The PDAs were established in a previous environmental screening study (LSA, 1997) and focused only on topographic considerations and existing land use/ownership. The majority of the site is confined within National Forest Service boundaries.

2.1 Thresholds of Significance

Earth resource and/or topographic impacts on the proposed development could be considered significant if any of the following occur:

- Exposure of people or property to substantial geological hazards, such as landslides, mudslides, ground failure or similar hazards, or soil and/or seismic conditions so unfavorable that they could not be overcome by design using reasonable construction and/or maintenance practices;

- Location of a structure within a mapped hazard area or within a structural setback zone; location of a structure within a Fault-Rupture Hazard Zone, or within a known active fault zone, or an area characterized by surface rupture that might be related to a fault;

- Triggering or acceleration of geologic processes, such as landslides or erosion that could result in slope failure;

- Substantial irreversible disturbance of the soil materials at the site or adjacent sites, such that their use is compromised;
- Modification of the surface soils such that abnormal amounts of windborne or waterborne soils are removed from the site;
- Earthquake induced ground shaking capable of causing ground rupture, liquefaction, settlement, or surface cracks resulting in the substantial damage to people and/or property;
- Deformation of foundations by expansive soils (those characterized by shrink/swell potential);
- Modification of the on-site soils (i.e., grading) in a manner that results in decreased stability for adjacent developments;
- On-site disposal systems which could cause a health hazard to on-site residences, adjacent developments or degrade ground/surface water quality.

2.2 Effects Found Not to be Significant

Neither a Tsunami or Seiche is considered to have a significant impact due to the distance from the ocean or inland body of water.

2.3 Potentially Significant Impacts

The most significant potential impacts to site development would be caused by changes in existing topogaphy, landslide and landslide-related events, including existing unstable landslide terrain, potential surface rupture on one or more faults within the site, erosion of surficial soil deposits, ground shaking, and liquefaction.

Impact 2.3.1 - Landslides. Based on information currently available, development within PDA nos. 1, 2, 3, 5, 8, 9 and 10 could be significantly impacted by renewed landslide movement resulting from strong ground motion from nearby earthquakes, erosion at the toe of the landslide(s), or adverse conditions created during grading. PDA nos. 4, 6 ahd 7 are not situated within or adjacent to any existing landslides. However, according to the

Seismic Hazard Zone Mapping by the C.D.M.G, these areas are susceptible to landsliding during a major seismic event. In fact, approximately 50 percent of the entire project area has been identified by the CDMG as susceptible to seismically induced (earthquake generated) landsliding. Given the topographic/land ownership constraints within the area, mitigation may not be possible in some areas.

Impact 2.3.2 - Ground Surface Rupture

During a major earthquake on either the Cucamonga or Sierra Madre fault, ground surface rupture on or in the vicinity of the fault (zone) could occur, thereby creating a significant impact. Although none of the PDAs are situated on or within either of these two fault zones, a strong earthquake on either of these faults could trigger secondary (sympathetic) ground rupture on other faults/shears in the area. There is also the potential of surface rupture along bedding planes and other geologic discontinuities within the sedimentary bedrock of the Puente Formation and, possibly to a lesser degree, within the Glendora Volcanics.

Ridgetop shattering is also considered as a significant impact as it relates to ground deformation during strong ground motion during a major nearby seismic event. However, this phenomenon typically involves inplace fracturing of rock and no appreciable ground displacement.

Impact 2.3-3 - Ground Shaking. Given the highly seismic character of the southern California region, moderate to severe ground shaking can be expected within the project area due to moderate to large earthquakes on nearby fault zones. The impact would be considered significant if not mitigated by proper design and/or construction.

Impact 2.3-4 - Soil Erosion. Essentially all the surficial soil deposits are considered highly erodible. Adverse drainage could promote accelerated soil erosion which could lead to mud flows and surficial slope failures on either manufactured or natural slopes. This impact would be considered significant if not mitigated.

Impact 2.3-5 - On-site Disposal Systems. Proposed residential development within the site will likely include the use of on-site sewage disposal systems. These systems, which include trench/leach fields and or seepage pits will likely require approval by the Los Angeles County Department of Health or other local health authority/agency. The factors to be assessed in evaluating the type and extent of the use of a particular disposal system include: the nature and depth of the surface soils, depth to impervious strata/bedrock, depth to groundwater, natural or finished ground slope in the disposal area, percolation rate of the soil/bedrock, lot size, required setbacks, drainage courses or any other pertinent factors.

Based on observations made during our field reconnaissance and compilation of soil and geologic data, it appears that the near surface conditions beneath the various PDAs are conducive to the use of trench leach fields for sewage disposal. Given the fractured nature of much of the bedrock within the area, the use of seepage pits also appears to be a reasonable alternative. However, major constraints to the use of such systems within the limits of the PDAs include topographic conditions (i.e. steep slopes), areas underlain by unstable landslides, and location of nearby major drainage courses, and spring flow in Wildwood and Sycamore Canyons.

Impact 2.3-6 - Construction Related Impacts. Grading activities within the project area would modify current landforms/topography. The greatest changes to existing topography would occur along the tops of ridges, on natural terrace-like surfaces, and atop other more gently sloping terrain where residential uses are planned.

2.4 Mitigation

Numerous controls are imposed on new developments through the permitting process. In general, public agencies regulate development with the intent to reduce potential geologic impacts using the guidelines of the California Building Code, the Alquist-Priolo Fault Rupture Hazard Zones, Seismic Hazards Zones, local land use policies and zoning, and project-specific mitigation measures, such as the need for adequate waste disposal systems. In addition, municipalities

require that grading plans and erosion control measures be developed and implemented for most proposed projects.

Standard Conditions (SC) of Approval

SC 2.4-1 The applicant shall submit a geotechnical report for review and approval by the Director of Public Works. This report will primarily involve assessment of potential soil related constraints and hazards such as slope instability, settlement, liquefaction, or related secondary seismic impacts, where determined to be appropriate by the Director of Public Works. The report shall also include an evaluation of potentially expansive soils and recommend construction procedures and/or design criteria to minimize the effect of these soils on the proposed development. All reports shall recommend appropriate mitigation measures and be completed in the manner specified by the Los Angeles County Grading Manual and the City of San Dimas Subdivision Ordinance.

SC 2.4-2 The applicant shall submit a report by an engineering geologist indicating the ground surface acceleration and potential ground surface rupture from earth movement for the various PDAs. All structures within the development shall be constructed in compliance with the g-factors as indicated by the geologist's report. Calculations for footings and structural members to withstand anticipated g-factors shall be submitted for review and approval by the Director of Public Works.

SC 2.4-3 The California Building Code (CBC) is contained in Title 24 of the California Code of Regulations, and adopts the Uniform Building Code (UBC) by reference. Title 24 includes building and related codes of the State of California affecting public buildings and a large percentage of private owned structures. Building standard regulations governing the process of plan review, permit issuance, construction inspection, license issuance, fees for these activities and other related requirements are regulations "that implement or enforce" building standards. Local codes

adopted by cities and counties may be more restrictive than Title 24, but may not be less restrictive.

SC 2.4-4 All grading and improvements on the subject property shall be made in accordance with the Grading Ordinance and to the satisfaction of the director of Public Works. Grading shall be in substantial compliance with a tentative tract map and the proposed grading that is approved by the Planning Commission. Surety to guarantee the completion of the project grading and drainage improvements, including erosion control, shall be posted to the satisfaction of the Director of Public Works and the City Attorney.

SC 2.4-5 The applicant shall exercise special care during the construction phase of this project to prevent any off-site situation. The applicant shall provide erosion control measures and shall construct temporary desiltation/detention basins of a type, size and location as approved by the Director of Public Works. The basins and erosion control measures shall be shown and specified on the grading plan and shall be constructed to the satisfaction of the Director of Public Works prior to the start of any other grading operations. Prior to the removal of any basins or erosion control devices so constructed, the area served shall be protected by additional drainage facilities, slope erosion control measures and other methods as may be required by the Director of Public Works. The applicant shall maintain the temporary basins and erosion control devices until the Director of Public Works approves of the removal of said facilities.

SC 2.2-6 The applicant shall submit a grading plan, in compliance with City standards, for review and approval by the Director of Public Works. All grading work must be in compliance with the approved plan and completed to the satisfaction of the Director of Public Works. All slopes within this project shall be graded no steeper than 2:1, unless otherwise approved by the Director of Public Works.

SC 2.4-7 The applicant shall submit a grading, drainage and retaining wall plan with a geotechnical soils report for review and approval by the Director of Public Works.

SC 2.4-8 The CBD contains provisions which regulate the design and construction of excavations, foundations, retaining walls and other building elements to control the effects of seismic ground shaking and adverse soil conditions. Any new development within the project area will be required to adhere to the regulations set forth in the UBC, at a minimum.

SC 2.4-9 Any grading required outside of a PDA boundary will require the applicant to either obtain slope easements or off-site grading agreements in a form suitable for recording from the affected applicant(s).

SC 2.4-10 The applicant shall submit erosion control plans for all slopes adjacent to major arterial and local collector roadways for review and approval by the Director of Public Works.

2.5 Mitigation Measures

2.5.1 - Mitigation Measure. Given the amount of slope instability (i.e. landsliding) within the area and the proximity to major earthquake faults, the hazards associated with strong ground motion and possible surface rupture, in-depth, site-specific geotechnical studies will be required to evaluate whether development within any of the 10 PDAs is not geotechnically feasible. At a minimum such studies should follow CDMG: Special Publication 17 (dated 1977), "Guidelines for Evaluating and Mitigating Seismic Hazards in California." It is suggested that the scope of work presented in these "guidelines" be performed prior to any form of foundation investigation, unless such an investigation is to establish setbacks from known geologic hazards.

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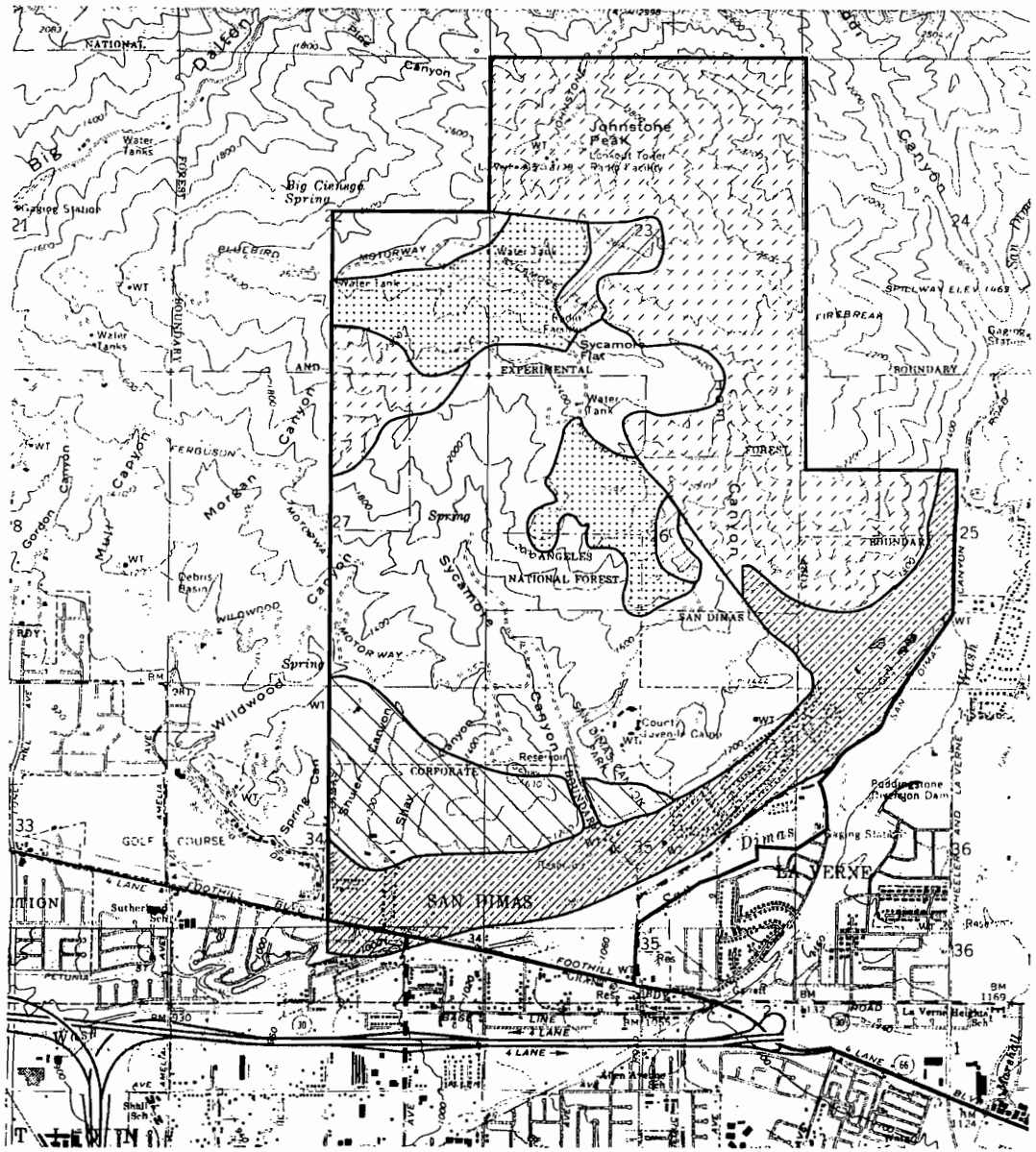


U.S.D.A SOIL ASSOCIATION

- Vista-Armagosa
- Gilroy
- Soper & Ramona
- Diablo Altamont
- Hanford
- Yolo-Hanford
- Rockland

NOTES: 1) Base map from U.S.G.S. Topographic Maps, Glendora, California Quadrangle (dated 1966, photorevised 1972) and San Dimas, California Quadrangle (dated 1966, photorevised 1981.)

0 2000 4000
SCALE IN FEET

N

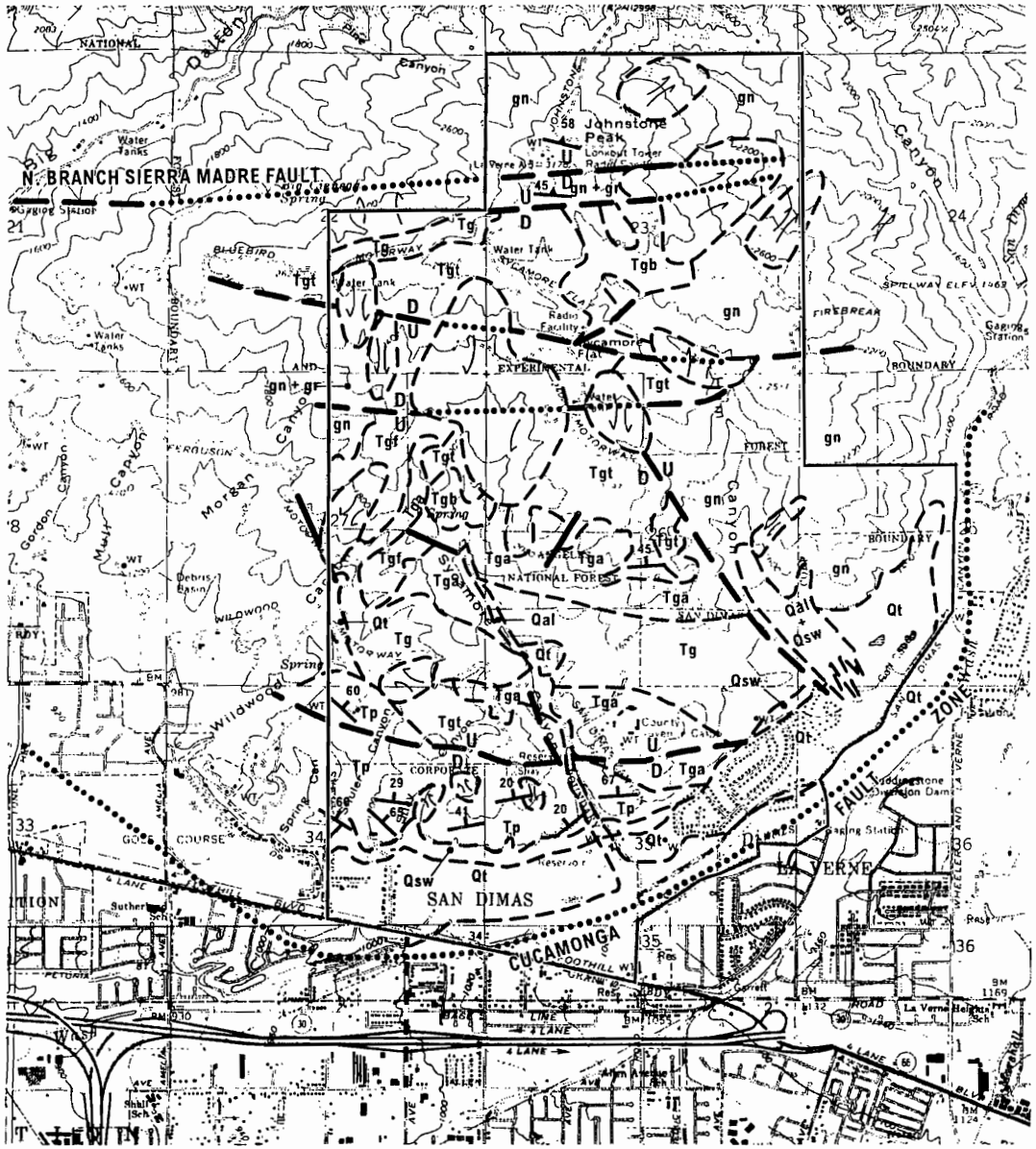
SOILS MAP

NORTHERN FOOTHILLS EIR

Converse Consultants
Geotechnical Engineering and Applied Sciences

Scale	1" = 2000'
Date	1/15/99
Prepared By	KLF
Checked By	DSM
Approved By	DSM
Project No.	98-32910-01
Drawing No.	1

Approved by_____



EXPLANATION

- Qal — Alluvium
- Qsw — Slopewash
- Qls — Landslide materials
- Qt — Terrace deposits (older alluvium)
- Tp — Puente Formation, marine siltstone, sandstone, siliceous shale and conglomerate
- Tg — Glendora Volcanics, undifferentiated
  - Tga — Andesite flows (calcic)
  - Tgb — Basaltic flows
  - Tgt — Tuff breccia (mainly andesite)
  - Tgf — Fine grained andesite
- gr — Granitic rocks, undifferentiated
- gn — Gneissic rocks, includes dikes of diorite

SYMBOLS

- Geologic Contact, approximately located
- 67 — Strike and dip of bedding
- 45 — Strike and dip of foliation
- Fault, dotted where concealed; U = upthrown side, D = downthrown side
- Direction of landslide movement

NOTES:

1) Base map from U.S.G.S. Topographic Maps, Glendora, California Quadrangle (dated 1966, photorevised 1972) and San Dimas, California Quadrangle (dated 1966, photorevised 1981.)
2) Geology modified from Shelton, J.S., 1955; and Streitz, 1969.

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SCALE IN FEET

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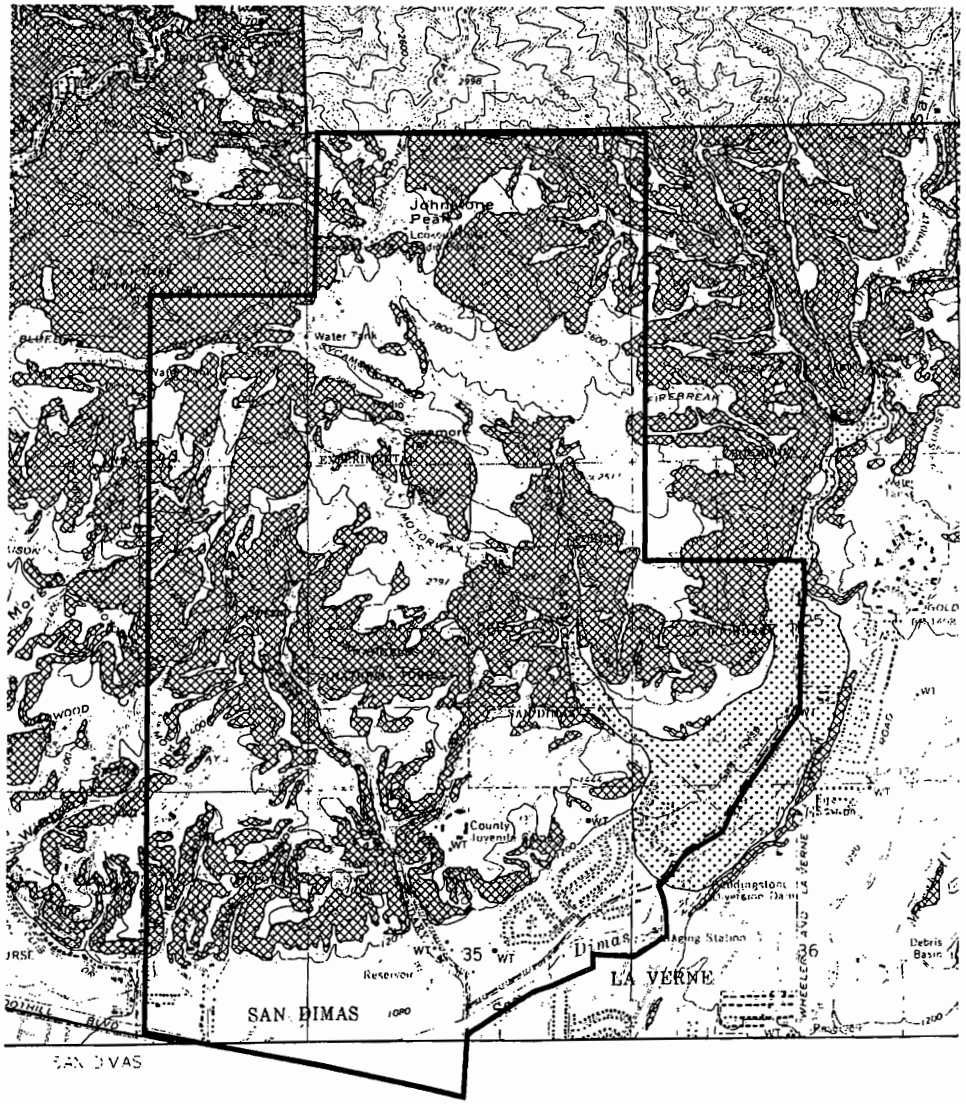
GEOLOGIC MAP

NORTHERN FOOTHILLS EIR

Scale: 1" = 2000'
Date: 1/15/99
Project No.: 98-32910-01
Prepared By: KLF
Checked By: DSM
Approved By: DSM
Drawing No.: 2

Converse Consultants — Geotechnical Engineering and Applied Sciences

Approved by_____



MAP EXPLANATION

Zones of Required Investigation:

Liquefaction

Areas where historic occurrence of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

Earthquake–Induced Landslides

Areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

Source: California Division of Mines and Geology Seismic Hazards Zone Map, Glendora Quadrangle Preliminary Map, September 30, 1998.

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SCALE IN FEET

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Approved by

SEISMIC HAZARDS ZONE MAP

NORTHERN FOOTHILLS EIR

Scale: 1" = 2000'
Date: 1/15/99
Prepared By: KLF
Checked By: DSM
Approved By: DSM
Project No: 98-32910-01
Drawing No: 3

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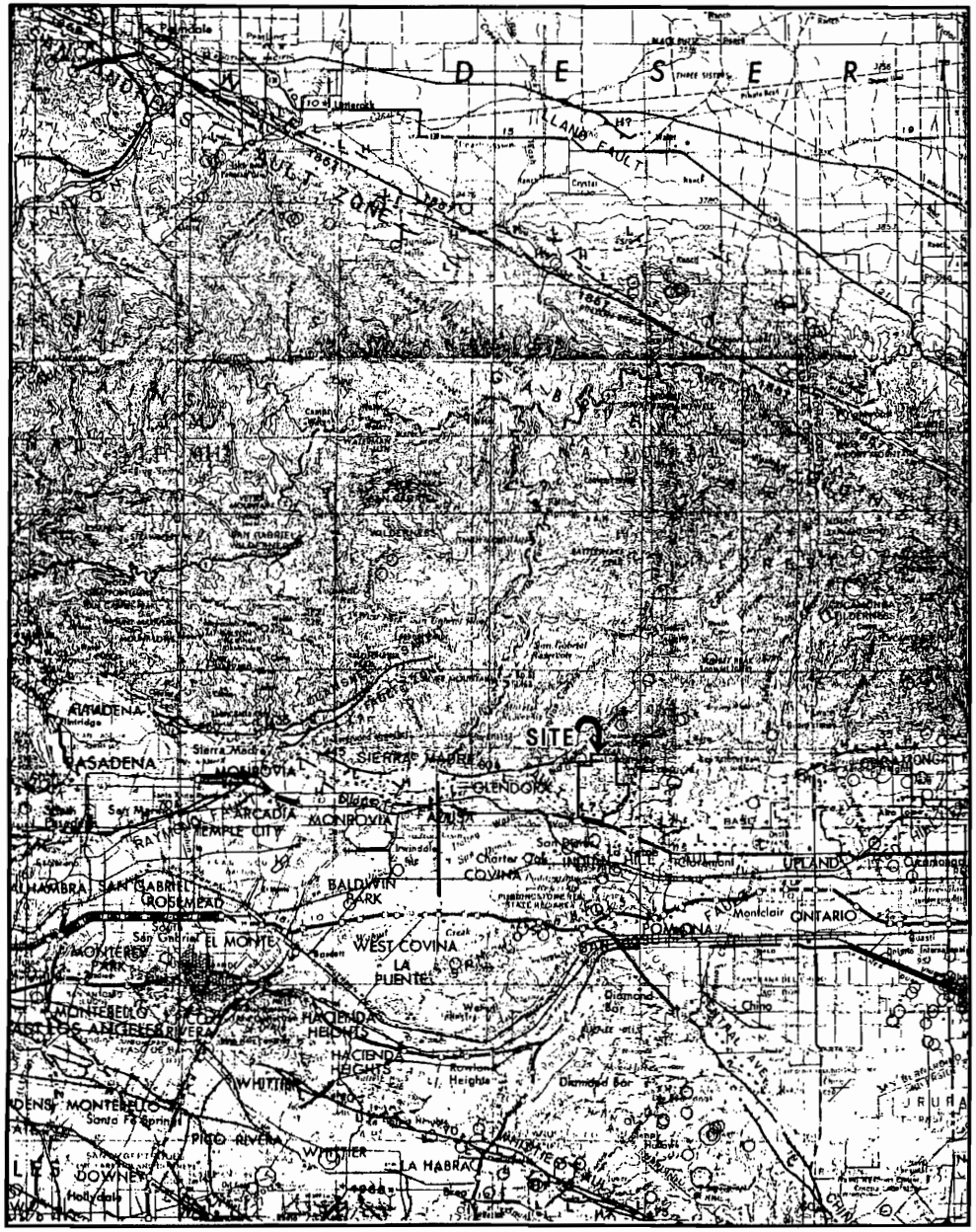


Approved by _____

EXPLANATION

1971
60 L H? ?

Late Quaternary fault—Dotted where concealed onshore; dashed where offshore (inferred from acoustic-reflection profiles); queried where existence uncertain; star where fault trace too short to show at scale. Bar and ball on relatively downthrown side. Sawteeth on upper plate of thrust fault. Representative dip of fault shown where known. Letter indicates geologic time period within which latest surface faulting is known to have occurred: H, Holocene; L, late Quaternary; queried where age uncertain. Date indicates most recent historical surface faulting; queried where historical occurrence is uncertain

Epicenters of earthquakes ($M_L \geq 2.0$) occurring in 1978–84, showing corresponding magnitude range

5.0–5.9

4.0–4.9

3.0–3.9

2.0–2.9

SCALE 1:250 000

5 0 5 10 15 20 MILES

5 0 5 10 15 20 25 30 KILOMETERS

CONTOUR INTERVAL 200 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

N

From: Joseph I. Zlony and Lucile M. Jones
1989

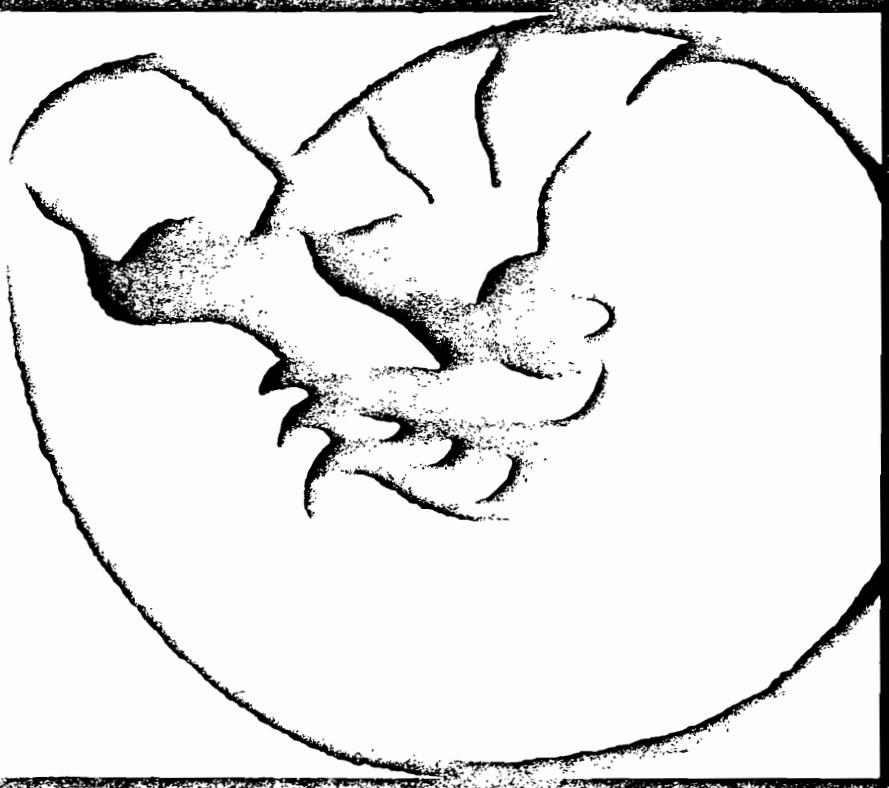
FAULT AND SEISMICITY MAP

NORTHERN FOOTHILLS EIR

Converse Consultants — Geotechnical Engineering and Applied Sciences

Scale	1" = 2000'
Project No	98-32910-01
Date	1/15/99
Drawing No	4
Prepared By	KLF
Checked By	DSM
Approved By	DSM

15.6 Cultural Resources Study



RMW Paleo Associates

Paleontology
Archaeology
History

AUTHOR: Patrick O. Maxon

PRINCIPAL INVESTIGATOR: Ronald M. Bissell, R.P.A.

DATE: January 1999

TITLE:	**SUBMITTED BY:**	
Review of Cultural Resources for Draft and Final Environmental Impact Reports for the Northern Foothills Implementation Program, City of San Dimas, California	RMW Paleo Associates Archaeology Paleontology History 23392 Madero, Suite L Mission Viejo, California 92691 (949) 770-8042 FAX (949) 458-9058	 Cottonwood Triangular Projectile Point, Rose Canyon Variant, collected by RMW Paleo, 1994

SUBMITTED TO: Robert Bein, William Frost & Associates
14725 Alton Parkway
Irvine, California 92618-2069

PROJECT NUMBER: RMW Project Number 98-1315

USGS QUADRANGLE: USGS San Dimas, California, 1966; Photorevised 1981 and Glendora, California, 1966; Photorevised 1972

ACREAGE: 2,976 Acres

KEYWORDS: San Dimas, Los Angeles County, Township 1 North, Range 9 West, San Bernardino Base and Meridian, CA-LAN-825 & -2054H

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MANAGEMENT SUMMARY/ABSTRACT

Purpose and Scope: The City of San Dimas, after completing an Initial Study (RBF 1998), has determined that a significant environmental effect will be caused by the Northern Foothills Implementation Program. Therefore, in accordance with the *California Environmental Quality Act* (Sections 21000-21177), an Environmental Impact Report (EIR) is required prior to implementation of the project. This report fulfills the cultural resources requirement for the EIR. The cultural resources study includes an archaeological literature review and recommendations based on the results of the review.

Dates of Investigation: The literature review was conducted on 11 January 1999. This report was completed on 1 February 1999.

Findings: Two archaeological sites (CA-LAN-825 and -2054H) have been recorded on the property. Five previous archaeological reconnaissances have resulted in the examination of a combined total of only 25 acres of the 2,976 acre parcel. This work is described in five reports.

Recommendations: It is recommended that each individual property owner/applicant be responsible for archaeological cultural resources studies specific to each individual parcel to be developed. The applicant shall be responsible for mitigation measures to properly manage any cultural resources discovered. Cultural resources studies must include: completion of a literature review for the particular project area, consultation with the appropriate Native American group if required, reconnaissance of the study area and mitigative treatment of any resources discovered. Also, any projects with the potential to impact archaeological sites CA-LAN-825 and/or CA-LAN-2054H (the only two recorded archaeological sites on the entire property) must undertake to evaluate their condition and importance through test excavation and archival research. In addition, the "tunnels" described by LSA (1998:2-41) must be formally recorded and evaluated by the proponent of any project with the potential to disturb them.

Disposition of Data: This report will be filed with the South Central Coastal Information Center, University of California, Los Angeles; Robert Bein, William Frost and Associates (RBF); and with RMW Paleo Associates, Inc.

CONTRACTING INFORMATION/INTRODUCTION

Contract Data: The City of San Dimas is preparing an Environmental Impact Report for the Northern Foothills Implementation Program. RMW Paleo Associates, Inc. was contracted by Robert Bein, William Frost & Associates (RBF) to perform a review of cultural resources research conducted on the property to date. The schedule for completion of the project is unknown.

Purpose: This study was completed under the provisions of the *California Environmental Quality Act* (CEQA), Public Resources Codes 21083.2 and 21084.1. Appendix K (currently in the process of being amended) of the CEQA guidelines, requires that if development is unavoidable, significant impacts to *important* (CEQA definition) archaeological sites must be reduced to a level of insignificance through avoidance, preservation or excavation (Governor's Office of Planning and Research 1996). According to Appendix K, Section III of CEQA, an important archaeological resource is one which:

A. Is associated with an event or person of:
   1. Recognized significance in California or American history, or
   2. Recognized scientific importance in prehistory
B. Can provide information which is both of demonstrable public interest and useful in addressing scientifically consequential and reasonable or archaeological research questions;
C. Has a special or particular quality such as oldest, best example, largest, or last surviving example of its kind;
D. Is at least 100 years old and possesses substantial stratigraphic integrity; or
E. Involves important research questions that historical research has shown can be answered only with archaeological methods.

In September 1992 the *California Register of Historical Resources* (California Register) was created. Its purpose is to identify the state's historical resources and to indicate which properties are to be protected from substantial adverse change (Office of Historic Preservation 1996:3). The criteria for listing resources on the California Register were expressly developed to be in accordance with previously established criteria developed for listing on the *National Register of Historic Places* (NRHP). A property must be *important* at the local, state or national level under the same (with minor variations) criteria as those for the NRHP (OHP 1996:5). The criteria are very similar to those created for CEQA. One important difference, however, is that for a resource to be considered *important* under the California Register, it need only be at least 45 years old as opposed to the 100 years required by CEQA. Most historical resources that are at least 50 years old are potentially eligible for listing on the California Register and must be evaluated. The Office of Historic Preservation recommends recording all cultural resources over 45 years old. The 45 year criteria recognizes that there is often a five year lag between resource identification and the date when planning decisions are made (Office of Historic Preservation 1995:2).

Undertaking: The proposed project involves a General Plan Amendment and Zone Change/Specific Plan. The General Plan Amendment will amend the San Dimas General Plan text to create a "Northern Foothills" land use designation and to define policies and requirements for development specific to the Northern Foothills area consistent with the "Northern Foothills Development Strategy." The Zone Change/Specific Plan will create either a new zone or specific plan to implement the policies and requirements of the General Plan and the adopted development strategy (RBF 1998:8).

Project Limits: The study area is 2,976 acres in size and is generally bordered by the City of La Verne to the southeast, residential developments to the south, the City of Glendora to the west and extends into the Angeles National Forest to the north and northeast,. Map 1 is a portion of the USGS 1 by 2 degree map, San Bernardino, California, depicting the general vicinity of the study area. Map 2 is composed of portions of the USGS quadrangles, Glendora and San Dimas, California, depicting the study area boundary.

Personnel: The examination of literature review materials and the production of this report was accomplished by Patrick O. Maxon. Ronald M. Bissell, R.P.A., served as Principal Investigator and reviewed the study. Résumés for both individuals are contained in Appendix A.

The Kelly Barn, Documented by RMW Paleo, 1994

RMW Paleo Associates
Archaeology
Paleontology
History

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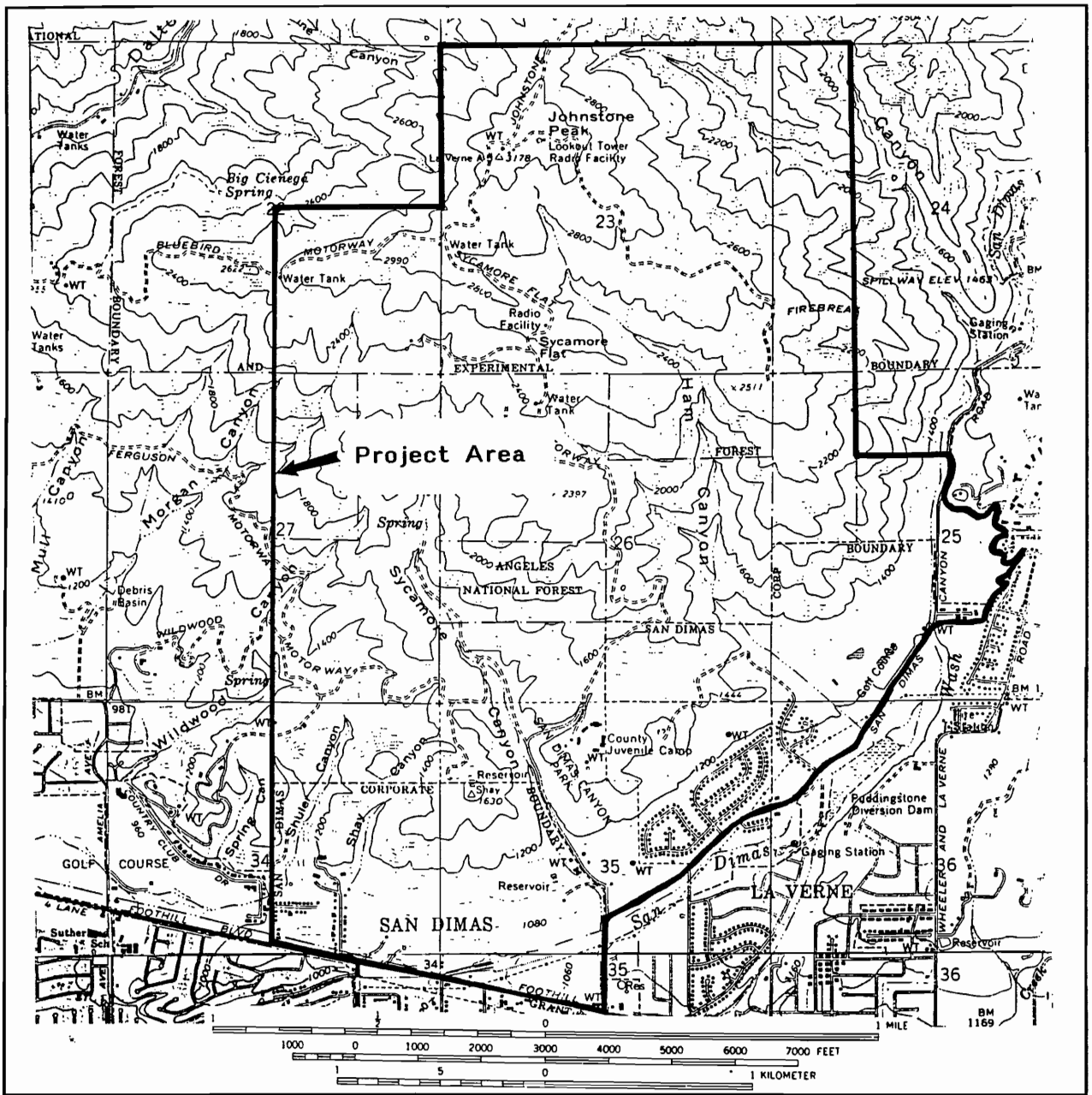
(949) 770-8042
FAX (949) 458-9058

Map 1: PROJECT VICINITY

Portion of USGS 1 by 2 Degree, San Bernardino California, 1958, Revised 1969.

Scale = 1:250,000

N



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Steatite Bird Effigy, Recovered by RMW Paleo, 1993

Map 2: PROJECT AREA

Portion of USGS 7.5 Minute Quadrangles, Glendora, California, 1966; Photorevised 1972 and San Dimas, California, 1966; Photorevised 1981

Map reduced to 75% of original

Scale = 1:24,000

SETTING

Natural: The San Dimas study area lies in the southern reaches of the Angeles National Forest (San Dimas Experimental Forest), north of the City of San Dimas and east of the City of Glendora. Of the property's 2,976 acres, 1,280 acres are Angeles National Forest land and 724 acres are developed with residential complexes, parks, a golf course, equestrian facilities, commercial developments and agricultural lands. The remaining 972 acres is open land that includes steep canyons and hillsides supporting chaparral with some grasslands, coastal sage scrub, oak woodland and riparian woodland habitat areas (LSA 1998:2-1). See LSA (1998) for a detailed description of current land use.

The study area is in the easternmost portion of the San Gabriel Mountains, part of the Transverse Range Geomorphic Province, which forms a major structural block of the earth's crust between the San Andreas fault on the north and the Sierra Madre fault on the south. Elevations range from 3,178 feet above mean sea level (AMSL) at Johnstone Peak in the northern extreme of the study area to approximately 1,000 feet AMSL along Foothill Boulevard in the southern end.

The general climate of the study area vicinity is described as Mediterranean, with temperatures rarely exceeding 35 degrees Celsius or dropping below five degrees Celsius. Rainfall occurs primarily between November and April and averages between 25 and 40 centimeters per year. The current climatic conditions did not prevail during the entire span of time that man has been present in the area. Heusser (1978) suggests that pine forests may have occupied the coastal regions from roughly 10,000 to 6,000 B.C.E. (Before the Common Era). The climate then became warmer and drier, resulting in replacement of the pine forests by oak woodland and grassland communities. Sage scrub and chaparral communities became pronounced during the few centuries preceding the Common Era (C.E.)

Cultural:

Prehistoric: The archaeological heritage of California is quite rich, probably more so than any other North American region north of Mexico. However, the archaeology of California is not well known. The Native Californians were generally quite peaceful and did not often offer warlike resistance to European settlement. Consequently, they did not gain great notoriety during the settlement period. Also, the original Californians were first under the control of the Spanish and then the Mexican governments and only later, after much of their culture had been destroyed by disease and displacement, did they come under the control of the United States government. There was only a minor Native American presence remaining in California when it became a United States possession and massive development began. Consequently, very little interest in the natives and their prehistory was initially generated. It was many years later before the size, complexity and extent of archaeological deposits in the state became apparent.

Humans have been present in the New World since perhaps 10,000 to 11,000 B.C.E. There is growing evidence, however, that humans were present long before that date (Dixon 1992). Linguistic and genetic studies suggest a date of 20,000 to 40,000 years ago as being more realistic

(LA Times 1998). The evidence of earlier occupation is not yet conclusive, but it is beginning to be accepted by archaeologists. The few generally accepted remains suggest a very small, mobile population apparently dependant on hunting of large game animals as the primary subsistence strategy. Other sources were certainly exploited, but the bulk of the traces remaining today are related to game hunting. (Chartkoff and Chartkoff 1984, Moratto 1984).

Chartkoff and Chartkoff (1984) identify the earliest portion of the archaeological sequence - to about 9,000 B.C.E. - as the Paleo-Indian Period. The surviving material culture of this period consists primarily of large, extremely well made projectile points and large but crude tools, such as scrapers and choppers. Such an assemblage was utilized to exploit the large game animals available to Pleistocene Era populations. Encampments were not permanent, but were probably sited near a major kill. Occupation would have persisted only until the resources of that kill were exhausted. It is probable that the Paleo-Indians lived in groups no larger than extended families and that contact with other such groups was infrequent. The Pleistocene came to an end sometime around 9,000 B.C.E., and the large game animals gradually became extinct. This major change in resource availability forced a major change in subsistence strategies.

A general chronology has been developed for the Southern California coastal region by Wallace (1955) for the time subsequent to the Paleo-Indian Period:

The *Millingstone Horizon* people (ca. 5,500-1,500 B.C.E.) practiced a mixed hunting and gathering food procurement strategy. Game hunting still played an important role in the economy, but by this time the Native Americans had learned to exploit the hard seed resources of the coastal sage scrub and chaparral ecological communities. The rapid extinction of the large mammals that the Paleo-Indian had previously been exploiting necessitated this shift in resource exploitation. The principle implements used to process the seeds - manos and metates - appear in large numbers for the first time in this horizon, and are especially numerous near the end of the period. Other specialized tools were developed to process the increased resources utilized by Millingstone people. Bone tools and shell items are uncommon; probably having decomposed over time. Settlement size seems to have increased and an annual round of seasonal migrations may have been practiced as movements coincided with ripening vegetal resources. Some formal burials are also evident.

The *Intermediate Horizon* (ca. 1,500 B.C.E. to C.E. 1,000), is characterized by a shift away from primarily vegetable food exploitation to a hunting and maritime subsistence strategy. In general, the use of groundstone implements gives way to the production of small, chipped stone tools, such as projectile points, suitable for hunting. It is during this time that the mortar and pestle were introduced. The mano and metate continued to be used on a somewhat reduced scale, but the introduction of the mortar and pestle signaled a shift away from the processing and consuming of hard seed resources to that of the acorn. The acorn then became the staple of the California Native Americans up to European contact.

In the *Late Prehistoric Horizon*, there was a greater use of food resources with more land and sea mammal hunting to complement collecting. The material culture in the Late Horizon was more complex. More classes of artifacts were being produced and they exhibited a more sophisticated degree of workmanship. The recovery of a greater number of small, finely chipped projectile points suggests a greater utilization of the bow and arrow. Other items include steatite containers, shell fishhooks, perforated stones, bone tools, personal ornaments, asphalt adhesive and elaborate mortuary customs (Wallace 1955:195).

During the final centuries prior to Spanish contact, the archaeological record reveals great increases in population. Some villages contained as many as 1,500 persons. Apparently, many of these settlements were occupied throughout the year rather than seasonally.

During the Late Prehistoric, emigrants from the Great basin appeared in the Los Angeles and Orange County area. These peoples either were very quick to adopt most of the local traits, or brought a similar material culture with them, because it is difficult to separate the archaeological assemblages of the emigrants from those of the indigenous peoples on the basis of artifact typology alone.

Ethnographic: The current study area was inhabited by a Native American group ethnographically known as the Gabrielino. The names the Native American groups applied to themselves are largely unknown; we know them by the names the Spanish coined as they moved into Native American territories. The name "Gabrielino" identifies those people who were under the control of the Spanish Mission San Gabriel.

The Gabrielino language, as well as that of others, including the Luiseño to the southeast, and the Serrano to the east, was derived from the Takic family; part of the Uto-Aztecan linguistic stock, which can be traced to the Great Basin area (Driver 1969). This language group represents an origin quite different from that of the Chumash to the west and the Ipai and Tipai to the south. Their language is derived from the Hokan stock of the Yuman language family originating in the American southwest. Linguistic analysis suggests that at one time (probably before 500 B.C.E.) the entire southern California coastal region was populated by Hokan speakers who were gradually separated and displaced by Takic speaking immigrants from the Great Basin area. The timing and extent of the migrations and their impact on indigenous peoples is not well understood. Any data related to it represents a valuable contribution to the understanding of local prehistory.

The Gabrielino arrived in the Los Angeles basin around 500 B.C.E. as part of the Shoshonean (Takic speaking) migration from the Great Basin region and gradually displaced or absorbed the indigenous Hokan speakers. Large, permanent villages were established in the fertile lowlands along rivers and streams and in sheltered areas along the coast. Eventually, Gabrielino territory encompassed the greater Los Angeles Basin, coastal regions from Topanga Canyon in the north to Aliso Creek in the south, and the islands of San Clemente, San Nicholas, and Santa Catalina (Bean and Smith 1978:538-540). The population may have numbered as many as 5,000 individuals at their peak in the precontact period.

The subsistence economy of the Gabrielino was one of hunting and gathering. The surrounding environment was rich and varied and the natives were able to exploit mountains, foothills, valleys, deserts and coasts. As with most Native Californians, acorns were the staple food (by the Intermediate Horizon), supplemented by the roots, leaves, seeds and fruit of a wide variety of flora (i.e., cactus, yucca, sage, agave, etc.). Fresh and saltwater fish, shellfish, birds, insects, as well as large and small mammals were exploited.

An extensive inventory of tools and implements were employed by the Gabrielinos to gather, collect, and process food resources. The most important hunting tools were the bow and arrow. Traps, nets, blinds, throwing sticks and slings were also employed. Fish were an important resource, and nets, traps, spears, harpoons, hooks and poisons were utilized to catch them. Ocean-going plank canoes and tule balsa canoes were used for fishing as well as for travel (Moratto 1990:63) for those groups residing near the ocean, and possibly for those around inland lakes.

The processing of food resources was accomplished in a variety of ways: nuts were cracked with hammer and anvil, acorns were ground with mortar and pestle, seeds and berries with mano and metate. Yucca was eaten by the natives (as well as being exploited for its fibers). The flower stalk of the yucca was cut at the base, placed in a rock lined roasting pit, buried and cooked overnight. Although not universally accepted (see Sutton, Schneider and Yohe 1993:47-50), Kowta (1969) has suggested that lithic planes may have been used for processing the yucca since they can effectively pulp and shred the fibers of its leaves.

Strainers, leaching baskets and bowls, knives, bone saws, and wooden drying racks were also employed. Food was consumed from a variety of vessels. Catalina Island steatite was used to make ollas and cooking vessels (Moratto 1990 from Hudson and Blackburn 1983).

Gabrielino houses were circular, domed structures of willow poles thatched with tule. They were actually quite large and could in some cases hold fifty individuals. Other structures served as sweathouses, menstrual huts and ceremonial enclosures (Bean and Smith 1978).

Kroeber (1925:621) considered the Gabrielino:

> . . . to have been the most advanced group south of Tehachapi, except perhaps the Chumash. They certainly were the wealthiest and most thoughtful of all the Shoshoneans of the State, and dominated these civilizationally wherever contacts occurred.

Chinigchinich, the last of a series of heroic mythological figures, was the center of Gabrielino religion. *Chinigchinich* created mankind, gave instruction on laws and institutions and then died. He then rose to the stars to sit in judgement of the people, rewarding the faithful and punishing those who disobeyed his laws (Kroeber 1925:637-638). The *Chinigchinich* religion was apparently relatively new when the Spanish arrived, and was spreading to nearby groups.

Relatively little is known concerning religious practices, but an enclosure called a *wankech*, containing a representation of *Chinigchinich*, was found in each of the larger villages. The worship of *Chinigchinich* was closely tied to the toloache cult where rituals included the ingestion of extracts from the datura plant; a hallucinogen (Kroeber 1925:622).

Girls were the subject of an initiation ceremony around the age of puberty. It is unknown whether boys had a similar ceremony. Marriages were the occasion for elaborate ceremonies, but little is known concerning actual practices.

The Gabrielino traced their descent through the male line (Kroeber 1925:633), with status being determined by both wealth and heredity. Each lineage had a leader (chief), whose authority rested in possession of a "sacred bundle." The chief had several assistants to help him with his many duties, including the collection of taxes (gifts from the people, primarily for consumption by guests), leading war parties, concluding treaties and seeing to community welfare. Subject to approval of the people, the position of chief was hereditary within the male line, though females could serve if no male heir was available. Shamans were also people of power, whose primary responsibilities were the overseeing of the various rituals.

The mainland Gabrielino practiced cremation of the dead; cremation usually occurring about three days after death. Most possessions of the deceased were also burned, though some were kept to be burned at the annual mourning ceremony, an eight day event in the fall of the year.

METHODS

The methods employed during this study were to conduct a literature and records review at the South Central Coastal Information Center, University of California, Los Angeles and to examine two additional documents provided by RBF. This report was produced based on the results of the reviews. The report describes historic and prehistoric archaeological sites on the property as well as survey and excavation reports accomplished within the study area.

The review of records housed at the South Central Coastal Information Center, University of California, Los Angeles was conducted by Dina Rachal Craig (Associate Coordinator of the Center) on 11 January 1999 (see Confidential Appendix B for a copy of the report). The review included the entire 2,976 acre parcel. Information Center sources reviewed include:

- Historic and prehistoric site records
- Cultural resources survey and excavation reports
- *National Register of Historic Places* (NRHP) (Office of Archaeology and Historic Preservation 1997)
- *California State Historic Resources Inventory*
- *California Points of Historical Interest* (1992)
- *California Historical Landmarks* (Office of Historic Preservation, California Department of Parks and Recreation 1990)

- USGS Quadrangles: 1:62,500 Pomona, California, 1894; 1:24,000 Glendora, California, 1966; Photorevised 1972 and San Dimas, California, 1966; Photorevised 1981

Material provided by Robert Bein, William Frost and Associates (RBF) includes the *San Dimas Northern Foothills Development and Infrastructure Study*, a preliminary review completed by LSA Associates, Inc. for RBF and the City of San Dimas, to "identify the physical and environmental attributes of the San Dimas Northern Foothills study area, assess the condition of available public services and facilities and to analyze the public policy context that will occur within future development" of the area (LSA 1998:1-1). The second document, an Initial Study based in part on the preliminary review, addresses environmental effects associated with the proposed Northern Foothills Implementation Program (RBF 1998:2).

FINDINGS

The records search revealed that only a very small portion of the study area has been examined for cultural resources in the past. Five reconnaissance reports, totalling some 25 acres of examined surface area, have been produced for the study area (Driggers 1988; McIntyre 1988; Metcalf 1978; Whelan 1993 & 1995). This 25 acres is less than one percent of the 2,976 acre study area. LSA recently conducted field examinations (LSA 1998), but no mention is made of what portions of the study area were examined or who conducted the examination.

Two archaeological sites (one prehistoric and one historic) have been recorded within the study area. The prehistoric site (CA-LAN-825) has been plotted on Information Center maps, but virtually no additional information for the site exists. The site record itself is blank except for a reference to the site being previously designated as CA-LAN-358. There is no additional information, even after discussions with Information Center staff, on who recorded the site, when the site was recorded or what reconnaissance effort resulted in the discovery of the site. The historic site (CA-LAN-2054H), known as the Johnstone Peak Lookout, was recorded by Neil Metcalf. The date of recordation, however, is contradictory: while the site record, dated 19 January 1992, references an inventory report titled "Johnstone Peak Electronic Site, Los Angeles County", the reference to the same report at the Information Center is dated 1978.

The Johnstone Peak Lookout was constructed in 1938 to assist in fire suppression efforts. The lookout tower was later converted, internally and externally, to serve as an electronic facility. The lookout was removed from its original site by the Forest Service in 1995 and put on permanent display at the Los Angeles County Fairgrounds in Pomona (LSA 1998:2-40). A memorial for William Arthur Johnstone (for whom Johnstone Peak is named), consisting of a plaque attached to a rock, is dated 27 June 1940 and remains at the site.

LSA, in the *San Dimas Northern Foothills Development and Infrastructure Study*, reports that two horizontal "wells" or tunnels exist at the upper reaches of Sycamore Canyon. According to property records, such tunnels were constructed prior to 1887 to tap water from the hillside. The

lower tunnel is approximately five feet in height by three feet in width at the entrance and was observed to extend several yards into the mountain. The first several feet of tunnel are reinforced, but the balance of the tunnel that can be observed has no reinforcement. LSA researchers did not observe the second tunnel closely, due to steep slopes and dense vegetation. Steel pipe connects the two tunnels and conveys water by gravity to a storage tank several hundred feet south of the tunnel (LSA 1998:2-41).

MANAGEMENT CONSIDERATIONS

1. Less than one percent of the study area (25 of 2,976 acres) has been examined for cultural resources by qualified archaeologists. Researchers from LSA did conduct field examinations to prepare their document (LSA 1998), but no mention is made of what portions of the study area were examined or who conducted the examination.

2. Two archaeological sites have been recorded on the study area: CA-LAN-825 has not been evaluated. CA-LAN-2054H was converted into an electronic facility and later removed from the study area. A memorial plaque remains on the site.

3. Two concrete wells or tunnels exist on the study area. They have not been formally recorded. It is unknown if the storage tank mentioned by LSA (1998:2-41) still exists

RECOMMENDATIONS

It is recommended that each individual property owner/applicant be responsible for cultural resources studies specific to each individual parcel to be developed. The applicant shall be responsible for mitigation measures to properly manage any cultural resources discovered.

Cultural studies must include:

1. completion of a literature review for the particular project area.
2. consultation with the appropriate Native American group if required.
3. reconnaissance of the study area.
4. mitigative treatment of any cultural resources discovered.

Additionally, any projects with the potential to impact archaeological sites CA-LAN-825 and/or CA-LAN-2054H (the only two archaeological sites recorded on the property) must undertake to evaluate their condition and importance through test excavation and archival research. In addition, the tunnels, steel pipe and storage tank (if it still exists) described by LSA (1998:2-41) must be formally recorded and evaluated by the proponent of any project with the potential to disturb them.

5. Archaeological site CA-LAN-825 must be relocated and a site record supplement generated for the site. Evaluation of the site may necessitate further mitigative treatment

(i.e., test excavation). CA-LAN-2054H has been removed and the remaining plaque is not in danger of destruction. No further work at the site is necessary at this time.

6. The two concrete wells/tunnels, steel pipe and storage tank (if it still exists) described by LSA (1998:2-41) must be formally recorded and evaluated before any disturbance in their vicinity. Further mitigative treatment may be necessary.

Patrick O. Maxon
Staff Archaeologist

Ronald M. Bissell, R.P.A.
Principal Investigator

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Robert Bein, William Frost and Associates (RBF)
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1993 The Siphon Site (CA-SBR-6580): A Millingstone Site in Summit Valley, California. *San Bernardino County Museum Association Quarterly 40(3).*

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1993 Sycamore Plantation, Los Angeles County. On file, South Central Coastal Information Center, University of California, Los Angeles.

1995 Archaeological Reconnaissance Report. On file, South Central Coastal Information Center, University of California, Los Angeles.

Appendix A

Personnel Qualifications

Ronald M. Bissell
RMW Paleo Associates, Inc.
Principal/Certified Archeologist

Professional Experience

1986 - Present. Principal Archaeologist, RMW Paleontological Associates, Incorporated
1983 - 1986. Independent Consultant Archaeologist
1976 - 1983. Information Specialist and Administrative Services Officer, Leighton and Associates
1956 - 1976. United States Army. Rank at retirement was Major of Field Artillery

Publications

1983 Archaeological Site CA-ORA-572, a Two Component Site in Fullerton, California. *Master's Thesis on file at the Library, California State University, Fullerton, California*

1983 A Previously Unrecognized Grinding Technology from CA-ORA-572. *Paper presented to the Southwestern Anthropological Association, April 1983. Expanded version published in the Quarterly of the Pacific Coast Archaeological Society, Volume 19, Number 3, July 1983*

1989 Orange County's First Fairgrounds, 1890-1900. *Proceedings of the Conference of Orange County History*

1993 Archaeological Site CA-VEN-630: A Solstice Observatory in Simi Valley, *Proceedings of the Society for California Archaeology, Volume 7*, Ventura County, California

1994 Archaeological Site CA-ORA-1058: Six Cairns in Orange County, California.

Degrees

1983 Anthropology, M.A., Archaeological Emphasis. California State University, Fullerton, California
1977 Library Science, M.S. California State University, Fullerton, California
1972 Bachelor of Arts, Geology and History, San Diego State University, San Diego, California
1989 Introduction to Federal Projects and Historic Preservation Law. Sponsored by the Advisory Council on Historic Preservation and the General Services Administration Training Center

Credentials

Certified by the Society of Professional Archaeologist as a Field Archaeologist.
Certified as an Archaeologist by the County of Orange Environmental Management Agency. Also certified by the Counties of Ventura, Los Angeles, Riverside, San Bernardino, Kern, Kings, Fresno, Tulare, Madera and San Diego
Certified as Open Water Scuba Diver by the Professional Association of Diving Instructors.

Memberships

Society of Professional Archaeologists
Pacific Coast Archaeological Society
Society for California Archaeology
Southwestern Anthropological Association
California Mission Studies Association
American Library Association
California Library Association
South Coast Geological Society

Patrick O. Maxon
RMW Paleo Associates, Inc.
Staff Archaeologist

Professional Experience

1994 - present	Staff Archaeologist, RMW Paleo Associates, Mission Viejo, California Responsibilities include project management, developing project proposals, conducting research, accomplishing field work (survey, excavation, monitoring) and producing technical reports.
1990 - 1994	Behavioral Specialist/Job Trainer, Vantage Foundation, Costa Mesa, California.
1989 - 1990	House Manager, Pearlmark Group Home, Anaheim, California.
1988 - 1989	Instructor, United Cerebral Palsy, Santa Ana, California.

Degrees

M.A. Anthropology: 1994, California State University, Fullerton. Concentration in Archaeology.
B.A. Sociology/Psychology: 1987, Towson State University, Towson, Maryland.
University of Maryland, Munich Campus, Munich, Germany (one semester)

Credentials

Certified as an Archaeologist by the County of Orange Environmental Management Agency.

Memberships

Pacific Coast Archaeological Society

AUTHOR: Patrick O. Maxon

PRINCIPAL INVESTIGATOR: Ronald M. Bissell, R.P.A.

DATE: January 1999

TITLE:	**SUBMITTED BY:**	
Review of Cultural Resources for Draft and Final Environmental Impact Reports for the Northern Foothills Development and Infrastructure Study, San Dimas, California	RMW Paleo Associates Archaeology Paleontology History 23392 Madero, Suite L Mission Viejo, California 92691 (949) 770-8042 FAX (949) 458-9058	 Cottonwood Triangular Projectile Point, Rose Canyon Variant, collected by RMW Paleo, 1994

CONFIDENTIAL APPENDIX

NOT FOR PUBLIC REVIEW

SUBMITTED TO: Robert Bein, William Frost & Associates
14725 Alton Parkway
Irvine, California 92618-2069

PROJECT NUMBER: RMW Project Number 98-1315

USGS QUADRANGLE: USGS San Dimas, California, 1966; Photorevised 1981 and Glendora, California, 1966; Photorevised 1972

KEYWORDS: San Dimas, Los Angeles County, Township 1 North, Range 9 West, San Bernardino Base and Meridian, CA-LAN-825 & -2054H

Confidential Appendix B

Literature Review Report

South Central Coastal Information Center
California Historical Resources Information System
UCLA Institute of Archaeology
A163 Fowler Building
Los Angeles, California 90095-1510
(310) 825-1980 / FAX (310) 206-4723 / sccic@ucla.edu

Los Angeles
Orange
Ventura

January 11, 1999

RMW Paleo Associates
23392 Madero, Ste. L
Mission Viejo, CA 92691

RE: Expedited Records Search Request for 3000 Acres on the Glendora and San Dimas Quadrangles

Dear Mr. Maxon:

As per your request received on January 11, 1999, we have conducted a records search for the above referenced project. This search includes a review of all recorded historic and prehistoric archaeological sites within the project area as well as a review of all known cultural resource survey and excavation reports. In addition, we have checked our file of historic maps, the National Register of Historic Places, the California State Historic Resources Inventory, the California Points of Historical Interest, and the listing of California Historical Landmarks in the region. The following is a discussion of our findings for the project area.

PREHISTORIC RESOURCES:

One prehistoric site (LAN825) has been identified within the project area (see enclosed map).

HISTORIC RESOURCES:

One historic archaeological site (LAN2054H) has been identified within the project area (see enclosed map).

The California State Historic Resources Inventory lists numerous properties that have been evaluated for historical significance within the project area (see enclosed list).

The National Register of Historic Places lists no properties within the project area.

The listings of the California Historical Landmarks (1990) of the Office of Historic Preservation, California Department of Parks and Recreation, indicate that there are no California Historical Landmark within the project area.

The California Points of Historical Interest (1992) identifies no properties within the project area.

15.4 Hydrology/Drainage Study

NORTHERN FOOTHILLS - CITY OF SAN DIMAS PRELIMINARY HYDROLOGY/DRAINAGE STUDY

PREPARED IN SUPPORT OF THE EIR

January 1999

Prepared By:

Robert Bein, William Frost & Associates
Professional Engineers, Planners & Surveyors
P.O. Box 57057, 14725 Alton Parkway, Irvine, CA 92619
(714) 472-3505 Fax: (714) 472-8122

RBF JN 34933

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1.0. INTRODUCTION

A project drainage and flood assessment of the Northern Foothills Area in San Dimas was performed by Robert Bein, William Frost & Associates in support of the Northern Foothills Environmental Impact Report (EIR). The Northern Foothills EIR compasses a 3,000 acre area within the northern portion of the City of San Dimas in Los Angeles County. Anticipated future changes to the study area include development with supporting infrastructure involving primary roadways and utility systems. The preliminary hydrologic/drainage investigation includes the evaluation of the surface hydrology, potential flood hazards, and debris potential of the existing watersheds within the study area. The hydrologic impacts of future development within the watersheds were evaluated.

2.0 STUDY SITE DESCRIPTION

The study area encompasses 3,000 acres bordered along the north and northeast by the Angeles National Forest, the City of La Verne along the southeast, residential areas to the south, and the City of Glendora along the west. Figure 1 shows the study area location map. Figure 2 shows the study area boundaries.

The Northern Foothills area is primarily undeveloped with sparse development consisting of ranches, equestrian facilities, and unpaved roadways. General topography of the area is characterized by steep terrain. Elevations range from 3,200 feet at Johnstone Peak to 1,000 feet along San Dimas Wash. There are six intermittent blue-line streams identified within the project site on the San Dimas USGS Quadrangle 7.5 minute series. There does not appear to be any existing major flood control or drainage facilities within the study area, except for a debris basin on Morgan Canyon.

The project study area is located within a total of seven independent watersheds or canyons, three major and four smaller. Existing development is generally within the smaller watersheds and primarily along the lower foothills and the remainder of the area is generally undeveloped. The natural watersheds generally consists of long canyons with significant topographic relief. The regional trends of the surface drainage pattern is that the majority of the site naturally drains southerly toward the San Dimas Wash. San Dimas Wash is a well defined regional floodplain and ephemeral creek is generally the south and southeasterly boundary of the project area. A small portion of the site drains westerly toward the City of Glendora and ultimately into the Big Dalton

Wash. Both the San Dimas Wash and the Big Dalton Wash ultimately drain into the San Gabriel River.

The preliminary analysis has been limited to those watersheds where future development could potentially occur. Watersheds included in the investigation are (from west to east): (1) Morgan Canyon, (2) Wildwood Canyon, (3) Shuler Canyon, (4) Shay Canyon, (5) Sycamore Canyon, and (6) Ham Canyon. Sycamore Canyon and Ham Canyon watersheds cover majority of the study area, approximately 70 percent. Nearby major regional flood control facilities consist of the San Dimas Wash to the south and southeast, San Dimas Reservoir to the east, Puddingston Diversion Dam to the southeast, and the Big Dalton Wash to the east. These existing canyons within the study area support natural drainage courses which consist of seasonal intermittent alluvial streams which are consistent with natural drainage for the semi-arid southern California area. A general description of some of the characteristics associated with the natural watershed is indicated in Table No. 2. The morphology of the natural alluvial streams in the foothill areas typically involves dynamic changes to the streambed and these streams are capable of delivering significant quantities of sediment and debris.

3.0 EXISTING CONDITIONS

The delineation of existing watershed boundaries and the associated concentration points for the site are shown in Figure 1. Majority of the surface runoff generated from the project site currently drains in a southerly direction toward the San Dimas Wash. Some undeveloped portions of the watersheds drain into storm drain systems associated with existing development along the south end of the project site. Table No. 1 summarizes the extent of development in each watershed.

The characteristics of the natural watersheds within the project study area are summarized in Table No. 2. The soils are generally classified as USGR-F. LACFCD has classified all these canyon areas as debris potential area. In addition, the study area is located between the M and L rainfall zones as designated by LACFCD. The average 50-year rainfall isohyetal for a 24-hour period characteristics of this area is 12 inches.

An estimation of impervious areas within the study area have been performed based upon review of recent aerial photographs, available topographic maps, and land used maps. Impervious areas are

assumed as 50 percent of the areas where development exists. The 50 percent assumes the presence of turf and landscaping within each individual residential lot. Table No.1 summarizes the watershed sizes and development conditions of the watersheds within the study area.

Table 1. Summary of Watershed Land Use Existing Conditions*				
Watershed	**Drainage Area (Acres)**	**% Undeveloped**	**% Developed**	**% of Area Impervious**
Morgan Canyon	410	95	5	2.5
Wildwood Canyon	270	90	10	5
Shuler Canyon	150	90	10	5
Shay Canyon	60	90	10	5
Sycamore Canyon	570	85	15	7.5
Ham Canyon	610	85	15	7.5

* Estimated based upon existing mapping.

Table 2. Summary of Watershed Characteristics					
Watershed	**Maximum Drainage Length (mile)**	**Average Slope (ft/mile)**	**Length/Width Ratio**	**Maximum Elevation Difference (ft)**	**Watershed Lag Time (min)**
Morgan Canyon	1.89	1,050	3.6	1,990	19
Wildwood Canyon	1.70	740	3.5	1,260	19
Shuler Canyon	.95	510	2.5	480	15
Shay Canyon	.72	500	2.6	360	11
Sycamore Canyon	2.31	830	3.8	1,920	24
Ham Canyon	2.16	940	2.8	2,040	23

3.1 Existing Watershed Surface Hydrology

3.1.1 Clear Water Discharge

A qualitative analysis was performed to evaluate the existing surface hydrology associated with each natural watershed. The drainage courses which collect runoff from the southern portions of the site appear to drain at the San Dimas Wash. The area within the project boundaries where existing development exists is relatively small compared to the amount of undeveloped areas (approximately 25 percent). The hydraulic conveyance capacity and level of flood protection of the existing storm drain systems have not been evaluated since limited information was available at the time of the study.

Evaluation of the surface runoff hydrology follows the design and analysis criteria defined by the Los Angeles County Public Works Department. The level of flood protection standards which have been adopted by Los Angeles County define a particular rainfall return period or probability. A Capital Storm is utilized for (1) natural watercourses, (2) floodways, and (3) depressions or sumps. The capital storm flood protection is based upon a rainfall with a probability of recurrence of once in 50 years. The design flowrates, include bulking due to the volume associated with debris and a burn in a natural watershed, or developed clear flow, which ever is greater. The Urban Design Storm provides a 25-year level of protection and is generally utilized for the design of all other drainage systems not requiring the capital storm. None of the existing watersheds within the study area has stream gages which would provide actual historical data on runoff generated from specific rainfall events. In order to determine anticipated runoff quantities generated from ungaged watersheds, hypothetical hydrologic procedures must be applied. The hydrology procedure which are applicable for the study area are outlined in the Los Angeles County Manual.

A quantitative estimate of the surface runoff generated from the primary watersheds was developed applying a runoff yield procedure utilizing Los Angeles County hydrologic data and the adopted rational method procedure. Clear-water 50-year discharges were estimated based on general assumptions for each watershed at concentration points corresponding to the downstream project boundary. Based on regional hydrologic characteristics obtained from the Los Angeles County Hydrology Manual, it was estimated that a 50-year discharge generated from these watersheds may be two to three cubic feet per second per acre depending upon the time of concentration for each watershed. A sample calculation of the runoff yield analysis is indicated below. Estimated 50-year

clear water discharges under existing watershed conditions range from 140 cfs at Shay Canyon to 970 cfs at Ham Canyon. Table 3 lists the estimated discharges for each watershed.

Sample Calculation of runoff yield for Morgan Canyon:

1. Watershed Lag time (ACOE Eqn) =24 n $((LxLca)/S^{0.5})^{0.38}$ = 24x0.04((1.89 mi. x 0.95 mi)/1051 $^{0.5})^{0.38}$=0.32 hrs
2. Tc=24 min Lag=0.8Tc
3. Rainfall Intensity: Zone M=2.7 Zone L=2.4
4. C(I) undevelop= 0.66 LAC Hydrology Manual chart
5. C develop = (0.9x impervious)+(1-impervious)x C undevelop = 0.67
6. Q50 clear =CIA = 690 cfs
7. DPA factor = 2 (LAC Hydrology Manual chart)
8. Q50 bulk = 2x690 = 1,370 cfs

Table 3. Estimated 50-Year Peak Discharges - Existing Conditions

Watershed	Drainage Area (Acres)	Watershed Lag Time (min)	50-year Unit Flow Rate (cfs/acre)	Clearwater 50-Year Peak Discharge (cfs)	Bulked 50-Year Peak Discharge
Morgan Canyon	410	19	1.7	690	1,370
Wildwood Canyon	270	19	1.6	440	880
Shuler Canyon	150	15	1.8	270	550
Shay Canyon	60	11	2.4	140	290
Sycamore Canyon	570	24	1.5	860	1,720
Ham Canyon	610	23	1.6	970	1,930

3.1.2 Existing Watershed Debris Production

The existing watersheds on the project area are undeveloped consisting of vegetated slopes and exposed earthen areas which are potential sediment sources can produce debris during heavy periods of runoff. Debris flows from foothills and mountainous areas are common in semi-arid area of Southern California and have been disastrous on some occasions. Debris production is worsened

after burns within the watershed, which commonly start in the grassland areas of Southern California. The foothill and canyon areas of the project site primarily drain into the San Dimas Wash. There is the potential for debris flows discharging from the months of the canyon to clog the existing downstream drainage systems (within existing residential areas) and, if severe enough, enter the existing residential development along the downstream portion of the study area. Typical at the entrance to the canyons debris collection facilities are constructed to limit the potential of this damage similar to the facility on Morgan Canyon. In addition, the debris volume transported in the drainage courses will increase the apparent flowrate due to the volume of debris. In order to account for the debris volume in the flowrate, a bulking factor is applied to increase the clear water flow.

The debris production rates for the watersheds involved were estimated using the L.A. County Hydrology Manual. The project area, as defined by the Los Angeles County manual is within Debris Potential Area (DPA) Zone 1, a zone of expected high debris potential. The amount of debris that is estimated to be produced from the undeveloped watersheds are shown in Table 4. The debris production rates of the subject watersheds ranges from 190 to 380 cubic yards per acre depending upon the size of the watershed.

Table 4. Estimated Debris Volumes - Existing Conditions

Watershed	Drainage Area (Acres)	Debris Production CY
Morgan Canyon	410	80,000
Wildwood Canyon	270	55,000
Shuler Canyon	150	37,000
Shay Canyon	60	20,000
Sycamore Canyon	570	94,000
Ham Canyon	610	99,000

3.2 Flooding

The City of San Dimas and the County of Los Angeles are participants in the National Flood Insurance Program (NFIP) which is administered by the Federal Emergency Management Agency

(FEMA). Communities in the NFIP must adopt and enforce minimum floodplain management standards, including identification of flood hazards and flood risks. Flood insurance studies previously developed flood hazard designations for this area. The portions of the project site is located on the Flood Insurance Rate Map (FIRM) Community Panel Number 0601549991C, published in June 1978. The flood insurance rate map indicates flood hazard areas primarily along San Dimas Wash, along the south end of the project. These low lying areas have been designated as "areas of 500-year flood; or areas subject to 100-year flooding with average depths less than one (1) foot or with drainage areas less than one square mile." No other flood insurance studies have been published for areas within the undeveloped areas of the study site. Although FEMA may not have designated flood hazards within other portions of the site or along some of the drainage course does not mean that there are no flood hazards within these locations. All the natural courses will have a defined floodplain which is a function of the natural stream geometry and amount of tributary drainage area. Further study should be performed to evaluate the characteristics of the natural drainage systems and delineate the natural floodplains.

Frequent flooding has been observed at Sycamore Canyon Road near the MWD site as a result of low to non-existent channel capacity at Sycamore Canyon Creek. The MWD site is located along the north side of the intersection of Sycamore Canyon Road and San Dimas Canyon Road. At this location, it appears that the channel is ill defined, shallow and has very little capacity to convey greater than daily flows along the Creek. City officials indicate a frequency of flooding as often as twice a year at this location. There have been no previous hydrology/hydraulic studies conducted for the area to determine the extent of flooding.

3.3 Water Quality

The project area is within the upper watershed which ultimately drain into the San Gabriel River. Water quality in this region is considered relatively good. The county routinely conducts conventional analysis of water for minerals, dissolved solids, and pH. Both surface and groundwater is considered good quality and does not exceed Federal and State standards for drinking water. The project site is located within the jurisdiction of the Los Angeles Regional Water Quality Control Board.

The majority of the stormwater runoff from the site drains to the San Dimas Wash. A small portion of the project site drains to the Big Dalton Wash. Stormwater runoff from project site do not appear

to drain to any public water supply facility.

3.4 Groundwater

Portions of the project area are located within the Foothill Groundwater Basin. Estimated groundwater depths are between 900 to 1,200 feet below ground surface within the project area. Two existing water tunnels exist in the upper reaches of Sycamore Canyon and currently convey water via steel pipes along the west slope of Sycamore Canyon. Water from this system is currently not used for domestic purpose.

Spreading grounds exist along both the San Dimas Wash and the Big Dalton Wash. These spreading grounds recharge the groundwater basins. Recharge water is supplied by upstream reservoirs. The San Dimas Reservoir releases water to the spreading grounds along the San Dimas Wash. The Big Dalton Reservoir releases water to the spreading grounds along the Big Dalton Wash. These facilities are owned and operated by the Los Angeles County Department of Public Works (LACDPW).

4.0 DEFINITION AND USE OF SIGNIFICANCE CRITERIA

For the purposes of this project, a hydrology, drainage, or flooding impact is considered significant if:

- Significantly increase stormwater peak discharge; or
- The residents of the proposed project would be subjected to flood or debris damage; or
- Debris production is increased over existing conditions; or
- Significantly increase stormwater pollution discharges to stormwater systems; or
- Substantially degrade water quality or contaminate a public water supply.

5.0 IMPACTS OF FUTURE DEVELOPMENT

Figure 2 shows the potential developable areas within the watersheds. The existing General Plan allows a maximum development density of one dwelling unit per five acres (1du/5ac). The development strategy proposed in the Northern Foothills area would permit the 1 du/5ac within the

development feasibility zone and 1 du/20 acres outside of the development feasibility zone. Based upon these densities, the impervious areas of each watershed was estimated. Impervious areas were assumed as 50 percent of the developed area. Table 5 summarizes future development conditions within each watershed. As shown in Table 5, increase in imperviousness ranges from as low as 1 percent for the Morgan Canyon watershed to 20 percent increase for the Shay Canyon watershed. Percent imperviousness is expected to increase 10 percent for Sycamore Canyon and 5 percent for Ham Canyon watersheds.

Table 5. Summary of Watershed Development - Future Conditions

Watershed	Drainage Area (Acres)	Potential Developable Areas (Acres)	% Undeveloped	% Developed	%Impervious	% Increase Impervious
Morgan Canyon	410	6	95	5	5	1
Wildwood Canyon	270	47	70	30	15	10
Shuler Canyon	150	42	65	35	20	15
Shay Canyon	60	18	60	40	25	20
Sycamore Canyon	570	107	70	35	20	10
Ham Canyon	610	60	75	25	15	5

5.1 Future Conditions Hydrology

In general, development within a watershed has a tendency to alter surface hydrology through the following: (1) to increase peak flow rates over those in the existing condition, (2) decrease the time of concentration through improved hydraulic efficiencies, and (3) increase the amount of impervious cover. This is due to the construction of houses, residential landscaping, streets, and other paved areas that enhance the ability of water to runoff instead of infiltration or soaking into the ground, or adhere to natural vegetation.

Table 6 summarizes the comparison of estimated existing condition and ultimate watershed conditions hydrology. The increase in discharge is not significant since low-density is anticipated for the potential developable areas. As shown, future development within these watersheds would

increase the discharge less than 5 percent.

Table 6. Comparison of Existing and Future Watershed Conditions Hydrology				
Watershed	Drainage Area (Acres)	Existing Clearwater 50-Year Peak Discharge (cfs)	Future Clearwater 50-Year Peak Discharge (cfs)	% Increase in Discharge
Morgan Canyon	410	690	810	17
Wildwood Canyon	270	440	540	23
Shuler Canyon	150	270	340	26
Shay Canyon	60	140	170	21
Sycamore Canyon	570	860	1,020	19
Ham Canyon	610	970	1,160	20

An evaluation of the change in the runoff yield was developed, assuming a 20 percent decrease in the time of concentration, in order to analyze the localized changes to surface hydrology (see Table 7). The analysis is consistent with values developed by LACPW for capital storm hydrology on watersheds with less than 10 acres.

Table 7. Estimates of Local Hydrology Changes				
Condition	Time of Concentration (min)	I	C(I)	Q (cfs/acre)
Existing	19	2.7	0.67	1.8
Future	15	3.0	0.71	2.1
Change	-4	0.3	0.04	0.3

5.2 Debris Potential with Future Development

Debris, which is produced when soil and vegetation is dislodged and carried down hillsides, will be reduced by future development. The presence of pavement, houses with residential landscaping, and

soil stabilization will hinder debris production. Debris production with future development for individual watersheds will decrease proportional to the decrease in undeveloped areas. Table 8 summarizes expected debris volumes for each watershed. As shown in Table 8, the Sycamore Canyon watershed is capable of producing an estimated 74,000 cubic yards of debris under the ultimate watershed condition.

Table 8. Estimated Debris Volumes - Future Development Conditions

Watershed	Drainage Area (Acres)	Debris Production CY
Morgan Canyon	410	78,000
Wildwood Canyon	270	44,000
Shuler Canyon	150	25,000
Shay Canyon	60	13,000
Sycamore Canyon	570	74,000
Ham Canyon	610	87,000

5.3 Flooding

Increase in development in the watershed would increase surface water runoff. However, the estimated increase in runoff is considered insignificant. Increasing the surface water runoff would contribute to the areas along Sycamore Creek and San Dimas Wash channel currently subject to flooding. Since the increase in discharge is minimal, the impacts of ultimate development to the current flooding problems are considered insignificant.

The potential developable areas shown in Figure 2 are located primarily along canyon ridge lines with the exception of an area along Sycamore Canyon. Proposed development along this area must consider FEMA requirements. Potential development areas have not been identified along the low lying areas in the southwest portion of the project area where 500-year and 100-year flooding has been identified. Flooding hazards to the proposed project is considered insignificant.

The proposed development may have a slight impact on the natural channel geomorphology. An

increase in peak discharge would also result in an increase in channel flow velocity. Furthermore, development within the watersheds would generally decrease sediment supply to the downstream channels. An increase in flow velocity as well as a decrease in upstream sediment supply may contribute to potential channel erosion. Further study would be required to determine the extent of potential erosion and sedimentation along natural channels.

5.4 Water Quality

As with most urban development, the proposed project will result in an increase in urban pollutant discharge. Future development may have potential impacts to San Dimas Wash. This impact is considered insignificant since anticipated land use consist primarily of low density residential which should not substantially deteriorate water quality. A portion of the site drains into the Big Dalton Wash. With the proposed project, there will be minimal or no impacts to water quality since no potential development areas have been identified within the watersheds which drain to the Big Dalton Wash.

Proposed development which involve grading and construction would contribute to an increase in pollution discharge. As a result, proposed development will be subject to the National Pollution Discharge Elimination System (NPDES) criteria and standards.

5.5 Groundwater

Groundwater levels are estimated at depths between 900 to 1,200 feet below ground surface within the project area. These depths are expected to fluctuate seasonally, however, not expected to reach the project area elevation. The proposed project will not have an influence to alter the direction of groundwater flow as well as have the need to withdraw or change the rate of groundwater flow. Potential impacts to groundwater is considered insignificant.

5.6 Impacts of Proposed Roadways

Three segments of roadways are proposed to accommodate the proposed project. Segment 1 begins at Cataract Road near the Shuler Canyon Creek crossing and continues north following the east side of Shuler Canyon. The Segment 1 alignment continues along the bottom of the west tributary to Shuler Canyon. The proposed roadway along the west tributary will require placement of fill along

the channel bottom for a distance along the entire length of the tributary channel, approximately 900 feet. Placement of fill along the channel bottom would alter the natural flow conditions. Filling the canyon will cause an impact to the hydrologic/drainage pattern. This tributary is not defined as a "blueline stream.." This impact can be mitigated to a level of non-significance if the drainage facilities, along the proposed roadway, provide adequate hydraulic capacity and not impact downstream facilities.

Segment 1 continues north and east along the ridge lines to join Sycamore Canyon Road. The Segment 1 alignment crosses the Sycamore Canyon Creek, the only major drainage crossing proposed. To avoid obstruction to the flow, the crossing should be designed to accommodate adequate capacity to convey the 50-year clear water discharge (or greater, as required by the City or County of Los Angeles). Segment 2 extends to the north from San Dimas Canyon Park and primarily follows the west side of Ham Canyon tributary. Segment 3 extends north from Segment 1 near the Sycamore Canyon crossing. The Segment 3 alignment follows the west side of the Sycamore Canyon Creek, approximately 15-50 feet higher than the natural channel bed. These proposed roadway segments do not appear to significantly change the site hydrology or drainage patterns. It is however, recommended that runoff from the canyon slopes drain along its natural path. Diversion of flows from one watershed to another should be avoided.

5.7 Cumulative Impacts

Ultimate development in the Northern Foothills area will contribute to a cumulative increase in runoff volume in the Los Angeles area. Implementation of on-site detention basins would delay the timing of runoff, therefore, the cumulative impact will be insignificant.

6.0 MITIGATION

In general, flooding and drainage measures should be built into the design of the proposed projects within the developable areas. Mitigation measures shall include the construction of debris basins and detention basins.

6.1 Debris Basins

The construction of debris basins would protect future development as well as prevent sediment from entering the future and existing storm drain systems. With the implementation of debris basins, only clear discharges would be carried by the system as opposed to bulked flows. Debris basins are

intended to collect sediment and debris from undeveloped portions of the watersheds. The design and construction of debris basins may be based on Los Angeles County methods and standards. The basins will protect downstream development from an existing flood hazard as well as provide protection to future development. Appropriate location for debris basins shall be at downstream ends of undeveloped drainage areas.

Construction of these basins may have multiple purpose -- to collect debris, serve as a collection area for landslide potential areas (not addressed in this report), and a flow-through detention basin.

6.2 Detention Basin

Future development in the watersheds is expected to result in an increase in surface water runoff and peak discharges downstream. The construction of stormwater detention basins within the watersheds would mitigate for this increase through attenuation of the peak flow by temporary storage. Stormwater detention would only be necessary if there are existing drainage facilities immediately downstream of the project which currently have limited hydraulic conveyance capacity and increases in flow would reduce current levels of flood protection. Further study of the downstream drainage systems should be conducted to fully assess these requirements. The detention basins would be designed and constructed to reduce future conditions discharge to existing levels.

6.3 Residual Impact

Drainage impacts will be insignificant if proposed development and the flood control facilities designed to protect all proposed residences from flooding are designed according to City and the Los Angeles County standards.

6.4 Drainage System Design Requirements

Drainage system design requirements for the proposed development and roadways should follow the minimum criteria for Private Drains (PD) or Miscellaneous Transfer Drains (MTD) defined by LACPW. General Criteria include:

- Minimum stormdrain pipe size diameter is 24 inches, but if conveys debris then 48 inches
- Stormdrain flow velocity is limited to 20 fps if exceeded must use special pipe with additional concrete thickness.

7.0 SUMMARY

Potential drainage impacts of ultimate development within the project area will be insignificant because:

- It is anticipated that the development within the study area would not significantly increase the amount of surface runoff (approximately 50%). However, the effect of this potential change must be evaluated in more detail for each of the existing downstream for each of the existing downstream flood protection then onsite storm detention can be implemented or the deficient drainage systems can be improved.

- The residents of the future development projects within the Northern Foothills area would not be subjected to flood or debris damage provided adequate drainage systems implemented in accordance with LACPW requirements.

- Debris production will not be increased over existing conditions. Debris, which is produced when soil and vegetation is dislodged and carried down hillsides, would be significantly reduced by future development within the drainage areas. The presence of pavement, houses with residential landscaping, and soil stabilization would hinder debris production.

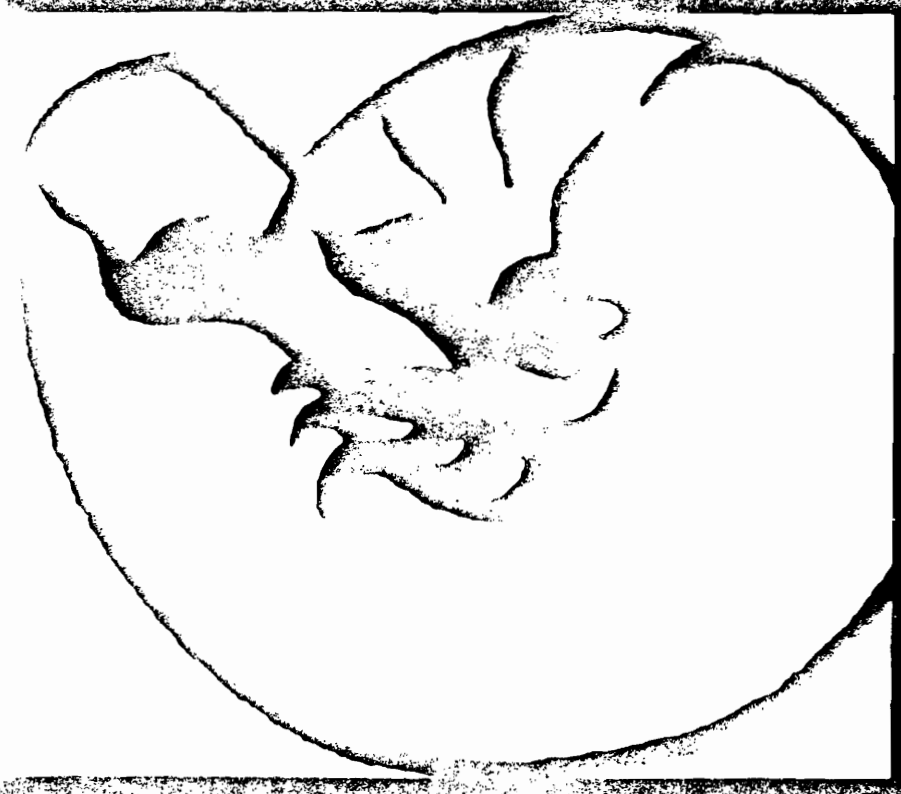
- The six intermittent blue-line streams identified within the project site on the USGS San Dimas Quadrangle 7.5 minute series will not be affected by the proposed development if proposed grading do not obstruct flows or encroach upon the natural channels.

- The proposed project will not have a significant impact to water quality and groundwater. However, proposed development will be subject to NPDES criteria, standards, and requirements. Implementing NPDES standards would minimize impacts to water quality.

- The alignments of the proposed roadways (segments 1, 2, and 3) primarily follow ridgelines and existing unpaved roadways. These roadway segments will be generally located higher than existing natural channels, with the exception of two

locations. The first location is along the south end of segment 1 where placement of fill within the canyon's west tributary is proposed. The second location is at Sycamore Creek crossing of Segment 1. At these two locations, the hydraulic characteristics of channel flow will be altered. These impacts can be mitigated to a level of non-significance if mitigation measures such as providing adequate hydraulic facilities to accommodate the expected flow rate and not result in downstream impacts.

15.5 Paleontological Resources Study



RMW Paleo Associates

Paleontology
Archaeology
History

Paleontological Resources Assessment of the San Dimas Study Area

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8 January 1998

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Introduction

The following report presents the results of RMW's assessment of the paleontological resources within the San Dimas study area in San Dimas, California. The study area is located near the northern edge of the City of San Dimas, California. The study area consists of approximately 2500 acres in the hills north of the City of San Dimas (Figure 1).

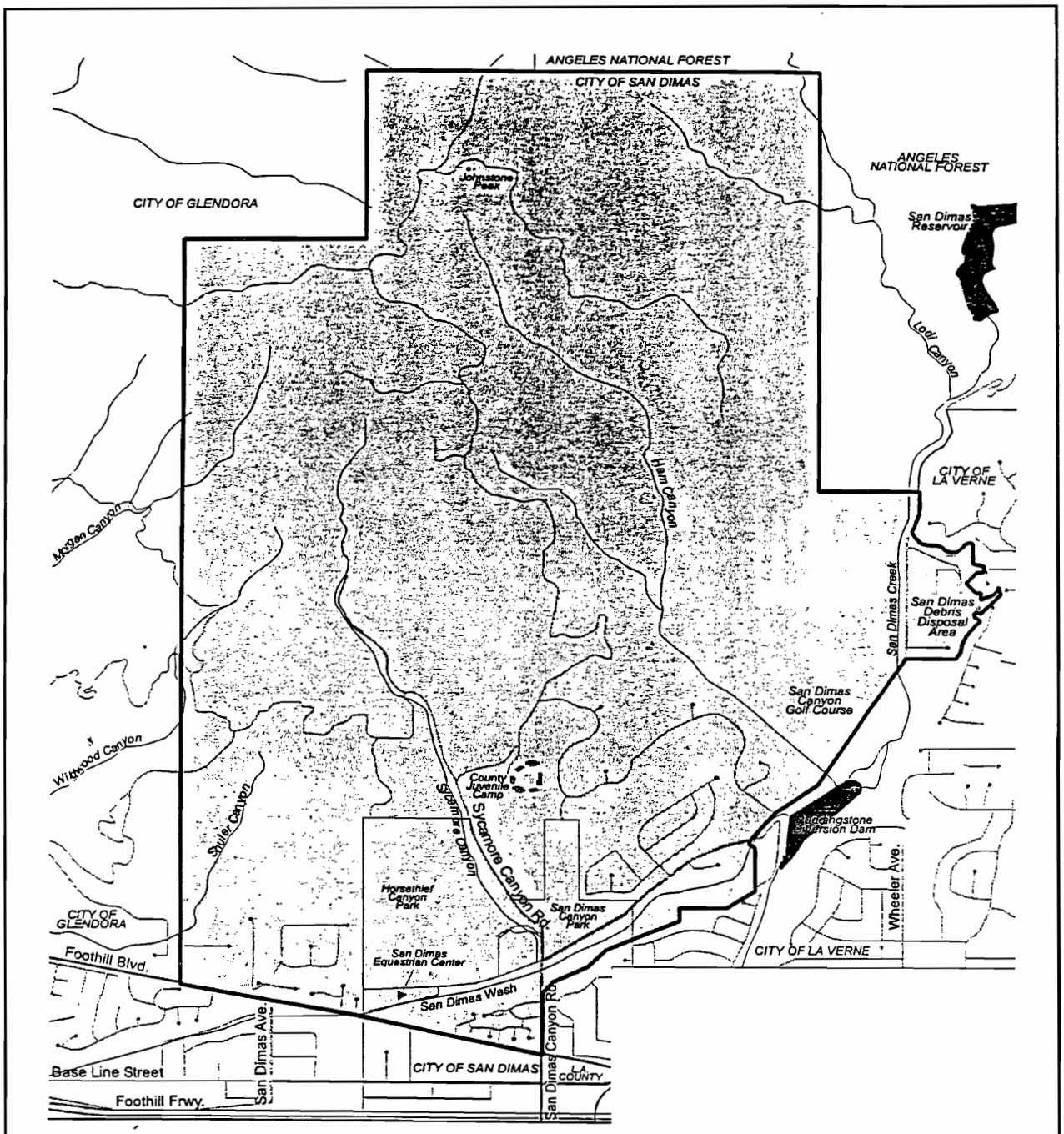
This report assesses the potential for significant impacts on the region's paleontological resources. The assessment is based on the result of literature and records review of the geology and paleontology of the study area. The Natural History Museum of Los Angeles County (LACM) preformed a review of their locality records to determine if there are any recorded fossil occurrences within or near the study area (Appendix B). No field survey was conducted during this study.

Stratigraphy and Paleontology

The study area is located in the San Gabriel Mountain Range of California. This range of mountains is part of the Transverse Range Geologic Province, which extends west to east from Point Conception to Riverside County. In these mountains are a series of marine and non-marine sedimentary rocks, volcanic, and granitic rocks. The distribution of these units is shown in Figure 2.

The youngest potentially fossiliferous rocks exposed within the study area are Pleistocene age sedimentary rocks (Qw, Qof, and Qod on Figure 2). These rocks are the erosional products of weathering of the San Gabriel Mountains during the past 1.8 million years. In the Los Angeles Basin these rocks typically range from 500,000 to 10,000 years old. Fossils of various large and small mammals have been found in these and similar deposits at several locations in Los Angeles County. Remains of bison, horses, elephants and other large and small ice age animals have been recovered from Pleistocene age deposits near Pasadena to the west of the study area. The Pleistocene age deposits are present along the southern boundary of the project site.

In the southwestern corner of the site are exposures of Miocene age marine sedimentary deposits of the Puente Formation (Mpe on Figure 2). The Puente Formation was deposited in a marine basin that extended across much of Riverside, San Bernardino, Orange, and Los Angeles Counties during the Middle to Late Miocene (14 to 5 million years ago). Water depths in this basin varied greatly, ranging from a few hundred feet to several thousand feet. The Puente Formation is well known for its fossil fish (Fritzsche 1980) in exposures to the south of the study area. Present in the formation are fossils of marine mammals, whales and sea lions (Barnes et al.). Bird and shark remains are also known from exposures of this formation to the south of the study area (RMW 1984, 1985, 1989). A single tooth of an extinct horse was collected from the Puente Formation near Corona (Stock 1928).



RMW
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Archaeology
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N

Figure 1 - Location Map

USGS 7.5 Minute Quadrangle
San Dimas Quadrangle, 1972, & Glendora Quadrangle, 1981; City of San Dimas Community Development Dept. Aerial Photography, 1994.

The majority of the study area is underlain by igneous rocks ranging in age from the Miocene (15+ million years old) to the Cretaceous (145 million years ago) (Mgv(a), ϕm, Kgr, K?gb, and Kqd on Figure 2). These rocks represent both intrusive and extrusive igneous rocks. Intrusive igneous rock form deep within the Earth and solidify from a molten magma. These include the various Cretaceous age rock units. Extrusive rocks are those associated with volcanic eruptions. The Glendora Volcanics are a series of lava flows that cooled at or near the surface. Biotite, dacite porphryry exposures in Dalton Canyon are probably igneous bodies associated with the volcanos that erupted leaving the Glendora Volcanics. There are no records of fossils from any of these deposits anywhere in the Los Angeles Basin. The igneous origins makes it unlikely that any fossils will be discovered in these deposits.

The oldest rock unit in the study area is a Jurassic age (150+/-million years ago) gneiss (m on Figure 2). These are some of the oldest rocks in all of coastal southern California. This rock unit is a metamorphic rock. The unit was originally deposited as another rock type, probably a sedimentary unit such as sandstone or shale, then, as a result of the heat and pressure associated with the intrusion of the Cretaceous igneous rocks, the minerals were deformed and recombined to form the gneiss. The original rocks may have contained fossils but they were probably destroyed by the metamorphism. There have been fossils found in similar, though less metamorphosed, deposits in San Diego County.

Also present in the study area are superficial deposits that include landslide and Recent alluvial deposits. The landslide deposits have the same potential for the discovery of fossils as their parent rock unit. Landslide deposits are present in the northwestern corner of the property and in a small area of the western boundary. Recent alluvial deposits are less than 10,000 years old and are generally too young geologically to contain fossils remains. The Recent alluvial deposits are found covering the floors of canyons, such as Sycamore and Ham Canyons.

Conclusions and Recommendations

The Puente Formation has a history of producing significant fossils in most areas where it is exposed. This indicates a high potential for the discovery of significant fossils. The Pleistocene age alluvial deposits exposed in the study area have a history of producing significant fossil remains at numerous locations in Los Angeles County. This history of fossil production indicates a moderate to high potential for the discovery of significant fossils. The areas underlain by igneous and metamorphic rocks have no potential for the discovery of significant fossils.

Potential for discovery is a measure of the likelihood that fossils will be discovered during excavations into these rock units. Potential for discovery does not measure the significance of individual fossils present within the study area, because it is impossible to accurately predict what individual fossils could be discovered. The significance of a fossil can only be determined after it is collected and studied. A high potential indicates that fossils are likely to be discovered during development of the project. A moderate potential suggests that fossils may be found during

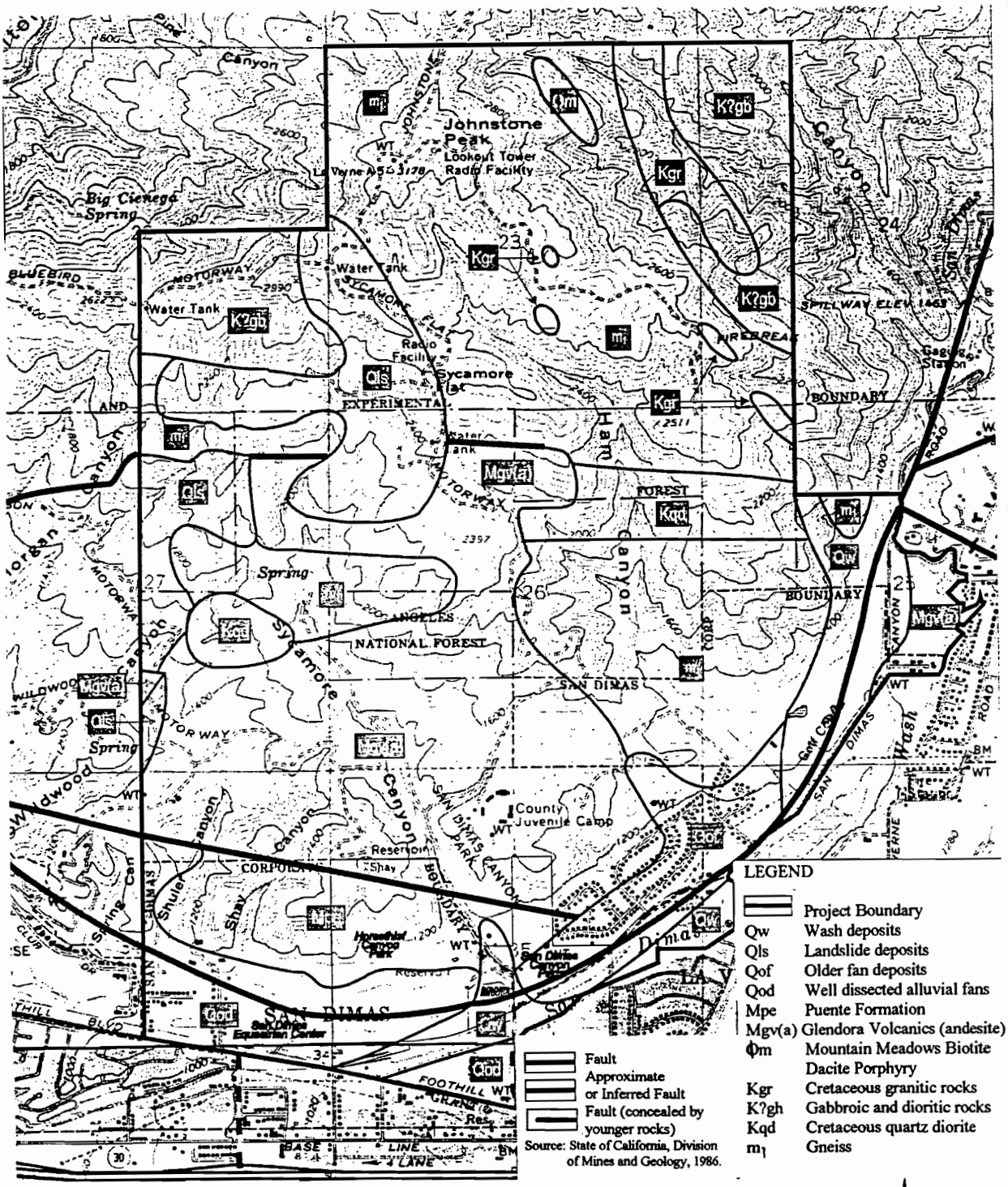

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Figure 2 - Geology Map

Northern Foothills EIR, San Dimas, California

development. The extent of the impacts is directly related to the amount of excavation. The more excavation there is, the more likely there will be significant impacts.

All grading operations may result in the destruction of fossils, unless proper mitigation measures are undertaken. The destruction of these fossils would represent a significant adverse impact on the region's paleontological resources. Fossils are an important nonrenewable scientific resource. Implementation of proper mitigation measures, however, will reduce the impacts to the region's paleontological resources to a less than significant level.

Cumulative Impacts

Cumulative impacts on paleontological resources result when rock units become unavailable for study and observation by earth scientists. The destruction of fossils is a cumulative impact that is difficult to measure, because it is hard to determine what undiscovered specimens were destroyed if science does not know of their existence.

This project will have a low to moderate cumulative impact on the region's paleontological resources. The level of cumulative impact is based on the amount of exposure of a rock unit to be disturbed compared to the total amount available for study. The level of cumulative impact will increase as development of the area expands, removing more exposures of this rock unit. The most effective means of mitigating these limited cumulative impacts is to implement the mitigation measures presented below. Examination of excavations by a paleontologist will allow for the collection of paleontological resources and the necessary information to interpret the geologic history of the region, mitigating these cumulative impacts.

MITIGATION MEASURES

The following mitigation measures have been developed to reduce the adverse impacts associated with the development of the San Dimas Foothills project on the region's paleontological resources to a less than significant level. These measures are derived from the guidelines of the Society of Vertebrate Paleontologists and meet the requirements of CEQA and the County of Los Angeles. All of these mitigation measures have proven successful in protecting paleontological resources, while allowing the timely completion of many projects in southern California.

These mitigation measures should be applied only in areas underlain by the Puente Formation (Mpe on Figure 2) and Pleistocene age deposits (Qw, Qof, and Qod on Figure 2). There is no need for paleontological resource mitigation measures on the other areas of the San Dimas Foothills project.

> Prior to grading in these areas, a qualified paleontologist should be retained to perform a field survey. This is necessary to determine if any significant fossils are exposed in the area.

A qualified paleontologist shall be retained to perform inspections of all construction excavations and, if necessary, salvage exposed fossils. Grading monitoring in these rock units shall initially be on a full time basis, i.e., all major excavations will be monitored. If the abundance of fossils is not as expected or if subsurface conditions are different than expected, the duration of monitoring may be decreased in accordance with good paleontological practices.

The paleontologist will be allowed to divert or direct grading in the area of an exposed fossil to facilitate evaluation and, if necessary, salvage fossil(s).

Because of the small nature of some fossils present in these rock units, matrix samples will be collected for processing through fine mesh screens.

Fossils shall be prepared to the point of identification and catalogued before they are donated to their final repository.

All fossils collected should be donated to a public, nonprofit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County.

On the completion of all laboratory and field work, all final mitigation reports will be filed with the repository and the lead agency. Monthly progress reports will be filed with the client and available to the lead agency.

If you have any questions or if we can be of additional service, do not hesitate to contact us.

Respectfully,

Rod Raschke/rra

Rod Raschke
Certified Paleontologist

References

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Appendix A

Rodney E. Raschke
RMW Paleo Associates, Inc.
Certified Paleontologist

Professional Experience

1986 - present	Teacher, Long Beach Unified School District Currently on special assignment to California Academy of Mathematics and Science Cal State University Dominguez Hills
1985	Instructor, University of California Irvine extension
1980 - 1985	Curatorial Assistant - Senior Museum Technician: Natural History Museum of Los Angeles County
1979 - 1983	Lecturer, Coastline Community College
1982 - present	Certified Paleontologist, RMW Paleo Associates, Inc.
1977 - 1979	Performed preliminary geologic mapping, exploration, and evaluation of the geologic hazards of future developments. Leighton and Associates, Irvine, California
1974 - present	Consulting Paleontologist, Responsible for the preparation of the paleontological resource analysis sections of Environmental Impact Statements. Projects in California, Nevada and Arizona
1976 - present	Certified Paleontologist
1973 - 1974	Engineering geologist responsible for geologic mapping for assessing geotechnical hazards during the development of residential housing tracts in Orange and Los Angeles Counties. G.A. Nicoll and Assoc. Tustin, California

Publications

1984 Early and Middle Miocene Vertebrates from the Santa Ana Mountains in *The Natural Sciences of Orange County, vol. 1, Natural History Foundation of Orange County*

1984 A fossil baleen whale from the Capistrano Formation in Laguna Hills, California in *The Natural Sciences of Orange County, vol. 1, Natural History Foundation of Orange County*

1985 A Late Miocene Marine Vertebrate Assemblage from southern California in *Annual Reports of Research, The National Geographic Society Research Reports, vol 21*

1988 Fossil Logistics: Development of a program for vertebrate paleontological studies in Orange County, California *Memoirs of the Natural History Foundation of Orange County vol. 2*

Degrees

1973 B.S. Geology. California State University, Long Beach
1984 M.S. Paleontology. California State University, Long Beach

Appointments and Honors

Museum Associate, Natural History Museum of Los Angeles County, California
Member, Paleontological Advisory Council, Natural History Foundation of Orange County
Member of Orange County Special Task Force "Orange County Museum System: An Inventory of Existing and Proposed Operations and Resources." Appointed by the Board of Supervisors, 1978-1979

Membership

American Association of Petroleum Geologists, Pacific Section
Society of Economic Paleontologists and Mineralogists, Pacific Section
Paleontological Society
Society of Vertebrate Paleontology

Appendix B

NATURAL HISTORY MUSEUM
of Los Angeles County
Vertebrate Paleontology Section
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e-mail: smcleod @ rcf.usc.edu
900 *Exposition Boulevard*
Los Angeles, California 9000

4 January 1999

RMW Paleo Associates
23392 Madero, Suite L
Mission Viejo, CA 92691

Attn: Becky Allen

re: Paleontological resources for the Glendora / San Dimas project area

Dear Becky:

I have searched our paleontology collection records for the locality and specimen data for the Glendora / San Dimas project area as outlined on the section of the Glendora and San Dimas quadrangle maps that you faxed me on 28 December 1998. We have no localities directly within the project vicinity, but we do have localities nearby.

All of our localities close to the project area are from the San Jose Hills and areas south of the project area in Late Miocene marine rocks of the Puente Formation. These localities have produced marine fish of the families Syngnathidae and Myctophidae. Most of the area of the project area, however, is mapped as granitic and volcanic rocks that almost certainly will not contain vertebrate fossils. Nonetheless, some of the southern portion of the project area [South Hills ?] is mapped as Upper Miocene marine and probably assignable to the Puente Formation. If excavations occur within that rock unit then there is a high likelihood that significant marine vertebrate fossils will be uncovered. In that circumstance, the excavations should be monitored closely to quickly and safely recover any vertebrate fossils discovered.

Sincerely,

Samuel A. McLeod
Vertebrate Paleontology

enclosure: invoice

15.7 Biological Resources

Draft San Dimas Northern Foothills Project Biological Technical Report

Prepared for:
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Project Manager
(949) 855-3653

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151 Kalmus Drive - Suite E-200
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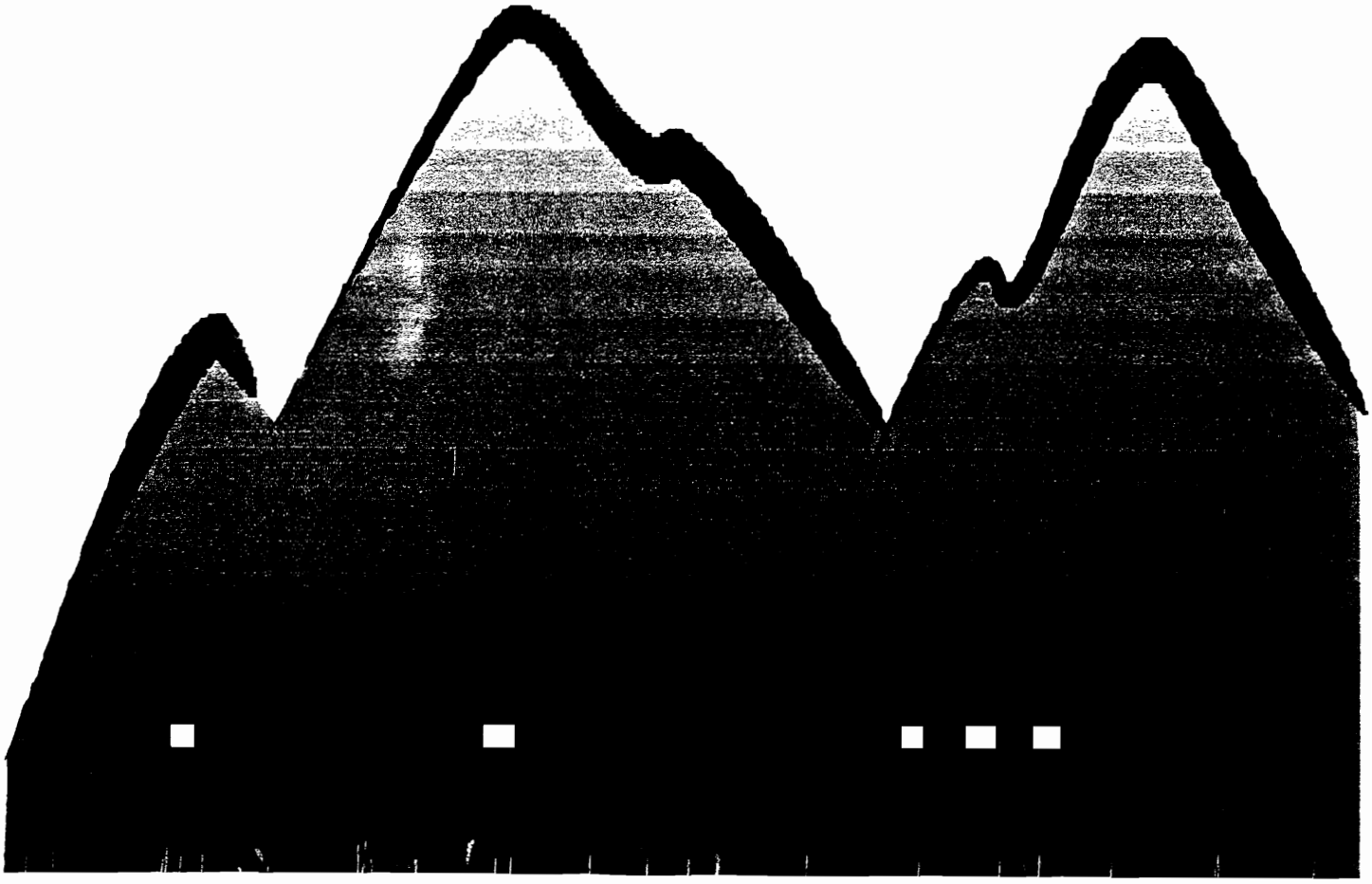
Contact: Ann M. Johnston
Senior Ecologist/Project Manager
(714) 444-9199

February 19, 1999



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Attachment A

Flora and Fauna Compendia

BIOLOGICAL RESOURCES TECHNICAL REPORT

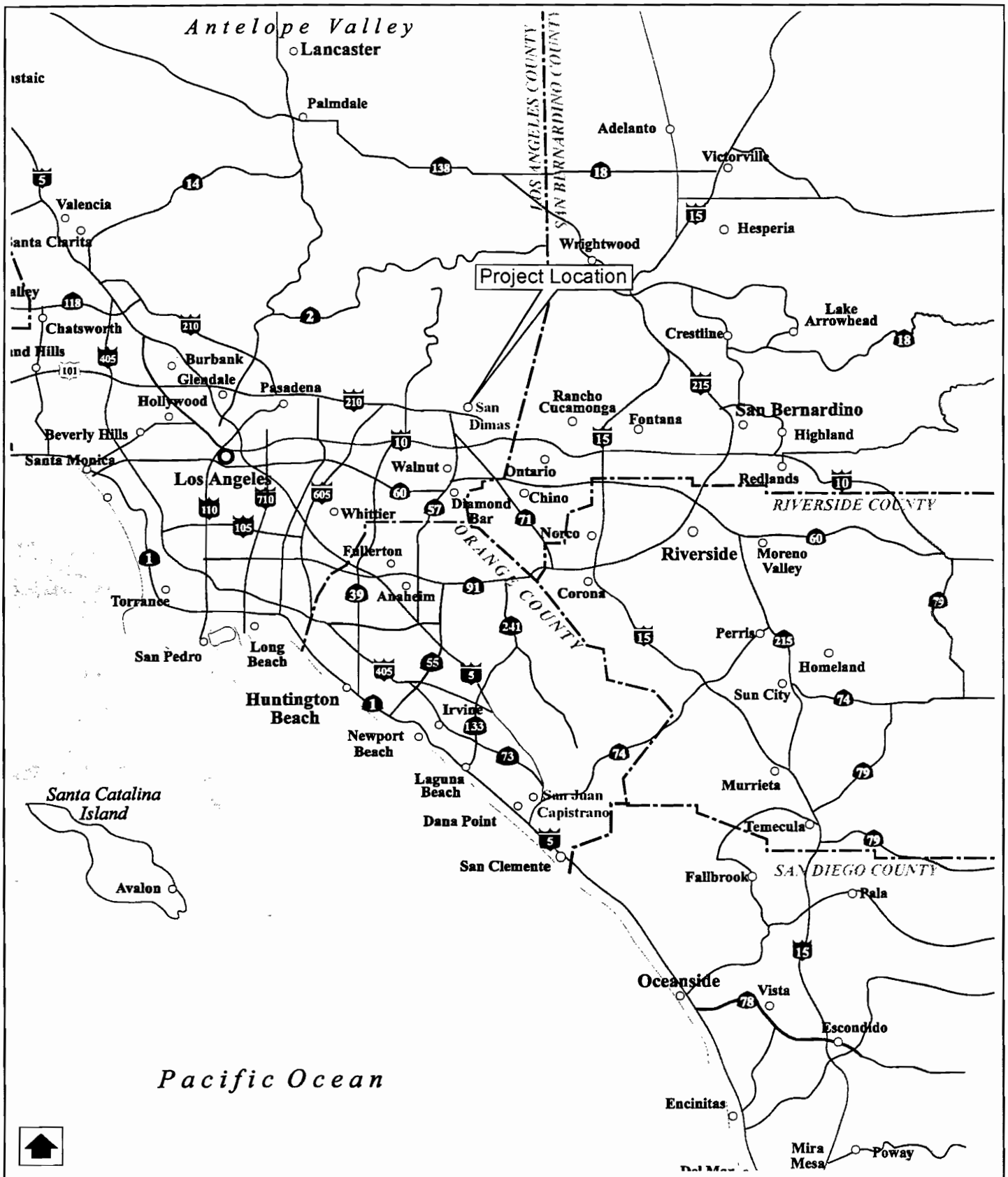
1.0 INTRODUCTION

This Biological Technical Report has been prepared to support California Environmental Quality Act (CEQA) documentation requirements of the proposed San Dimas Northern Foothills Project (hereafter referred to as the project site). In addition, information from this report may be used in support of future (i.e., after City approval of the project) permitting requirements for the U.S. Army Corps of Engineers (ACOE), California Department of Fish and Game (CDFG), and the Regional Water Quality Control Board (RWQCB). This information has been reported in accordance with accepted scientific and technical standards that are consistent with the requirements of the U.S. Fish and Wildlife Service (USFWS) and CDFG.

1.1 PROJECT DESCRIPTION

The project site contains approximately 3,000 acres located north of Foothill Boulevard, in the northern portion of the City of San Dimas, in eastern Los Angeles County (Exhibit 1). The area is generally bordered by the Angeles National Forest to the north and northeast, the City of La Verne to the east and southeast, residential areas to the south, and the City of Glendora immediately to the west (Exhibit 2). The project site is situated in an area that supports a mix of land uses consisting of residential, commercial, agriculture, and open space. The primarily undeveloped area consists of a variety of habitats, such as chaparral, coastal sage scrub, grassland, woodland, and riparian scrub.

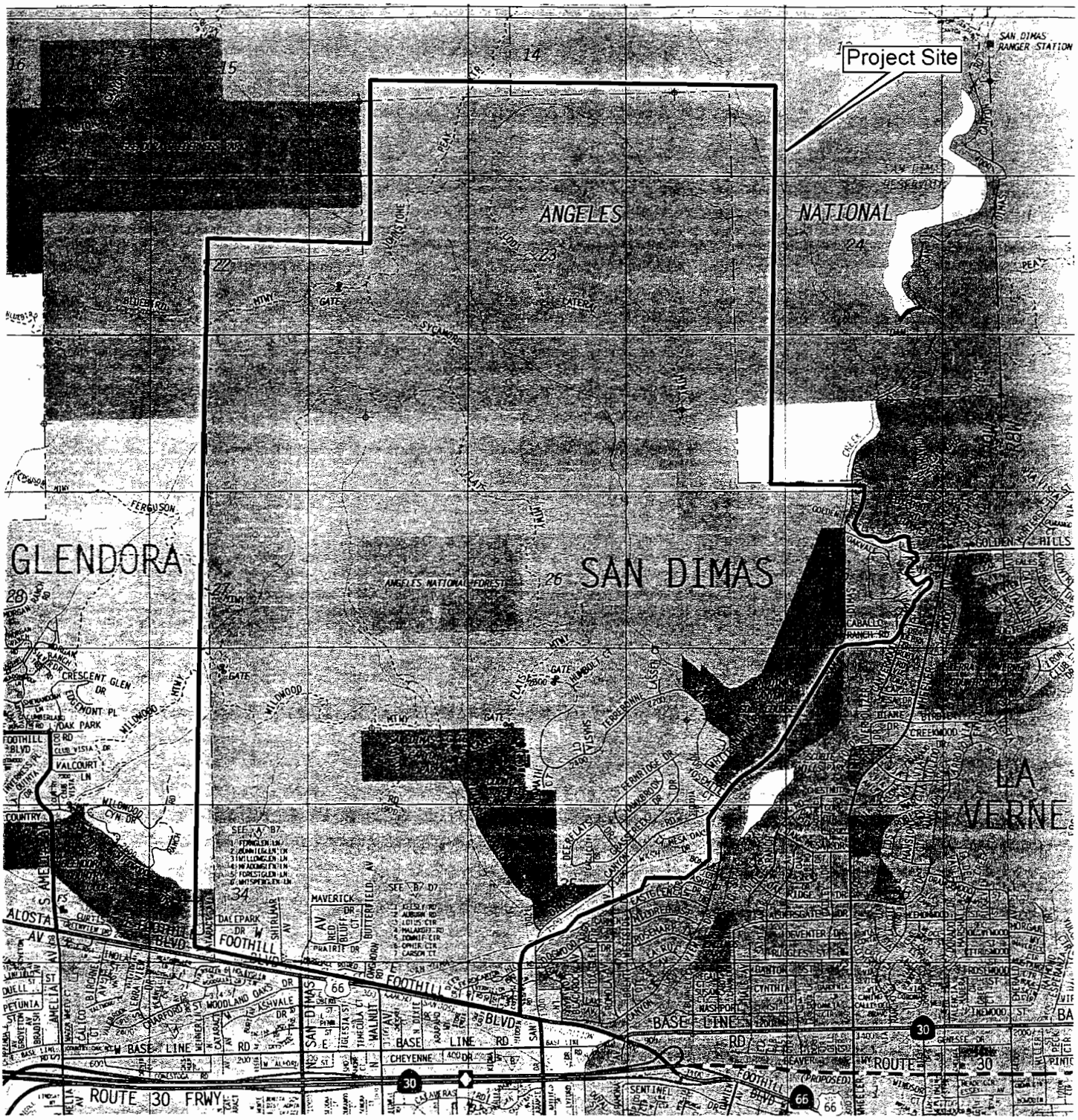
The proposed project consists of: (1) a General Plan Amendment; and (2) a Zone Change/Specific Plan. Under the existing General Plan, the maximum development permitted within the project site would permit 195 dwelling units on 972 acres (one dwelling unit per five acres). The development strategy proposed in the *Northern Foothills Development and Infrastructure Study* (November 1998) would permit a maximum of 127 dwelling units on 972 acres (approximately one dwelling unit per 7.6 acres). The City proposes to amend its General Plan to create a "Northern Foothills" land use designation and to outline policies and requirements consistent with the aforementioned study. The Zone Change/Specific Plan is a request to create a new zone or specific plan to implement the policies and requirements of the General Plan and the adopted development strategy. The overall objective is to fit future projects into their hillside settings rather than altering the hillsides to fit projects. A priority between development and natural resource values has been given to protecting the resource.



San Dimas Northern Foothills
Biological Technical Report
Regional Location

Exhibit 1

BonTerra CONSULTING



1 inch = 2,400 feet

Source: Thomas Guide: Los Angeles/Orange Counties 1998 Edition

San Dimas Northern Foothills
Biological Technical Report
Local Vicinity

Exhibit 2

BonTerra CONSULTING

2.0 SURVEY METHODS

The data provided in this report has been collected from biological surveys conducted on January 27, February 2, and February 9, 1999. In addition, existing documentation pertinent to the biological resources within, or in the vicinity of, the project site was compiled and reviewed. This included a review of taxa currently listed as threatened or endangered, proposed for listing, and/or that are candidates for listing by the CDFG, USFWS, and California Native Plant Society (CNPS). BonTerra Consulting conducted a search of the available literature to identify special status plants, wildlife, or habitats known to occur in the vicinity of the project site. The California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California (Skinner and Pavlik 1998), and compendia of special status species published by the USFWS and CDFG were consulted. In addition, the Glendora Quadrangle area of the California Department of Fish and Game Natural Diversity Database was searched to document any previously reported sensitive species and habitats within the project area.

2.1 VEGETATION MAPPING AND GENERAL PLANT SURVEYS

General botanical surveys of the project site were conducted on January 27, February 2 and 9, 1999. The purpose of these surveys was to field verify maps prepared by LSA Associates in 1998 and to map the proposed development areas in greater detail. Special attention was placed on those areas of vacant land and other open space areas that are not currently developed or under public ownership. The detailed mapping was necessary to evaluate the potential of the vegetation to support special status plant and wildlife species. All plant and wildlife species observed were recorded in field notes. Plant species were identified in the field or collected for future identification. Plants were identified using keys in Hickman (1993), Munz (1974) or Abrams (1923). Taxonomy follows Hickman (1993) for scientific and common names. Roberts (1998) was used for common names when none were listed in Hickman (1993). The vegetation descriptions follow CDFG 1997 which is based on Sawyer and Keeler-Wolf 1995 and structured to be compatible with Holland 1986. Focused surveys for special status plant species were not conducted for the project area.

2.2 GENERAL WILDLIFE SURVEYS

A general wildlife survey of the project site was conducted on January 27, February 2, and February 9, 1999. During the wildlife survey, the project site was also evaluated to assess potential direct and indirect impacts from project implementation. Survey emphasis was placed on potential development areas identified in the Northern Foothills Implementation Program Initial Study. The survey included active searches for reptiles and amphibians by lifting, overturning, and carefully replacing rocks and debris and observing amphibian and reptile activity on dirt roads and in drainage bottoms. Birds were identified by standard visual and auditory recognition. The presence of nests or other evidence of breeding activity was noted. Surveys for mammals included searching for and identifying diagnostic sign, including scat, footprints, scratch-outs, dusting bowls,

burrows, and trails. Focused surveys for special status wildlife species were not conducted for the project site.

3.0 BIOLOGICAL RESOURCES

This section describes the biological resources that either occur or potentially occur in the project site or within the immediate vicinity. Vegetation types, wildlife populations and movement patterns, special status plant communities, and special status plant and wildlife species either known or potentially occurring in the project site are discussed below.

3.1 VEGETATION

The vegetation types that occur in the proposed development area as delineated by BonTerra Consulting 1999 are shown on Exhibit 3. Exhibit 4 shows the seven vegetation types on the project site as previously identified by LSA in 1998 for the Northern Foothills EIR.

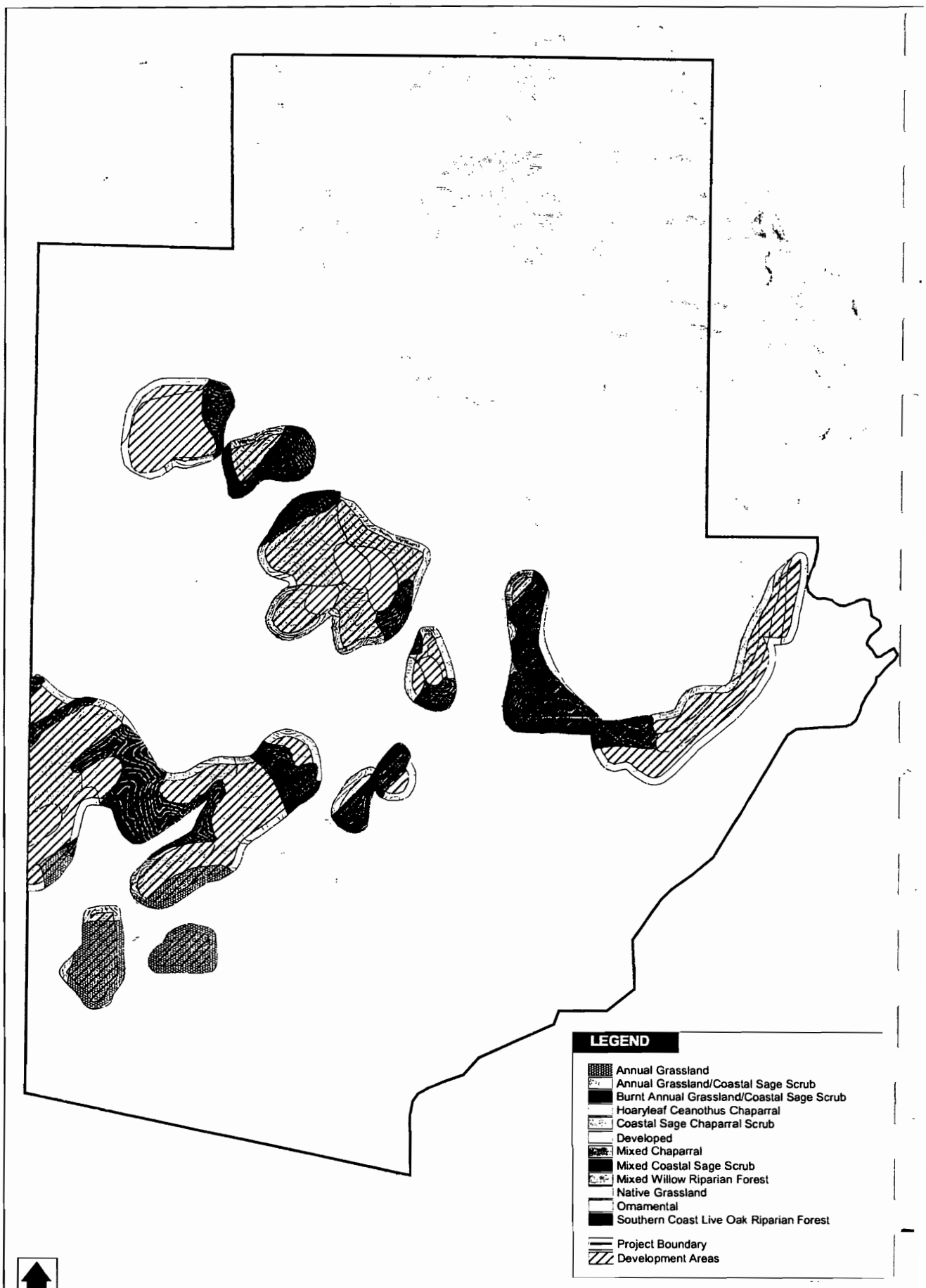
A total of 11 different vegetation types occur in the proposed development area. These vegetation types, discussed below, are mixed: willow riparian forest; southern coast live oak riparian forest; mixed chaparral; hoaryleaf ceanothus chaparral; coastal sage chaparral scrub; mixed coastal sage scrub; native grassland; annual grassland/coastal sage scrub; annual grassland; burnt annual grassland/coastal sage scrub; and ornamental/developed. The acreage of vegetation associations within the proposed development areas are summarized in Table 1.

Mixed Willow Riparian Forest

The riparian habitat along San Dimas Creek in the eastern portion of the project site fits the description of mixed willow riparian forest, which is classified as southern willow scrub in Holland (1986) and mixed willow series by Sawyer and Keeler-Wolf (1995). This community is dominated by western sycamore (*Platanus racemosa*), black willow (*Salix goodingii*), arroyo willow (*Salix lasiolepis*) and giant reed (*Arundo donax*) with scattered coast live oak (*Quercus agrifolia*) and white alder (*Alnus rhombifolia*). The high number of giant reed indicates that the area has been disturbed by the construction of the golf course and San Dimas Road which are both adjacent to and cross San Dimas Creek.

Southern Coast Live Oak Riparian Forest

The southern coast live oak riparian forest occurs along major drainage courses and on mesic (moist) sites such as canyons and north-facing slopes. The southern coast live oak riparian forest is classified as southern coast live oak forest in Holland and the coast live oak series



San Dimas Northern Foothills
Biological Technical Report
Biological Resources

Exhibit

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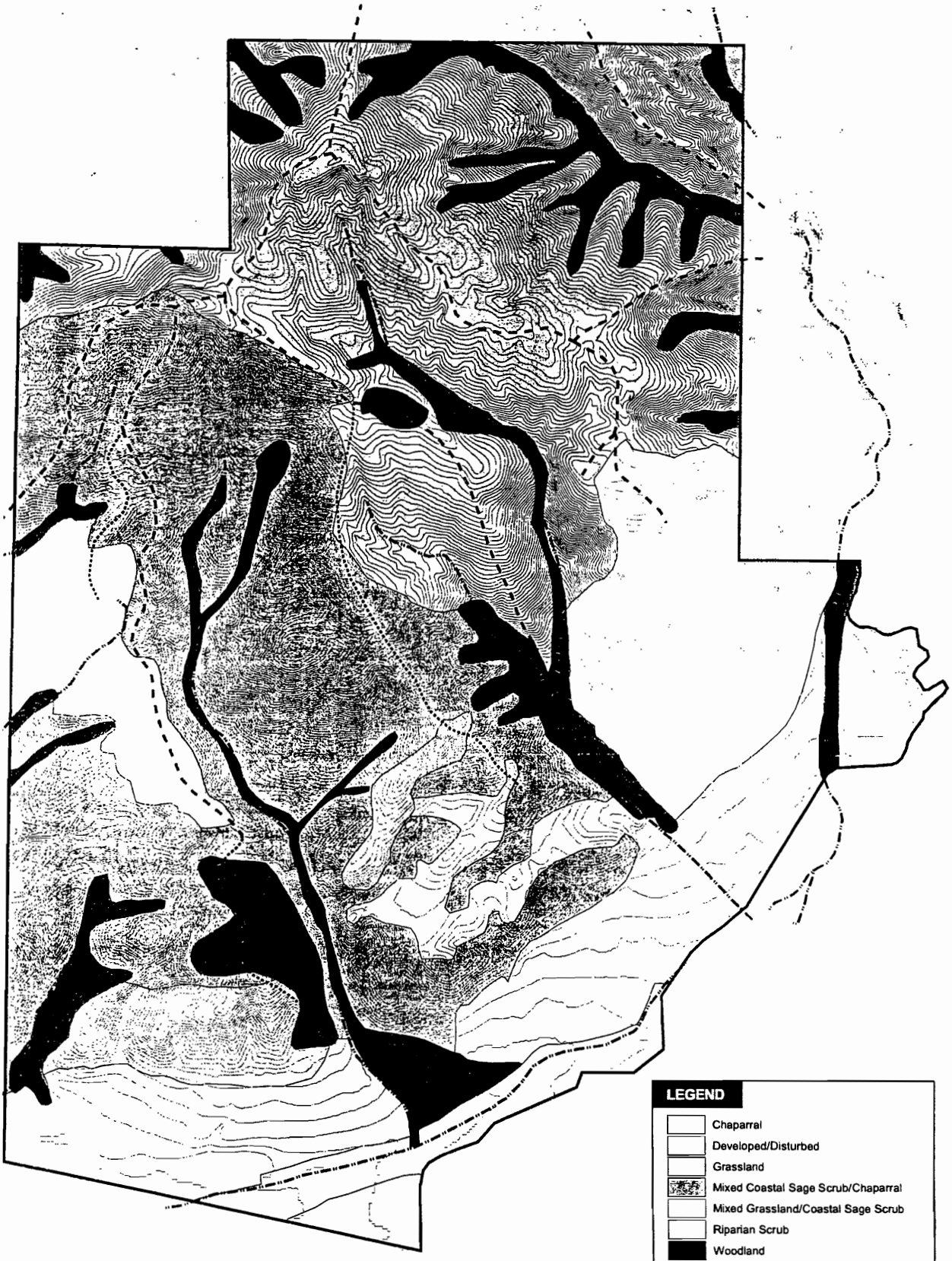

Source: LSA / Global Geographic Services

1 inch = 1,200 feet

San Dimas Northern Foothills
Biological Technical Report
General Biological Resources

Exhibit 4

BonTerra CONSULTING

in Sawyer and Keeler-Wolf (1995). The riparian forest along the drainages onsite is dominated with coast live oak. Other species present include: western sycamore, California bay laurel (*Umbellularia californica*), toyon (*Heteromeles arbutifolia*), mule fat (*Baccharis salicifolia*), poison oak (*Toxicodendron diversilobum*), black willow, seep monkey flower (*Mimulus guttatus*), and watercress (*Rorippa nasturtium-aquaticum*). One portion of the riparian forest directly above the golf course occurs on a bench and contains ponded water.

TABLE 1
VEGETATION ASSOCIATIONS

Vegetation Associations	Development Area (acres)
Mixed Willow Riparian Forest	3.06
Southern Coast Live Oak Riparian Forest	48.91
Mixed Chaparral	66.71
Hoaryleaf Ceanothus Chaparral	2.49
Coastal Sage Chaparral Scrub	56.62
Mixed Coastal Sage Scrub	35.26
Native Grassland	32.28
Annual Grassland/Coastal Sage Scrub	14.74
Annual Grassland	23.87
Burnt Annual Grassland/Coastal Sage Scrub	7.07
Ornamental	9.05
Developed	26.77
TOTAL	**326.83**

Mixed Chaparral

The mixed chaparral on the project site is classified as southern mixed chaparral in Holland (1986) and the chamise series of Sawyer and Keeler-Wolf (1995). Chaparral on the project site occurs on the hillsides and ridge tops and is very dense and almost impenetrable. The mixed chaparral is dominated by chamise (*Adenostoma fasciculatum*), hoaryleaf ceanothus (*Ceanothus crassifolius*), black sage (*Salvia mellifera*), toyon, holly-leafed cherry (*Prunus illicifolia*), and scrub oak (*Quercus berberidifolia*).

Hoaryleaf Ceanothus Chaparral

The hoaryleaf ceanothus chaparral on the project site is classified as *Ceanothus crassifolius* chaparral in Holland (1986) and as hoaryleaf ceanothus series in Sawyer and Keeler-Wolf (1995).

This chaparral occurs in the northern portion of the project site and is dominated by hoaryleaf ceanothus and chamise.

Coastal Sage Chaparral Scrub

The coastal sage chaparral scrub is a mixture of the mixed sage scrub and chaparral habitats, two vegetation types that typically intergrade. The species present on the project site include: chamise, laurel sumac (*Malosma laurina*), toyon, ceanothus, California sagebrush (*Artemisia californica*), black sage, and California buckwheat (*Eriogonum fasciculatum*).

Mixed Coastal Sage Scrub

Mixed coastal sage scrub on the site is dominated by a mix of sage scrub species and fits the description of Riversidian sage scrub in Holland (1986) and the mixed sage series in Sawyer and Keeler-Wolf (1995). The mixed coastal sage scrub occurs scattered throughout the project site on south-facing slopes and in pockets within the chaparral. This vegetation is relatively undisturbed and contains a diverse mix of shrubs and herbaceous species. The dominant native perennial species on the project site include: California sagebrush, black sage, white sage (*Salvia apiana*), California buckwheat, purple sage (*Salvia leucophylla*), prickly-pear (*Opuntia occidentalis*), and deerweed (*Lotus scoparius*).

Native Grassland

Native grassland on the project site occurs in two large patches and is scattered in the interstitial openings in the mixed coastal sage scrub. The native grassland fits the valley needlegrass grassland classification in Holland (1986) and the purple needlegrass series in Sawyer and Keeler-Wolf. The dominant grass species on the project site include purple needlegrass (*Nassella pulchra*), giant wild rye (*Leymus condensatus*), melic grass (*Melica imperfecta*), and canary grass (*Phalaris* sp.). The largest patch of grassland on the northern portion of the project site has been disturbed by previous ranch uses and contains many non-native species of brome grass (*Bromus* sp.). The other native grassland area is relatively undisturbed. The areas of native grassland between the coastal sage scrub habitats were not mapped because of their small size.

Annual Grassland/Coastal Sage Scrub

Large areas on the project site contain a mixture of annual grassland and coastal sage scrub species. These areas appear to have been disturbed by grazing or frequent fires. The majority of acreage is dominated by non-native grasses with a few scattered sage scrub species. The coastal sage scrub species in these areas include California sagebrush, buckwheat, and laurel sumac.

Annual Grassland

Annual grasslands occur on the southern portion of the project site adjacent to developed areas. The dominant species are non-native grasses including foxtail chess (*Bromus madritensis*), ripgut grass (*Bromus diandrus*), and slender wild oat (*Avena barbata*). Other non-native weedy species also dominate the annual grassland, including short-pod mustard (*Hirschfeldia incana*), prickly lettuce (*Lactuca serriola*), and wild radish (*Raphanus sativus*).

Burned Annual Grassland/Coastal Sage Scrub

The burned areas on the project site occur in the central portion adjacent to Sycamore Flat Road. These areas were recently burned and the dominant species in the areas could not be determined. Several laurel sumacs were crown sprouting during the survey, but there is very little evidence of any other dominant plant species.

Ornamental/Developed

Ornamental vegetation is associated with the developed areas on the project site such as residences, parks and equestrian center, golf course, and the detention center. Ornamental vegetation typically consists of non-native species including gum trees (*Eucalyptus* spp.) and oleander (*Nerium* sp.).

3.2 WILDLIFE

The diversity of habitat types and their spatial arrangement on the project site create a mosaic of high value habitat that is capable of supporting a wide variety of wildlife species. All components of wildlife habitat -- open space, cover, water, and food -- are present within the project site. Virtually all wildlife species of the local foothill ecosystem are expected to be present within the project area, or to use the site as part of a larger home range. This is attributable to the large size of the project site, its relatively high quality habitat, and the extensive surrounding areas of natural open space.

Of any single habitat type, woodlands are expected to support the greatest diversity and abundance of wildlife species. However, the inherent high value of woodland habitats is due, in part, to their proximity and interspersion with other habitats such as chaparral and coastal sage scrub.

Fish

The creeks and waterways in southern California are perennial and subject to periods of high water flow in winter and spring and little to no flow in late summer and fall. These creeks and waterways can support a variety of habitats, including willow woodland, mule fat scrub, and freshwater marsh. The herbaceous cover present will vary by season from little to no cover during periods of high water flow to high coverage in late summer and fall. Native fish species that potentially inhabit this area have adapted to living in these naturally fluctuating conditions. However, natural and man-made causes such as drought, alteration of habitat, and introduced species have helped to reduce the native fish populations of southern California.

Major creeks within the project site are San Dimas Creek and the creek in Sycamore Canyon, hereafter referred to as Sycamore Canyon Creek. Non-native species introduced into the region that may occur within the slower moving portions of the creeks onsite include the fathead minnow (*Pimephales promelas*) and mosquito fish (*Gambusia affinis*). In addition, where substantial ponding occurs along San Dimas Creek, species such as large mouth bass (*Micropterus salmoides*), green sunfish (*Lepomis cyanellus*), and stocked trout (*Oncorlynclus* sp.) may also be present.

Amphibians

Amphibians require moisture for at least a portion of their life cycle and many require standing or flowing water for reproduction. Although much of the project site is dry for most of the year, a number of amphibian species occur or potentially occur even in the drier habitats. These species are able to survive in dry areas by remaining beneath the soil in burrows or under logs or leaf litter, emerging only when temperatures are low and humidity is high. Many of these species' habitats occur in association with water, and many emerge to breed after the rainy season begins. In addition, moisture in soil can remain high within certain habitats, depending on factors such as amount of vegetation cover, elevation, slope, and aspect.

San Dimas Creek and the Sycamore Canyon Creek may provide suitable habitat within the project site for the black-bellied salamander (*Batrachoseps nigriventris*), western toad (*Bufo boreas*), California treefrog (*Hyla cadaverina*), Pacific tree frog (*Hylla regilla*), and bullfrog (*Rana catesbeiana*). The project area also has the potential to support arboreal salamander (*Aneides lugubris*), Pacific slender salamander (*Batrachoseps pacificus*), ensatina (*Ensatina eschscholtzii*), and western spadefoot toad (*Scaphiopus hammondii*). These species may occupy areas immediately adjacent to areas of semi-permanent runoff where wetland vegetation occurs, and flood control channels.

Reptiles

Reptilian diversity and abundance typically varies with vegetation association type and character. Many species prefer only one or two vegetation associations; however, most will forage in a variety of habitat types. Most species occurring in open areas use rodent burrows and various objects lying on the ground surface for cover, protection from predators, and extreme weather conditions.

Reptile species observed or expected within the project site include Coast horned lizard (*Phrynosoma coronatum*), western fence lizard (*Sceloporus occidentalis*), side-blotched lizard (*Uta stansburiana*), Gilbert's skink (*Eumeces gilberti*), western skink (*Eumeces skiltonianus*), coastal whiptail (*Cnemidophorus hyperythrus*), southern alligator lizard (*Gerrhonotus multicatinatus*), western glossy snake (*Arizona occidentalis*), ringneck snake (*Diadophis punctatus*), California kingsnake (*Lampropeltis getulus*), coachwhip (*Masticophis flagellum*), striped racer (*Masticophis lateralis*), gopher snake (*Pituophis melanoleucus*), western rattlesnake (*Crotalus viridis*), and speckled rattlesnake (*Crotalus mitchelli*). Other species with potential to occur in the project area include western pond turtle (*Clemmys marmorata pallida*), silvery legless lizard (*Anniella pulchra pulchra*), western blind snake (*Leptotyphlops humilis*), night snake (*Hypsiglena torquata*), rosy boa (*Lichanura trivirgata*), long-nosed snake (*Rhinocheilus lecontei*), western patchnose snake (*Salvadora hexalepis*), western black-headed snake (*Tantilla planiceps*), two-striped garter snake (*Thamnophis hammondii*), and lyre snake (*Trimorphodon biscutatus*).

Birds

Birds were the most widely observed vertebrate taxon occurring within the project site. Some of the more common species observed or expected to occur within the project site are the mountain quail (Oreortyx *pictus),* California quail (*Callipepla californica*), mourning dove (*Zenaida macroura*), greater roadrunner (*Geococcyx californianus*), white-throated swift (*Aeronautes saxatalis*), Anna's hummingbird (*Calypte anna*), Costa's hummingbird (*Calypte costae*), acorn woodpecker (*Melanerpes formicivorus*), northern flicker (*Colaptes auratus*), Pacific-slope flycatcher (*Empidonax difficilis*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), western kingbird (*Tyrannus verticalis*), loggerhead shrike (*Lanius ludovicianus*), western scrub jay (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), cliff swallow (*Hirundo pyrrhonota*), mountain chickadee (*Parus gambeli*), bushtit (*Psaltriparus minimus*), Bewick's wren (*Thryomanes bewickii*), house wren (*Troglodytes aedon*), western bluebird (*Sialia mexicana*), northern mockingbird (*Mimus polyglottos*), California thrasher (*Toxostoma redivivum*), European starling (*Sturnus vulgaris*), common yellowthroat (*Geothlypis trichas*), spotted towhee (*Pipilo maculatus*), California towhee (*Pipilo crissalis*), rufous-crowned sparrow (*Aimophila ruficeps*), white-crowned sparrow (*Zonotrichia leucophrys*), Brewer's blackbird (*Euphagus cyanocephalus*), house finch (*Carpodacus mexicanus*), and house sparrow (*Passer domesticus*).

Habitats within the project site provide high quality foraging habitat for a variety of raptors (birds of prey). Raptors observed within or near the project site include the turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), and American kestrel (*Falco sparverius*). Other raptors expected within the project site include northern harrier (*Circus cyaneus*), sharp-shinned hawk (*Accipiter striatus*), Cooper's hawk (*Accipiter cooperii*), red-shouldered hawk (*Buteo lineatus*), golden eagle (*Aquila chrysaetos*), western screech owl (*Otus kennicottii*), and great horned owl (*Bubo virginianus*). There is also potential for white-tailed kite (*Elanus leucurus*), merlin (*Falco columbarius*), prairie falcon (*Falco mexicanus*), barn owl (*Tyto alba*), and spotted owl (*Strix occidentalis).*

Mammals

Rodents are among the most diverse and widespread mammals and several species are expected to occur within the project site. Rodents that potentially occur include the California ground squirrel (*Spermophilus beecheyi*), Merriam's chipmunk (*Tamias merriami*), western gray squirrel (*Sciurus griseus*), pocket gopher (*Thomomys bottae*), California vole (*Microtus californicus*), dusky-footed woodrat (*Neotoma fuscicpes*), cactus mouse (*Peromyscus eremicus*), deer mouse (*Peromyscus maniculatus*), brush mouse (*Peromyscus boylii*), and black rat (*Rattus rattus*). The project site also has the potential to support desert shrew (*Notiosorex crawfordi*), little pocket mouse (*Perognathus longimembris*), California pocket mouse (*Perognathus californicus*), agile kangaroo rat (*Dipodomys agilis*), house mouse (*Mus musculus*), and California mouse (*Peromyscus californicus).* Medium to large sized mammals observed or expected to occur include the Virginia opossum (*Didelphis virginiana*), broad-footed mole (*Scapanus latimanus*), brush rabbit (*Sylvilagus bachmani*), desert cottontail (*Sylvilagus audubonii*), black-tailed jackrabbit (*Lepus californicus*), coyote (*Canis latrans*), gray fox (*Urocyon cinereoargenteus*), common raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), long-tailed weasel (*Mustela frenata*), western spotted skunk (*Spilogale gracilis*), American badger (*Taxidea taxus*), mountain lion (*Felis concolor*), bobcat (*Felis rufus*), and mule deer (*Odocoileus hemionus*). A number of bat species are also expected to use various habitats within the project site for foraging, roosting, and potentially breeding. However, it is difficult to identify specific species of bats because they are difficult to detect due to their secretive habits.

3.3 WILDLIFE MOVEMENT

A wildlife dispersal or migration corridor is a relatively narrow strip of habitat that connects two or more larger areas or habitat. It is essentially free of any physical barriers such as freeways, fences, walls, housing tracts, or lakes. A typical wildlife corridor provides both refuge and ease of movement. Canyon bottoms and ridgelines offer both. Canyon bottoms offer food, water, shelter and ease of movement because of their rich plant growth, sparse undergrowth, and reliable water supplies. Ridgelines offer ease of movement between adjacent canyons and refuge in adjacent brush. Most animals will also use firebreaks and dirt roads as corridors, as long as they are not heavily traveled by vehicles at night.

Wildlife corridors vary greatly in their overall significance. General information that currently exists on corridors suggests that major drainages, canyon bottoms and ridgetops, as well as areas that provide important resources for wildlife, will be the most significant areas for wildlife movement. In general, two types of corridors exist. Regional corridors are generally those that allow movement between large, often widely separated areas. These may connect National Forests, mountain ranges, or other major wildlife use areas. Local wildlife corridors are those that allow dispersion between smaller, generally more adjacent areas, such as between canyons or ridges, or important resource areas.

With respect to the proposed project site, Morgan Canyon, Wildwood Canyon, Shuler Canyon, Shay Canyon, Sycamore Canyon, and Ham Canyon provide important resources to wildlife within the project area and the adjacent Angeles National Forest. These drainages currently act as travel routes within the project site and are expected to be used by a variety of wildlife species including, but not limited to, the coyote, bobcat, mule deer, and mountain lion. These larger and more mobile wildlife species may use these drainages to move within and between the adjacent open space areas, while the smaller and less mobile species such as rodents, amphibians, and reptiles, as well a large number of plant species may live in the "route" and require long periods or several generations of individuals to transverse to the area.

The portions of these drainages in the vicinity of the project site do not currently act as "movement corridors", as defined above, due to the general lack of development in the area and the lack of connectivity to other large open space areas to the south. The canyons and ridgelines within the project site are expected to be used by resident wildlife for local movement within the project site and to the surrounding open space areas.

3.4 SPECIAL STATUS BIOLOGICAL RESOURCES

The following section addresses special status biological resources observed, reported, or having the potential to occur within the project site. These resources include plant and wildlife species that have been afforded special status and/or recognition by federal and state resource agencies, as well as private conservation organizations. In general, the principal reason an individual taxon (species, subspecies, or variety) is given such recognition is the documented or perceived decline or limitations of its population size or geographical extent and/or distribution (resulting in most cases from habitat loss).

Definitions of Special Status Biological Resources

A *federally endangered species* is one facing extinction throughout all or a significant portion of its geographic range. A *federally threatened species* is one likely to become endangered within the foreseeable future throughout all or a significant portion of its range. The presence of any federally threatened or endangered species on a project site generally imposes constraints on development,

particularly if development would result in "take" of the species or its habitat. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct. Harm in this sense can include any disturbance to habitats used by the species during any portion of its life history.

Proposed species are those officially proposed by the USFWS for addition to the federal threatened and endangered species list. Because proposed species may be listed as threatened or endangered, these species could pose additional constraints prior to or during implementation of a proposed development project.

The State of California considers: an *endangered species* as one whose prospects of survival and reproduction are in immediate jeopardy; a *threatened species* as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management; and a *rare species* as one present in such small numbers throughout its range that it may become endangered if its present environment worsens. Rare species applies to California native plants. State threatened and endangered species are fully protected against take.

Species of Special Concern is an informal designation used by the CDFG for some declining wildlife species that are not considered threatened or endangered. This designation does not provide legal protection but signifies that these species are recognized as sensitive by the CDFG. Species that are *California fully protected* include those protected by special legislation for various reasons, such as the mountain lion and white-tailed kite.

The CNPS is a local resource conservation organization that has developed an inventory of California's sensitive plant species (Skinner and Pavlik 1994). This inventory is the summary of information on the distribution, rarity, and endangerment of California's vascular plants. This rare plant inventory is comprised of four lists. CNPS presumes that *List 1A* plant species are extinct in California because they have not been seen in the wild for many years. CNPS considers *List 1B* plants as rare, threatened, or endangered throughout their range. *List 2* plant species are considered rare, threatened, or endangered in California but more common in other states. Plant species for which CNPS needs additional information are included on *List 3*. *List 4* plant species are those of limited distribution in California whose susceptibility to threat appears low at this time.

Special Status Plants

A total of 11 special status plant species are known to occur in the vicinity of the project site; ten of these species potentially occur on the project site. These species and their potential to occur on the project site are summarized in Table 2. All of the special status plant species that have potential to occur in the project site are discussed below.

TABLE 2
SPECIAL STATUS PLANT SPECIES
KNOWN TO OCCUR IN THE REGION OF THE PROJECT SITE

Species	Status			Habitat	Optimal Survey Period	Presence
	USFWS	CDFG	CNPS			
Astragalus brauntonii Braunton's milkvetch	E	--	List 1B	Scrub and chaparral habitats	February - June	No suitable habitat
Berberis nevinii Nevin's barberry	E	E	List 1B	Floodplain sage scrub habitats	March-April	Potential
Brodiaea filifolia Thread-leaved brodiaea	T	E	List 1B	Venturan-Diegan transitional coastal sage scrub, grassland, and southern hardpan vernal pool habitats	March - June	Potential
Calochortus clavatus var. *gracilis* Slender mariposa lily	SSC	--	List 1B	Chaparral habitats	March	Potential
Calochortus plummerae Plummer's mariposa lily	SSC	--	List 1B	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest and valley and foothill grassland habitats (granitic)	May-July	Potential
Dudleya densifolia San Gabriel Mountains dudleya	C	--	List 1B	Chaparral, coastal scrub, lower montane conifer forests, granitic, cliffs and canyon walls	March-July	Potential
Dudleya multicaulis many-stemmed dudleya	SSC	--	List 1B	Scrub, grassland and rock outcrop habitats	May-June	Potential
Erigeron breweri var. *bisanctus* pious daisy	--	--	List 1B	Chaparral and lower montane coniferous forest habitats	May-September	Potential
Helianthus nuttallii Los Angeles sunflower	--	--	List 1A	Coastal freshwater marsh habitats	August - October	No suitable habitat
Lepidium virginicum var. robinsonii Robinson's peppergrass	--		List 1B	Chaparral, coastal scrub	January-July	Potential
Senecio aphanactis rayless ragwort	--		List 2	Cismontane woodland, coastal scrub, alkaline	January-April	Potential

LEGEND

Federal (USFWS)

- **E** Endangered
- **T** Threatened
- **PE** Proposed Endangered
- **PT** Proposed Threatened
- **C** Candidate Species
- **SSC** Species of Special Concern

State (CDFG)

- **E** Endangered
- **T** Threatened
- **PE** Proposed Endangered
- **PT** Proposed Threatened

California Native Plant Society (CNPS)

- **1A** Plants Presumed Extinct in California
- **1B** Plants Rare, Threatened, or Endangered in California and Elsewhere
- **2** Plants Rare, Threatened, or Endangered in California But More Common Elsewhere
- **3** Plants About Which We Need More - A Review List
- **4** Plants of Limited Distribution - A Watch List

R:\Projects\RBF\J023 Plant Tbl-021799

Braunton's milkvetch *(Astragalus brauntonii)*, a federally endangered species, is a limestone soil endemic or may be found in down-wash sites associated with chamise (*Adenostoma fasciculatum*), our Lord's candle (*Yucca whipplei*), tecate cypress (*Cupressus forbesii*) and chaparral beargrass (*Nolina cismontana*), (USFWS 1992, Vol. 57, No. 230). This species needs fire or other site perturbations for its survival (USFWS 1992). This species is not known to be present in the vicinity of the project site; however, data is not widely available for this species due to its ecology. This species is not anticipated to be present on the project site due to the lack of suitable soils.

Nevin's Barberry *(Berberis nevinii)* is a state and federally endangered species that occurs in sandy and gravelly habitats in coastal sage scrub and chaparral. This species is known to occur in Los Angeles, Riverside, San Bernardino and San Diego counties. Nevin's barberry is known to occur in San Antonio Canyon north of the project site in the Angeles National Forest. This species has a limited potential to occur in the drainages on the project site.

Thread-leaved brodiaea (*Brodiaea filifolia*), a federally threatened and state endangered species, is a perennial herb that flowers May through June in valley grasslands and vernal pools in clay soils below 2,000 feet above mean sea level. The brodiaea is known to occur in San Dimas between Wildwood and Morgan canyons and in Glendora to the west of the project site. This species has the potential to occur in the native grasslands and the openings in the coastal sage scrub on the project site.

The **slender mariposa lily (*Calochortus clavatus* var. *gracilis*)** is a federal Species of Special Concern. The known range for this species includes canyons and slopes below 4,000 feet above mean sea level at the southern base of the San Gabriel Mountains. This species is a perennial herb that is found in openings in chaparral and coastal sage scrub. The project site provides potentially suitable habitat for the slender mariposa lily.

Plummer's mariposa lily (*Calochortus plummerae*) is a federal Species of Concern and is known to occur in Los Angeles, Riverside, and San Bernardino counties in chaparral, coastal sage scrub, grasslands, cismontane woodlands, and lower montane coniferous forests. This species is known to be present in the vicinity of Johnston Peak, which is directly north of the project site. The project site provides potentially suitable habitat for the Plummer's mariposa lily.

San Gabriel Mountains dudleya (*Dudleya densifolia*) is known to occur on granitic cliffs and canyon walls surrounded by chaparral and coastal sage scrub species. This species is a candidate for listing by the USFWS. This species is known to occur in a limited number of localities in the San Gabriel Mountains, which include Fish Canyon, Roberts Canyon, and the mouth of the San Gabriel Dam. Suitable habitat is present on the project site for the San Gabriel Mountain dudleya.

The **many-stemmed dudleya (*Dudleya multicaulis*)** is a federal Species of Special Concern. The USFWS has considered emergency-listing the many-stemmed dudleya due to the cumulative impacts on this species. The many-stemmed dudleya is found in open places and rock outcroppings in coastal sage scrub below 2,000 feet above mean sea level. Many-stemmed dudleya is often associated with heavy, often clayey, soils (Hickman 1993). This species is known to occur in Los Angeles, Orange, Riverside, San Diego, and San Bernardino counties. This species is known to occur in the adjacent San Dimas Experimental Forest and potentially occurs on the project site.

The **pious daisy *(Erigeron breweri* var. *bisanctus)*** is a species known only from Los Angeles and San Bernardino counties. This species is listed by the CNPS as a list 1B species. It grows in open dry slopes and washes in chaparral and montane forest habitats. The pious daisy is known to occur in Big Dalton Canyon which is west of the project site in the Angeles National Forest. Suitable habitat for the pious daisy is present on the project site.

Robinson's peppergrass (*Lepidium virginicum* var. *robinsonii*) is a CNPS list 1B species that grows in chaparral and coastal sage scrub habitats on dry soils. This species is known to occur in Tanbark Flats north of the project site in the Angeles National Forest. Suitable habitat is present on the project site.

The **rayless ragwort (*Senecio aphanctis*)** is a CNPS list 2 species that grows in cismontane woodland, coastal sage scrub, and alkaline habitats. This species is known to occur in the vicinity of the project by the Puddingstone Dam. This species has a limited potential to occur on the project site.

Special Status Wildlife

A total of 57 special status wildlife species are known to occur within the region and potentially occur on the project site. This includes the following 12 species listed as endangered, threatened or proposed for listing by the USFWS or CDFG, or both: Quino checkerspot butterfly (*Euphydryas editha quino*), Santa Ana sucker (*Catostomus santaanae*), arroyo southwestern toad (*Bufo microscaphus californicus*), California red-legged frog (*Rana aurora draytonii*), Swainson's hawk (*Buteo swainsoni*), bald eagle (*Haliaeetus leucocephalus*), peregrine falcon (*Falco peregrinus*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), southwestern willow flycatcher (*Empidonax trailii extimus*), least Bell's vireo (*Vireo bellii pusillus*), nesting habitat of bank swallow (*Riparia riparia*), and coastal California gnatcatcher (*Polioptila californica californica*). These endangered and threatened species are addressed below and summarized in Table 3.

TABLE 3
SPECIAL STATUS WILDLIFE SPECIES
KNOWN TO OCCUR IN THE REGION OF THE PROJECT SITE

Species	USFWS	CDFG	Potential to Occur on Project Site
Insects			
Euphydryas editha quino Quino checkerspot butterfly	E	--	potential habitat present , potential to occur
Fish			
Gila orcutti arroyo chub	SSC	SSC	habitat present, potential to occur
Rhinichthys osculus Santa Ana speckled dace	SSC	SSC	habitat present, potential to occur
Catostomus santaanae Santa Ana sucker	PT	SSC	habitat present, potential to occur
Amphibians			
Taricha torosa torosa coast range newt	--	SSC	habitat present, expected to occur
Ensantina eschscholtzii klauberi large-blotched ensantina	SSC	SSC	habitat present, potential to occur
Scaphiopus hammondii western spadefoot	SSC	SSC/P	potential habitat present, potential to occur
Bufo microscaphus californicus arroyo southwestern toad	E	SSC/P	habitat present, potential to occur
Rana aurora draytonii California red-legged frog	T	SSC/P	habitat present, potential to occur
Rana muscosa mountain yellow-legged frog	SSC	SSC/P	habitat present, potential to occur
Reptiles			
Clemmys marmorata pallida southwestern pond turtle	SSC	SSC/P	habitat present, potential to occur
Phrynosoma coronatum blainvillii San Diego horned lizard	SSC	SSC/P	habitat present, potential to occur
Cnemidophorus tigris multiscutatus coastal western whiptail	SSC	--	habitat present, potential to occur
Anniella pulchra pulchra silvery legless lizard	SSC	SSC	habitat present, potential to occur
Diadophis punctatus modestus San Bernardino ringneck snake	SSC	--	habitat present, potential to occur
Lampropeltus zonata parvirubra San Bernardino mountain kingsnake	SSC	SSC	habitat present, potential to occur
Salvadora hexalepis virgultea coast patchnose snake	SSC	SSC	habitat present, expected to occur
Thamnophis hammondii two-striped garter snake	SSC	SSC/P	habitat present, potential to occur

TABLE 3 (continued)
SPECIAL STATUS WILDLIFE SPECIES
KNOWN TO OCCUR IN THE REGION OF THE PROJECT SITE

Species	USFWS	CDFG	Potential to Occur on Project Site
Birds			
Ixobrychus exilis hesperis western least bittern	SSC	SSC	limited habitat present, not expected to occur
Elanus leucurus white-tailed kite	--	FP	habitat present, potential to occur
Circus cyaneus northern harrier	--	SSC	habitat present, expected to occur
Accipiter striatus sharp-shinned hawk	--	SSC	habitat present, expected to occur
Accipiter cooperii Cooper's hawk	--	SSC	habitat present, expected to occur
Buteo swainsoni Swainson's hawk		T	habitat present, expected to occur
Buteo regalis ferruginous hawk	SSC	SSC	habitat present, expected to occur
Heliaeetus leucocephalus bald eagle	E	T/FP	lack of large bodies of water, may periodically occur
Aquila chrysaetos golden eagle	--	SSC/FP	habitat present, expected to occur
Falco columbarius merlin	--	SSC	habitat present, potential to occur
Falco peregrinus peregrine falcon	E	E/FP	habitat present, potential to occur
Falco mexicanus prairie falcon	--	SSC	habitat present, potential to occur
Athene cunicularia burrowing owl	SSC	SSC	habitat present, potential to occur
Asio otus long-eared owl	--	SSC	habitat present, potential to occur
Strix occidentalis occidentalis California spotted owl	SSC	SSC	limited habitat present, adjacent to suitable habitat, potential to occur
Coccyzus americanus occidentalis western yellow-billed cuckoo		E	habitat present, limited potential to occur
Empidonax trailii extimus southwestern willow flycatcher	E		habitat present, potential to occur
Lanius ludovicianus loggerhead shrike	SSC	SSC	habitat present, expected to occur
Vireo bellii pusillus least Bell's vireo	E	E	habitat present, limited potential to occur

TABLE 3 (continued)
SPECIAL STATUS WILDLIFE SPECIES
KNOWN TO OCCUR IN THE REGION OF THE PROJECT SITE

Species	USFWS	CDFG	Potential to Occur on Project Site
Eremophila alpestris actia California horned lark	--	SSC	habitat present, potential to occur
Riparia riparia bank swallow (nesting)	--	T	potential habitat present, limited potential to occur
Campylorhynchus brunneicapillus sandiegoense San Diego cactus wren	--	SSC	habitat present, expected to occur
Polioptila californica californica coastal California gnatcatcher	T	SSC	habitat present, potential to occur
Dendroica petechia brewsteri yellow warbler	--	SSC	habitat present, expected to occur
Icteria virens yellow-breasted chat	--	SSC	habitat present, potential to occur
Piranga rubra summer tanager	--	SSC	habitat present, potential to occur
Aimophila ruficeps canescens Southern California rufous-crowned sparrow	SSC	SSC	habitat present, expected to occur
Amphispiza belli belli Bell's sage sparrow	SSC	SSC	habitat present, potential to occur
Ammodramus savannarum grasshopper sparrow	--	--	habitat present, potential to occur
Agelaius tricolor tricolored blackbird	SSC	SSC	habitat present, potential to occur
Mammals			
Antrozus pallidus pallid bat	--	SSC	habitat present, potential to occur
Corynorhinus townsendii townsendii Townsend's western big-eared bat	SSC	SSC	habitat present, potential to occur
Lepus californicus bennettii San Diego black-tailed jackrabbit	SSC	SSC	habitat present, potential to occur
Perognathus californicus femoralis Dulzura California pocket mouse	SSC	SSC	habitat present, potential to occur
Perognathus fallax pallidus pallid San Diego pocket mouse	SSC	SSC	habitat present, potential to occur
Perognathus longimembris brevinasus Los Angeles pocket mouse	SSC	SSC	habitat present, potential to occur
Onychomys torridus ramona southern grasshopper mouse	SSC	SSC	habitat present, potential to occur
Neotoma lepida intermedia San Diego desert woodrat	SSC	SSC	habitat present, potential to occur

TABLE 3 (continued)
SPECIAL STATUS WILDLIFE SPECIES
KNOWN TO OCCUR IN THE REGION OF THE PROJECT SITE

Species	USFWS	CDFG	Potential to Occur on Project Site
Taxidea taxus American badger	--	--	habitat present, potential to occur

LEGEND

Federal (USFWS)		State (CDFG)	
E	Endangered	E	Endangered
T	Threatened	T	Threatened
PE	Proposed Endangered	PE	Proposed Endangered
PT	Proposed Threatened	PT	Proposed Threatened
C	Candidate Species	SSC	Species of Special Concern
SSC	Species of Special Concern	FP	Fully Protected
		P	Protected

The **Quino checkerspot butterfly** is a federally endangered species. Its historic range included southern Los Angeles County south through Orange and western Riverside Counties into northwest Baja California. Its current U.S. distribution consists of several isolated populations in Riverside and San Diego counties. This butterfly requires native habitats that support its foodplants: dwarf plantain (*Plantago erecta*) and owl's clover (*Castilleja exserta*). These plants were not found during surveying; however, they may be present in grassland areas in the spring. In addition, the project site is located in the vicinity of specified potential habitat areas in the USFWS January 25, 1999 survey protocol for this species. The Quino checkerspot butterfly is considered to potentially occur in grassland areas of the project site.

The **Santa Ana sucker** has been proposed for federal listing as threatened and is a California Species of Special Concern. This species is found in small, shallow streams with currents that run from swift to sluggish. They are most abundant where waters are cool (less than 72 degrees Fahrenheit) and unpolluted, although they can withstand turbidity. They are also associated with bottom materials of boulders, rubble, and sand where there are growths of filamentous algae. They feed on algae and detritus that they scrape from rock surfaces, and will rarely ingest aquatic insect larvae. Spawning occurs from early April to early July, peaking in late May and early June. The Santa Ana sucker is threatened by river channelization and poor watershed management. The Santa Ana sucker has limited potential to occur in Sycamore Canyon Creek and potential to occur in San Dimas Creek.

The **arroyo southwestern toad**, a subspecies of the southwestern toad, is federally endangered, a California Species of Special Concern, and a CDFG protected species. This species occurs sporadically in the region in gently sloping washes, streams, and arroyos, especially those with sandy banks supporting willows, cottonwoods, and sycamores (Stebbins 1985) and in alluvial habitat at the mouths of canyons. Habitat loss has probably been the greatest factor contributing

to the extensive reduction of arroyo southwestern toad populations in the region. Other factors may include water pollution and the introduction of the bullfrog (*Rana catesbeiana*) and non-native game fishes (Jennings 1983). This species has potential to occur in Sycamore Canyon Creek and San Dimas Creek.

The **California red-legged frog** is a federally threatened species, a California Species of Special Concern, and a CDFG protected species. This species has become extremely rare in Southern California, and a few populations exist in the region. Habitat for this species is characterized by streams, rivers, ponds, and lakes, where clear water forms deep pools (at least two feet deep) and willows and other riparian vegetation hang low over the water. The principal causes for the decline of California red-legged frog appear to be: (1) the introduction of exotic predatory crayfishes, fishes, and amphibians in the region; and (2) extensive reduction and pollution of habitat. There is limited potential for this species to occur in Sycamore Canyon Creek and potential for it to occur in San Dimas Creek.

The **Swainson's hawk** is a state threatened species. Swainson's hawks will forage over the grassland and ruderal communities occurring within the project site during migration to and from South America. Swainson's hawks primarily feed on small rodents, reptiles, and some insects within these habitats. Loss or degradation of breeding areas, as well as grasslands, throughout its range are believed to have caused one of the most significant declines of any bird in California (Remsen 1978). Habitats to support foraging activities of this species are present throughout the project site and the Swainson's hawk is expected to occur.

The **bald eagle** is a federally endangered species, a state threatened species, and a CDFG fully protected species. This species typically breeds in some of the more northern states, but some bald eagles do winter in southern California, such as those at Lake Mathews in Riverside County and at Big Bear Lake in the San Bernardino Mountains. In addition, a bald eagle reintroduction program on Catalina Island is attempting to re-establish this species in coastal southern California. Due to the lack of large bodies of water that support fish for this species onsite, this species is not expected to nest onsite; however, it may periodically fly over the project area.

The **peregrine falcon** is a state and federally listed endangered species that, due to recent population gains, has been recently proposed for delisting by the USFWS. No such delisting has been proposed by the state. Peregrine falcons prey almost exclusively on birds and use a variety of habitats, particularly wetlands and coastal areas. It is a very uncommon breeding resident and uncommon as a migrant. It breeds mostly in woodland, forest, and coastal habitats. Riparian areas, and coastal and inland wetlands are important as habitats yearlong, especially in nonbreeding seasons. Decline is associated mostly with DDE contamination, and poor reproduction. Suitable habitat for this species is present within woodland areas of the project site; the peregrine falcon has the potential to occur onsite.

Formerly a rare summer resident, the **western yellow-billed cuckoo** is now extirpated from much of Southern California. The state designated the western yellow-billed cuckoo as endangered in 1988. Occasional sightings in coastal southern California suggest that a very few breeding pairs may persist despite extensive habitat loss (Unitt 1984). Breeding yellow-billed cuckoos are restricted to extensive deciduous riparian thickets or forests with dense, low-level or understory foliage which occur along slow-moving watercourses, backwaters, or seeps. Willows are almost always a dominant component of western yellow-billed cuckoo nesting habitat. Riparian, and woodland areas are present along Sycamore Canyon Creek and San Dimas Creek. However, this species is considered extirpated from the San Dimas Experimental Forest, which is adjacent to the project site (USDA 1988). Therefore, the western yellow-billed cuckoo has a limited potential to occur onsite.

The **southwestern willow flycatcher** is a state- and federally-listed endangered species. This subspecies was once considered a common breeder in coastal Southern California. However, this subspecies has declined drastically due to a loss of breeding habitat and nest parasitism by brown-headed cowbirds. This species occurs in riparian habitats along rivers, streams, or other wetlands where dense growths of willows (*Salix* sp.), baccharis (*Baccharis* sp.), arrowweed (*Pluchea* sp.), tamarisk (*Tamarix* sp.), or other plants are present, often with a scattered overstory of cottonwood (*Populus* sp.) (USFWS February 27, 1995). Suitable habitat for this species occurs along San Dimas Creek. It is known to occur as a fall transient and former breeder in the San Dimas Experimental Forest (USDA 1988). Therefore, this species potentially occurs onsite.

The nesting areas of the **bank swallow** are considered threatened by the state. The bank swallow is a migrant found primarily in riparian and other lowland habitats in California west of the deserts. It forages over riparian, brushland, grassland, and cropland. In summer, these birds are restricted to riparian areas with vertical cliffs and banks with fine-textured or sandy soil, into which it digs its nesting holes. Its decline is attributed to channelization and stabilization of banks, and other destruction and disturbance of nesting rivers. No suitable nesting habitat was observed; however, suitable habitat may occur along Sycamore Canyon Creek and San Dimas Creek. Therefore, there is limited potential for bank swallows to occur on the project site during nesting.

Now a rare and local summer resident of southern California's lowland riparian woodlands, the **least Bell's vireo** was formerly more common and widespread. In 1980, the state designated the least Bell's vireo as an endangered species; the federal government did the same in 1986. While destruction of lowland riparian habitats has played a large role in driving this species to its present precarious situation, brood parasitism by brown-headed cowbirds must be cited as the single most important factor in its decline (Garrett and Dunn 1981). Since being federally listed in 1986, the least Bell's vireo population has begun to recover. Local cowbird control programs have been very effective in maintaining some populations (Small 1994). Potential habitat for this species occurs along Sycamore Canyon Creek and along San Dimas Creek. The least Bell's vireo is considered

a very rare summer resident of the San Dimas Experimental Forest and may be extirpated (USDA 1988). Therefore, there is limited potential for least Bell's vireo to occur on the project site.

The **coastal California gnatcatcher** is federally listed as threatened and a California Species of Special Concern. This species occurs in most of Baja California's arid regions but is extremely localized in the United States, where it predominantly occurs only in coastal regions of the highly urbanized Southern California counties of Los Angeles, Orange, Riverside, and San Diego (Atwood 1992). In California, this species is an obligate resident of several distinct subassociations of the coastal sage scrub plant community. Common plants of this community include California sagebrush, California buckwheat, coastal prickly pear, lemonadeberry, white sage, and laurel sumac, Mexican elderberry, poison oak, and orangebush monkeyflower. Gnatcatchers are also found in drainages where scrub community vegetation integrates with mule fat. Brood parasitism by brown-headed cowbirds and loss of habitat to urban development have been cited as causes of the coastal California gnatcatcher population decline (Unitt 1984; Atwood 1990). The coastal sage scrub found throughout the project site provides suitable habitat for this species. Therefore, coastal California gnatcatcher may occur on the project site.

The project site is also within the known range of several special status wildlife species that are not listed as threatened or endangered by state and/or federal resource agencies. These species are identified in Table 3 are also be addressed below.

The **arroyo chub (*Gila orcutti*)** is both a federal and California Species of Special Concern. It is native to the streams of the Los Angeles Plain and the upper Santa Clara River system. The chub prefers the slowest moving sections of streams with sandy or muddy bottoms. It feeds on algae and other plants, crustaceans, and aquatic insect larvae. Its decline is attributable to disturbance by humans and predation by introduced fish, such as the green sunfish and largemouth bass. There is limited potential for this fish to occur in Sycamore Canyon Creek and potential for it to occur in San Dimas Creek.

The **Santa Ana speckled dace (*Catostomus santaanae*)** is a federal and California Species of Special Concern. This fish requires permanent flowing streams with a summer water temperature of 62-68 degrees Fahrenheit, and overhanging riparian plants to provide cover. It usually inhabits shallow gravel and cobble riffles. The Santa Ana speckled dace occupies only remnants of its native range due to water diversions, urbanization of watersheds, introduction of nonnative species, and pollution. The project site contains potential habitat for this species along Sycamore Canyon Creek and along San Dimas Creek. Therefore, there is potential for this species to occur onsite.

The **coast range newt (*Taricha torosa torosa*)** is a California Species of Special Concern. This species is found from sea level to about 6,500 feet above mean sea level, and can be found in grassland, woodland, coastal scrub, mixed chaparral, ponds, and slow moving streams. This species has been depleted by large scale historical exploitation coupled with the loss and

degradation of stream habitats, especially in Los Angeles, Orange, Riverside, and San Diego counties. Suitable habitat for this species is present throughout the project site, especially near Sycamore Canyon Creek and San Dimas Creek. This species is also known to occur in the San Dimas Experimental Forest adjacent to the project site (USDA 1988). Therefore, the coast range newt is expected to occur onsite.

The **large blotched ensantina (*Ensantina escholtzii klauberi*)** is a federal and California Species of Special Concern. This subspecies can be found in forests and well-shaded canyons, as well as in oak woodland and old chaparral. The decline of this species is most likely due to habitat loss and degradation. Suitable habitat for this species is found throughout the project area. In addition, the large-blotched ensantina is expected to occur in the San Dimas Experimental Forest (USDA 1988). Therefore, there is potential for this species to occur onsite.

The **western spadefoot toad (*Scaphiopus hammondii*)** is a federal and California Species of Special Concern, and a CDFG protected species that historically occurred in vernal pools throughout lowland California. Today, nearly all of the recorded western spadefoot toad population locations in the region have been converted to agricultural, residential, or commercial developments. Only a few populations are known to persist in isolated, widely scattered areas of southern California. Other populations of this species occur in the relatively undeveloped northern half of California. There is potential for vernal pools within the project site in the area of the oak woodland plateau adjacent to the San Dimas Canyon Golf Course. Also, western spadefoot toad is known to occur in the San Dimas Experimental Forest (USDA 1988). Therefore, there is potential for the western spadefoot toad to occur at the project site.

The **mountain yellow-legged frog (*Rana muscosa*)** is a federal and California Species of Special Concern, and a CDFG protected species. This species is typically found on sunny riverbanks, meadow streams, isolated pools, and lake borders in the high Sierra Nevada, and rocky stream courses in the mountains of southern California. It prefers sloping banks with rocks or vegetation to the water's edge. Its decline has been attributed to human-induced changes in streamflow, land-use practices, intensive recreation, and introduction of nonnative competitors or predators, and the species' presumed sensitivity to increased ultraviolet radiation. Suitable habitat for this species is present along Sycamore Canyon Creek and along San Dimas Creek. In addition, this species is known to occur in the San Dimas Experimental Forest (USDA 1988). Therefore, there is potential for this species to occur onsite.

The **southwestern pond turtle (*Clemmys marmorata pallida*)** is a federal and California Species of Special Concern, and a CDFG protected species. It is known to inhabit streams, intermittent creeks, ponds, freshwater marshes, and lakes within woodland and scrub habitats. It prefers areas with extensive vegetation such as cattails, watercress, water lilies, or other aquatic plants and is most often seen basking on logs and mudbanks, and feeds on aquatic plants, insects, and carrion. Numbers have been declining as suitable habitat for this species is polluted or destroyed. There

is limited potential habitat for this species in Sycamore Canyon Creek and potential habitat for the species to occur in San Dimas Creek. This species is considered a rare resident of the San Dimas Experimental Forest (USDA 1988). Therefore, there is potential for this species to occur onsite.

The **San Diego horned lizard *(Phrynosoma coronatum blainvillii)*** is a federal and California Species of Special Concern, and a CDFG protected species. It is a small, spiny, somewhat rounded lizard that occurs primarily in open or sparse scrub and chaparral communities. This species prefers loose friable soil for burrowing. Three factors have contributed to its decline: loss of habitat, overcollecting, and the introduction of exotic ants. In some places, especially adjacent to urban areas, the introduced ants have displaced the native species upon which the lizard feeds (Hix 1990). Habitat suitable for this species occurs throughout the project site and it is considered abundant in the San Dimas Experimental Forest (USDA 1988). Therefore, this species has potential to occur onsite.

The **coastal western whiptail *(Cnemidophorus tigris multiscutatus)*** is a federal Species of Special Concern. It is a moderately large, slender lizard typically found in semi-arid areas or where vegetation is sparse. Coastal western whiptails inhabit open scrub, chaparral, and woodland communities. It eats insects, spiders, scorpions, and lizards. It is restricted to the western coast of North America from about Ventura County, California, south through the northern two-thirds of the Baja California peninsula. This subspecies apparently has declined in California as a result of loss of habitat to urban development. Suitable habitat for this species exists throughout the project site and it is considered a common resident of the San Dimas Experimental Forest (USDA 1988). Therefore, there is potential for this species to occur onsite.

The **silvery legless lizard (*Anniella pulchra pulchra*** is a federal and California Species of Special Concern. It is a small and secretive lizard that spends most of its life beneath the soil, under stones, logs, debris, or within leaf litter. The silvery legless lizard inhabits areas with moist sandy soil, including dry washes, woodlands, riparian, and scrub communities. It ranges in elevation from sea level to about 5,000 feet above mean sea level (Stebbins 1985). Suitable habitat for this species is present throughout the project site, and therefore, this species has potential to occur onsite.

The **San Bernardino ringneck snake *(Diadophis punctatus modestus)*** is a federal Species of Special Concern. It is considered locally rare in southwestern California, and it inhabits scrub, chaparral, native grassland, and woodland communities. This species is difficult to detect due to its secretive behavior. It occurs in elevations from sea level to 7,000 feet above mean sea level (Stebbins 1985). Suitable habitat for this species occurs within the project site and it is known to occur in the San Dimas Experimental Forest (USDA 1988). Therefore, there is potential for this species to occur onsite.

The **San Bernardino mountain kingsnake (*Lampropeltus zonata parvirubra*)** is a federal and California Species of Special Concern. This species ranges from near sea level to 8,000 feet above mean sea level in the vicinity of water sources near shrub or woodland habitats. Declines in populations of the San Bernardino mountain kingsnake may be attributed to overcollecting and habitat conversion. Suitable habitat for this species occurs near Sycamore Canyon Creek and San Dimas Creek. This species is also known to occur in the San Dimas Experimental Forest (USDA 1988). Therefore, this species has the potential to occur onsite.

The **coast patch nose snake *(Salvadora hexalepis virgultea)*** is a California Species of Special Concern. It inhabits open sandy areas with rocky outcrops within scrub, grassland, and woodland communities. This species, one of five subspecies of the patch-nosed snake, is a moderate-sized, active snake. The coast patch-nosed snake ranges along the coast of California from San Luis Obispo County south into Baja California. It occurs from sea level to about 7,000 feet above mean sea level (Stebbins 1985). Suitable habitat for this species is present throughout the project site. The species is considered an uncommon resident of the San Dimas Experimental Forest (USDA 1988). Therefore, this species has limited potential to occur onsite.

The **two-striped garter snake *(Thamnophis hammondii)*** is a federal and California Species of Special Concern, and a CDFG protected species. It occurs primarily in wetlands and is found in freshwater marsh and riparian habitats with perennial water. The two-striped garter snake feeds on small fishes, frogs, and tadpoles. There is potential habitat for this species to occur along Sycamore Canyon Creek and along San Dimas Creek. It is considered a common resident of the San Dimas Experimental Forest (USDA 1988). Therefore, this species has potential to occur onsite.

The **western least bittern (*Ixobrychus exilis hesperis*)** is a California Species of Special Concern. Least bitterns are virtually restricted to large brackish and freshwater marshes in the coastal lowlands (Unitt 1984). Development in the coastal lowlands and the destruction of coastal lagoons have been largely responsible for the reduction of nesting localities in the region (Garrett and Dunn 1981). The project site does not support suitable habitat for this species and it is not expected to occur onsite.

The **white-tailed kite (*Elanus leucurus*)** is a California Fully Protected Species. Within the region, kites nest primarily in oaks, willows, and sycamores and forage within grassland and scrub communities. White-tailed kites show strong site fidelity to nest groves and trees. The most abundant prey species of this raptor include California vole, western harvest mouse, and house mouse. Reasons for its decline have been identified as loss foraging habitat, roost sites, and nesting habitat. Suitable habitat for this species is found throughout the project site. This species is considered an uncommon resident of the San Dimas Experimental Forest, and there are no records of it breeding there (USDA 1988). Therefore, white-tailed kites have potential to forage onsite, but are not expected to nest onsite.

The **northern harrier *(Circus cyaneus)*** is a California Species of Special Concern. It is a regular winter migrant. It can be expected at any month of the year and can be seen foraging in grassland, scrub, and riparian communities. This species requires marshes and open grassy meadows for nesting. While once a relatively common species during fall, winter, and spring in undeveloped areas of Los Angeles County, the northern harrier population is now greatly reduced and localized in distribution. Suitable habitat for this species is present within the project site and it is a fairly common winter visitor to the San Dimas Experimental Forest (USDA 1988). Therefore, the northern harrier is expected to forage onsite, but is not expected to nest onsite.

The **sharp-shinned hawk (*Accipiter striatus*)** is a California Species of Special Concern. This species prefers woodland communities but can also be found in virtually any habitat as it passes through the area during migration. Oak and riparian areas are preferred habitats for this species. Some individuals probably winter in the area, while others continue to northern South America. The species occurs as a winter migrant and has nested in the vicinity of the San Dimas Experimental Forest (USDA 1988). The sharp-shinned hawk is expected to occur onsite within woodland and riparian communities.

The **Cooper's hawk (*Accipiter cooperii*)** is a California Species of Special Concern. Both resident and migratory populations exist in the project area. Wintering Cooper's hawks are often seen in wooded urban areas and native woodland communities. Preferred nesting habitats are oak and riparian woodlands dominated by sycamores and willows. Cooper's hawks prey on small birds and rodents that live in woodland and occasionally scrub and chaparral communities. Suitable habitat for this species occurs throughout the project site. This species is considered an uncommon resident of the San Dimas Experimental Forest and breeds there (USDA 1988). Therefore, the Cooper's hawk is expected to occur onsite.

The **ferruginous hawk (*Buteo regalis*)** is a federal and California Species of Special Concern. Ferruginous hawks occur in southern California from mid-fall through early spring and forage over grasslands and the ecotone between coastal sage scrub and grasslands. The distribution of the ferruginous hawk has become greatly reduced as a result of the loss of wintering grounds. Suitable habitat for this species is present within the project area, and therefore, the ferruginous hawk is expected to occur onsite.

The **golden eagle (*Aquila chrysaetos*)** is a California Species of Special Concern, and a CDFG fully protected species. The bird is an uncommon permanent resident in open habitats throughout California. It nests in high trees and on rock faces of cliffs, and forages on plains and in open country for small mammals, snakes, birds, and carrion. Grassland and woodlands provide suitable habitat for this species. Although the golden eagle is considered an uncommon resident in the San Dimas Experimental Forest, it breeds in the vicinity of the San Dimas Experimental Forest (USDA 1988). Therefore, the golden eagle is expected to occur onsite.

The **merlin (*Falco columbarius*)** is a California Species of Special Concern. In California, merlins prefer vast open space areas such as estuaries, grasslands, and deserts where they hunt small flocking birds such as sandpipers, larks, sparrows, and pipits. In Los Angeles County, merlins are uncommon winter migrants. As merlin breeding populations in the northern latitudes rebound from previous contaminant-related reproductive problems, the species will likely be observed more frequently during winter where appropriate habitat remains. Grasslands within the project site provide suitable habitat for this species. Therefore, the merlin potentially occurs onsite.

Prairie falcons (*Falco mexicanus*) are a California Species of Special Concern. Because of winter and nesting habitat loss, few areas remain in Los Angeles County where prairie falcons can be consistently observed. Preferred foraging habitat for this species includes grasslands, scrub communities, and estuaries. Grassland and scrub communities are provide suitable habitat within the project site. The prairie falcon is considered an uncommon transient in the San Dimas Experimental Forest (USDA 1988). Therefore, there is limited potential for prairie falcons to occur onsite.

The **burrowing owl (*Athene cunicularia hypungea*)** is a widely distributed species in western North America, from southern Canada to southern and central Mexico. These ground-dwelling owls inhabit relatively flat and open areas such as grasslands and agricultural areas, but will occupy a variety of man-made habitats including golf courses, cemeteries, airports, school yards, and vacant lots. A semi-colonial species, this owl requires the presence of burrows for nesting and roosting activities. Burrowing owls may dig their own burrows, but are usually dependent on abandoned burrows made by mammals such as the California ground squirrel. There is potential habitat for the burrowing owl to be found within grassland areas, as well as at golf courses and at the San Dimas Equestrian Center. Therefore, there is potential for the burrowing owl to occur onsite. The burrowing owl is considered to be rare in the San Dimas Experimental Forest (USDA 1988).

The **long-eared owl (*Asio otus*)** is a California Species of Special Concern. This species is a rare resident of Los Angeles County. In Los Angeles County, this species nests in oak and willow woodlands and forages in scrub and grassland communities. A variety of small rodent species are consumed as prey. Long-eared owls have declined throughout California, but the most pronounced reductions have occurred in the southwestern part of the state where a minimum 55 percent decline has been documented. Suitable habitat for this species exists throughout the project site. This species is also considered a rare transient in the San Dimas Experimental Forest (USDA 1988). Therefore, the long-eared owl potentially occurs onsite.

The **California spotted owl (*Strix occidentalis occidentalis*)** is a federal and California Species of Special Concern. In southern California it is nearly always associated with oak and oak-conifer habitats (Garrett and Dunn 1981). It feeds in forest habitats on a variety of small mammals, birds, bats, and arthropods. This species requires blocks of mature forest with permanent water and

suitable nesting trees and snags. The species is declining due to habitat destruction and fragmentation. The forests within the project site are not mature enough to provide suitable habitat for the owl; however, the site is adjacent to the Angeles National Forest. The California spotted owl is considered an uncommon resident of the San Dimas Experimental Forest and it breeds there (USDA 1988). Therefore, there is potential for the owl to occur onsite.

The **loggerhead shrike (*Lanius ludovicianus*)** is a California Species of Special Concern. This species is a fairly common resident of lowlands and foothills in Southern California. Shrikes inhabit grasslands and other dry, open habitats. They can often be found perched on fences and posts from which prey items (large insects, small mammals, lizards) can be seen. This species is known to impale its prey on barbed wire or thorns. Suitable habitat for this species occurs throughout the project site. This species is considered a fairly common resident of the San Dimas Experimental Forest and is known to breed there (USDA 1988). This species was observed onsite during 1999 survey efforts and is expected within suitable habitat onsite.

The **California horned lark (*Eremophila alpestris actia*)** is a California Species of Special Concern. This subspecies is found along the coast of Northern California, in the San Joaquin Valley, in the Coast Ranges south of San Francisco Bay, and in southern California west of the deserts. In southern California, this subspecies is a fairly common breeding resident in grasslands and other dry, open habitats. Suitable habitat for this species is present throughout the project site. This species is considered a fairly common transient to the San Dimas Experimental Forest (USDA 1988). Therefore, this species has the potential to occur onsite.

The **San Diego cactus wren (*Campylorhynchus brunneicapillus sandiegoense*)** is a California Species of Special Concern. Cactus wrens are residents in coastal Southern California, where they occur in dry washes with yuccas and cacti, and on lower coastal slopes and bluffs with extensive patches of prickly-pear cactus (Garrett and Dunn 1981). Extensive patches of prickly-pear cactus occur within the project area. In addition, this species is considered a very local resident of the San Dimas Experimental Forest and breeds there (USDA 1988). Therefore the San Diego cactus wren is expected to occur onsite.

The **yellow warbler (*Dendroica petechia morcomi*)** is a California Species of Special Concern. It breeds from southern British Columbia and western Washington south to northwestern Baja California and northwestern Texas (Curson 1994). In southern California, yellow warblers are migrants, and breed locally in riparian woodlands. Suitable habitat for this species is present along Sycamore Canyon Creek and San Dimas Creek. Yellow warbler is considered a common transient and is known to breed in the San Dimas Experimental Forest (USDA 1988). Therefore, yellow warbler is expected to occur onsite.

The **yellow-breasted chat (*Icteria virens*)** is a California Species of Special Concern. This large warbler was once a fairly common summer resident in riparian woodlands throughout California but

is now much reduced in numbers, especially in southern California (Remsen 1978). Its decline is a result of habitat destruction and cowbird nest parasitism. For nesting, this species requires dense, brushy tangles near water and riparian woodlands supporting a thick understory. There is potential habitat for this species along San Dimas Creek, and it may occur there.

The **summer tanager (*Piranga rubra*)** is a California Species of Special Concern. This species is an uncommon summer resident and breeder in desert riparian habitat. It occurs in cottonwoods, and willow, especially older, dense stands along rivers and streams. This species' decline is attributed to loss and fragmentation of mature cottonwood and willow stands. Suitable habitat for this species is found along San Dimas Creek, and therefore, this species has potential to occur onsite.

The **southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)** is a California Species of Special Concern. In coastal southern California, rufous-crowned sparrows are considered fairly common in scrub communities and other habitats vegetated with grasses and widely spaced low shrubs. They also prefer slopes with rock outcroppings. This subspecies is present throughout the year in southern California. Suitable habitat for this species is present in grasslands and scrub communities within project site. This species is also considered an uncommon resident of the San Dimas Experimental Forest and is known to breed there (USDA 1988). Therefore, this species is expected to occur onsite.

The **Bell's sage sparrow (*Amphispiza belli belli*)** is a federal and California Species of Special Concern. This coastal subspecies is an uncommon to fairly common local resident in the interior foothills of coastal southern California. Bell's sage sparrow breeds in low, dense chamise chaparral and in dry scrub communities, often with stands of cactus (Garrett and Dunn 1981). Suitable habitat for this species is present throughout the project site. This species is considered an uncommon local resident of the San Dimas Experimental Forest (USDA 1988). Therefore, this species has potential to occur onsite.

The **grasshopper sparrow (*Ammodramus savannarum*)** is not included on any state or federal lists of sensitive species but is considered of local interest in coastal southern California due to past and ongoing loss and degradation of suitable breeding habitat. In southern California, this secretive sparrow is an uncommon resident from late March through August. Grasshopper sparrows occur in areas of tall grass, often where mixed with a few shrubs. Suitable habitat for this species occurs within grasslands of the project site, and therefore, this species has the potential to occur onsite.

The **tricolored blackbird (*Agelaius tricolor*)** is a federal and California Species of Special Concern. These colonially nesting birds prefer to breed in marsh vegetation of bulrushes and cattails and have also been recorded nesting in willows, blackberries, and mustard (Beedy et. al 1991). During winter months, they are often found foraging in wet pasture, agricultural fields, and

seasonal wetland. Tricolored blackbirds are nomadic, wandering during the nonbreeding season and occupying colony sites intermittently (Unitt 1984). Potential habitat for this species occurs along San Dimas Creek, and therefore, it may occur onsite.

The **pallid bat (*Antrozus pallidus*)** is a California Species of Special Concern that most commonly occurs in mixed oak and grassland habitats, but may also occur in chamise chaparral, coastal scrub, mixed chaparral, and woodlands. This large bat roosts in rock crevices and in cavities of trees, especially oaks. Potential habitat for this species occurs throughout the project site. The pallid bat is a rare resident of the San Dimas Experimental Forest (USDA 1988). Therefore, the pallid bat has the potential to occur onsite.

Townsend's western big-eared bat (*Corynorhinus townsendii townsendii*) occurs throughout California and is a federal and California Species of Special Concern. This species occupies a variety of communities, including oak woodlands, arid deserts, grasslands, and high-elevation forests and meadows. Known roosting sites in California include mines, caves, and buildings. Suitable habitat for this species is present throughout the project site, and therefore, there is a potential for it to occur onsite.

The **San Diego blacktailed jackrabbit (*Lepus californicus bennettii*)** is a federal and California Species of Special Concern. It is a subspecies of the widespread blacktailed jackrabbit and is restricted to the Pacific slope from Santa Barbara County to northwestern Baja California. This nocturnal species prefers relatively open areas with sparse shrub cover. This species has declined due to loss of habitat from agricultural and urban development. Suitable habitat for this species is located throughout the project site. This species is considered an uncommon resident of the San Dimas Experimental Forest (USDA 1988). Therefore, this species has potential to occur onsite.

The **Dulzura California pocket mouse (*Perognathus californicus femoralis*)** is a federal and California Species of Special Concern. This species inhabits grasslands, coastal scrub, chamise chaparral, mixed chaparral, oak woodland, and bigcone douglas fir habitats. Suitable habitat for this species is present throughout the project site. This species is considered common in the San Dimas Experimental Forest (USDA 1988). Therefore, this species has potential to occur onsite.

The **pallid San Diego pocket mouse (*Parognathus fallax pallidus*)** is a federal and California Species of Special Concern. This species occurs in open areas, such as grasslands and areas with shrubs. It usually occurs in sandy soils, such as alluvial plains. This species is declining due to loss of habitat. Suitable habitat for this species is present in grassland and mixed grassland/coastal sage scrub areas, and therefore, potentially occurs onsite.

The **Los Angeles pocket mouse (*Perognathus longimembrus brevinasus*)** is a federal and California Species of Special Concern. This subspecies is found in desert riparian, desert scrub, desert wash, coastal scrub, and sagebrush habitats of the Los Angeles Basin. Its decline has been

attributed to the severe and continuing loss of habitat. Suitable habitat for this subspecies is present throughout the project area, and therefore, this subspecies potentially occurs onsite.

The **southern grasshopper mouse (*Onychomys torridus ramona*)** is a federal and California Species of Special Concern. It is a territorial predatory rodent, feeding almost exclusively on arthropods. It is found in open coastal sage scrub, mixed chaparral, riparian areas, and grassland communities. It prefers sandy soils and ranges from Los Angeles County to northwestern Baja California. Suitable habitat for this species is present throughout the project site, and therefore, there is a potential for it to occur onsite.

The **San Diego desert woodrat (*Neotoma lepida intermedia*)** is a federal and California Species of Special Concern. It occupies arid areas with sparse vegetation, especially those comprised of cactus and other thorny plants. It can be found in Joshua tree, pinon-juniper, chaparral, sagebrush, and most desert habitats. This subspecies is restricted to the Pacific slope in a range that stretches from San Luis Obispo to northwestern Baja California. Suitable habitat for this species occurs throughout the project site. This species is considered uncommon in the San Dimas Experimental Forest (USDA 1988). Therefore, there is a potential for this species to occur onsite.

The **American badger (*Taxidea taxus*)** is considered locally rare. This species occupies a wide variety of habitats and ranges throughout the state except for the coastal redwood forests of the extreme northwest. In Southern California, this species is most commonly associated with grasslands and other relatively open habitats with friable, uncultivated soils. Its decline is attributed to loss of habitat to urbanization and agriculture, hunting, and general persecution (CDFG 1980; Williams 1986). Suitable habitat occurs within grassland communities of the project site, and therefore, the badger may occur onsite.

Special Status Vegetation Types

Vegetation types or communities that support concentrations of special status plant or wildlife species, are of relatively limited distribution, or are of particular value to wildlife, are considered to be special status vegetation types.

Woodland areas including mixed willow riparian forest and southern coast live oak riparian forest, particularly along streambeds, are highly special status vegetation types on the project site. These woodlands occur in Sycamore Canyon, Ham Canyon, and along San Dimas Canyon (along the eastern boundary of the project site). These areas support a wide diversity of wildlife species and may function as habitat linkages. These vegetation types may be subject to permit conditions as regulated by the U.S. Army Corps of Engineers (ACOE), pursuant to Section 404 of the Clean Water Act, and by the CDFG, pursuant to a Streambed Alteration Agreement under Section 1601 of the California Fish and Game Code. In addition, the ACOE would require a Section 401 Water

Quality Certification, or a waiver thereof from the Regional Water Quality Control Board for impact to these areas.

Coastal sage scrub is also considered a special status vegetation type based on: (1) widespread awareness among the resource agencies, policy makers, and the public that this community has undergone widespread losses in the past; and (2) the State's ongoing effort to create regionally important coastal sage scrub preserves under the Natural Community Conservation Planning (NCCP) program described below.

Native grasslands in the project area are considered a special status habitat (CDFG 1997) due to the decrease in the acreage of this vegetation type throughout southern California.

4.0 PROJECT IMPACTS

4.1 INTRODUCTION

The determination of impacts in this analysis is based on a comparison of the vegetation association/wildlife habitat resources on the approximate 3,000-acre project site and proposed development areas, totaling approximately 326.83 acres. It has been assumed that all construction activities, including staging and equipment areas, and fuel modification would be contained within the limits of the development areas. Both direct and indirect impacts on biological resource have been evaluated. Direct impacts are those that involve the initial loss of habitats due to grading and construction. Indirect impacts have been identified as those related to disturbance from construction (such as dust and noise).

Biological impacts associated with the proposed development of 326.83 acres of the project site were evaluated with respect to the following sensitive biological issues:

- federally- or state-listed endangered or threatened species of plant or wildlife;
- streambeds, wetlands, and their associated vegetation;
- habitats suitable to support a federally- or state-listed endangered or threatened species of plant or wildlife;
- species designated as federal and California Species of Special Concern;
- habitat, other than wetlands, considered sensitive by regulatory agencies (USFWS, CDFG) or resource conservation organizations; and
- other species or issues of concern to regulatory agencies or conservation organizations.

The actual and potential occurrence of these resources within the development areas of the project site was correlated with the significance criteria to determine whether the impacts in the proposed development areas would be considered significant.

4.2 SIGNIFICANCE CRITERIA

The criteria for determining significant impacts on biological resources were developed in accordance with the state CEQA Guidelines. Section 15065(a) of the CEQA Guidelines states that a project may have a significant effect on the environment if "the project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of an endangered, rare, or threatened species." An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally adverse but not significant according to CEQA because although they would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of, an important resource on a population- or region-wide basis. For purposes of this analysis, the term "region" refers to the area within eastern Los Angeles County. The actual or potential occurrence of biological resources within the development areas was correlated with the threshold criteria stated above to determine whether or not project impacts on these resources would be considered significant.

4.3 IMPACTS

Vegetation Association Impacts

Development within the 326.83-acre area will result in the loss of native and non-native vegetation associations. Non-native vegetation associations present within the development areas include annual grassland and ornamental/developed areas. These vegetation associations, and the habitats they provide, generally are of low biological value. Therefore, the loss of these areas is not considered to be significant.

The native habitats that will be impacted by the proposed development areas consist of mixed willow riparian forest, southern coast live oak riparian forest, chaparral, coastal sage scrub, and native grasslands. The impact acreage for each of these vegetation types is included in Table 1.

Impacts to the mixed willow riparian forest and southern coast live oak riparian forest would be considered significant because these associations are considered very sensitive by the state and federal resource agencies. In addition, portions of these associations may meet the three-parameter test for jurisdictional wetlands or exhibit indicators as "other" jurisdictional waters pursuant to Section 404 of the Clean Water Act or Section 1600 of the California Fish and Game Code. Alteration (grading or filling) of these associations may require authorization from the ACOE and CDFG.

Impacts to coastal sage scrub and native grasslands would be considered adverse and significant because coastal sage scrub and native grasslands are considered unique communities within southern California and these areas have undergone a significant reduction region wide.

Impacts to the chaparral habitats would be considered adverse but not significant due to large number of acres of chaparral left in the region.

Wildlife Impacts

Development within the 326.83-acre area will result in the loss of native and non-native vegetation associations and the wildlife habitat they provide. Both native and non-native habitats within the project site are expected to provide nesting, foraging, and denning opportunities for a wide variety of wildlife species. However, the non-native habitats generally provide low quality wildlife habitat. The removal of native and non-native habitats within the proposed development areas would result in the loss of small mammals, reptiles, amphibians, and other animals of slow mobility that are present within the impact area. More mobile wildlife species now using the project site would be forced to move into remaining areas of open space, consequently increasing competition for available resources in those areas. This situation would result in the loss of individuals within the wildlife population that cannot successfully compete. The loss of native and non-native habitats from the proposed development areas would not result in any substantial reduction of general wildlife populations in the region because of the large area of the project site that would not be developed (approximately 2,600 acres) and the substantial amount of permanent open space adjacent to the project site. Therefore, these impacts would be considered adverse but not significant.

Wildlife Movement Impacts

The project site is expected to support local wildlife movement within the canyons and ridgeline between the Angeles National Forest and San Dimas Creek. Currently, the majority of the project site is open space. Potential development areas are located: near the upper portion of Shuler Canyon, and Shay Canyon; at the middle and the upper portion of Wildwood Canyon and Sycamore Canyon; and toward the lower portion of Ham Canyon. Development and human disturbance from the proposed development areas would likely reduce the movement of wildlife

through Wildwood Canyon, Sycamore Canyon, and Ham Canyon and concentrate wildlife movement into canyons and ridgelines outside of these areas. These impacts would be considered adverse on a local level. However, because the project site and the areas identified for proposed development do not have the potential to link large areas of open space together, these impacts to wildlife movement onsite are not considered regionally significant.

Special Status Biological Resource Impacts

Plants

Nine special status plant species potentially occur in the proposed development areas. Three of these species (**Nevin's barberry, thread-leaved brodiaea**, and **San Gabriel Mountains dudleya**) are listed as threatened, endangered, or proposed for listing by the USFWS. Any impacts to these species would be considered significant. Sensitive plant surveys should be conducted for these species during future environmental evaluation of specific projects in the proposed development areas to better evaluate the level of impact these resources would incur from project implementation.

The project site also has the potential to support six special status plant species not listed as threatened, endangered, or proposed for listing including the **slender mariposa lily**, **Plummer's mariposa lily**, **many-stemmed dudleya**, **pious daisy**, **Robinson's peppergrass**, and **rayless ragwort**. The presence of any CNPS List 1B species on the project site may also result in significant impacts, depending on the species found, and the extent of the population onsite.

Wildlife

The project site contain approximately 139 acres of coastal sage scrub and grassland habitats that may support the **quino checkerspot**, a federally endangered species. Should this species occur onsite, impacts on this species would be considered potentially significant. Focused surveys should be conducted to first determine if the host plant for the species is present. If substantial populations of host plant are present, focused adult butterfly surveys should be conducted and coordination with the resource agencies when specific development plans are proposed.

Sycamore Canyon Creek, San Dimas Creek, and their associated woodland habitats provide potentially suitable habitat for the **arroyo chub**, **Santa Ana speckled dace**, **Santa Ana sucker, coast range newt**, **arroyo southwestern toad, California red-legged frog**, **mountain yellow-legged frog**, **southwestern pond turtle**, **San Bernardino mountain kingsnake,** and **two-striped garter snake**. Approximately 51.97 acres of mixed willow and southern coast live oak riparian forests are located within potential development areas. Impacts on these species, particularly those that are threatened or endangered, would be considered potentially significant and focused

surveys for several of these species may be required by resource agencies when specific development plans are proposed.

Sensitive reptile and amphibian species may occur in approximately 287.95 acres of upland habitat located onsite including coastal sage scrub, grasslands, oak woodland, and chaparral habitats: **large-blotched ensantina**, **western spadefoot toad**, **San Diego horned lizard**, **coastal western whiptail**, **silvery legless lizard**, **San Bernardino ringneck snake,** and **coast patch nose snake**. Impacts on these species would be considered adverse but not significant because none of these species is currently listed as threatened or endangered by state and/or federal resource agencies and suitable habitat for these species is common within the region.

A variety of sensitive bird species potentially occur within the 51.97 acres of riparian habitat within the proposed development areas. However, most of these species would likely be located along San Dimas Creek. These species include **western yellow-billed cuckoo**, **southwestern willow flycatcher**, **least Bell's vireo**, **bank swallow, yellow warbler**, **yellow-breasted chat**, **tricolored blackbird**, and **summer tanager**. Impacts on these species would be considered potentially significant, particularly for threatened or endangered species, and focused surveys for several of these species may be required by resource agencies when specific development plans are proposed.

Many sensitive bird species may also occur in 287.95 acres of upland areas of the project site, including coastal sage scrub, grasslands, oak woodland, and chaparral. These species include **loggerhead shrike**, **California horned lark**, **San Diego cactus wren**, **coastal California gnatcatcher**, **southern California rufous-crowned sparrow**, **Bell's sage sparrow**, and **grasshopper sparrow**. Impacts on these species would be considered potentially significant, particularly for threatened or endangered species, and focused surveys for several of these species may be required by resource agencies when specific development plans are proposed.

The proposed project would remove suitable foraging habitat for a variety of raptor species. Raptors that may occur onsite include **white-tailed kite**, **northern harrier**, **sharp-shinned hawk**, **Cooper's hawk, Swainson's hawk**, **ferruginous hawk**, **bald eagle**, **golden eagle**, **merlin**, **peregrine falcon**, **prairie falcon**, **burrowing owl**, **long-eared owl**, and **California spotted owl**. The loss of raptor foraging habitat is considered adverse, but not significant, due to the large amount of suitable foraging habitat adjacent to the development areas. However, any active raptor nest/burrow occurring within the proposed development areas that would be impacted by project construction would be considered significant. Focused surveys for nesting/burrowing activity may be required by resource agencies when specific development plans are proposed.

Approximately 291 acres of natural habitats, such as coastal sage scrub, grasslands, woodland, and chaparral, may be impacted by the proposed development areas. Sensitive mammal species

that may occur in these habitats include the **pallid bat**, **Townsend's western big-eared bat**, **San Diego black-tailed jackrabbit**, **Dulzura California pocket mouse, pallid San Diego pocket mouse, Los Angeles pocket mouse**, **southern grasshopper mouse**, **San Diego desert woodrat**, and **American badger**. Impacts on these species would be considered adverse but not significant because none of these species are currently listed as threatened or endangered by state and/or federal resource agencies and suitable habitat for these species is common within the region.

The **western least bittern** is not expected to occur onsite due to lack of suitable habitat. Therefore, impacts on this species would be considered less than significant.

Regional Conservation Planning Programs

The purpose of the **Natural Communities Conservation Planning (NCCP)** program is to provide for regional protection and perpetuation of natural wildlife diversity while allowing compatible land use and appropriate development and growth. The NCCP process is intended to provide an alternative to "single species" conservation efforts by formulating regional, natural community-based habitat protection programs to protect numerous species. Among the objectives of this approach is to end legal and political gridlock and provide certainty for landowners who wish to develop valuable real estate without the delays posed by the probable listings of species and habitat protection.

The Southern California Coastal Sage Scrub Program, administered by the CDFG and USFWS, is the first NCCP project. This program is intended to provide the direction and collaborative support necessary to conduct research, planning, and habitat management efforts leading to the long-term conservation and protection of species in the coastal sage scrub community of southern California. The planning program will be carried out with the voluntary and cooperative participation of landowners, local governments, state and federal agencies, and environmental organizations.

Generally, the conservation program and the biological issues are being coordinated for the five-county southern California region (San Diego, Orange, Riverside, Los Angeles, and San Bernardino counties). However, because the area is so large and land planning considerations vary throughout the region, functional planning is being conducted on a subregional scale.

Progress made to date varies widely among subregional planning areas. For instance, the central and coastal Orange County NCCP was recently approved and is now being implemented in an area covering about 340,000 acres. Plans for other subregional areas are in very early formative stages. Aside from participants in a subregional plan for the Palos Verdes Peninsula, only three entities (the City of San Dimas, the Santa Monica Mountains Conservancy, and the Wildlife Corridor Conservation Authority) have enrolled in an NCCP program for Los Angeles County. Enrollment in the program is essentially the first step in the planning process that involves

numerous additional steps. The next step would involve coordination with the CDFG and USFWS, the agencies that administer the NCCP. Such coordination would be initiated by the City of San Dimas and other enrollees or interested jurisdictions and could include the presentation of general baseline information regarding biological resources and land uses within the subregional planning area. The time limit for initiating these following steps has expired **(end date was _____)**, and therefore, the City of San Dimas is no longer considered a participant in the NCCP program.

5.0 MITIGATION MEASURES

This section focuses on the development of mitigation measures for those impacts found to be significant or potentially significant. Strategies to mitigate each impact to a level of less than significant, if possible, are identified and described.

The recommended mitigation measures consist of a three-tiered approach to alleviate significant or potentially significant impacts on biological resources expected to result from implementation of projects within the proposed development areas. This approach includes the following categories:

Avoidance. This is the most effective type of mitigation, wherein important habitat or other resources are avoided through project design. Avoidance of high value habitats within the proposed development areas would reduce the level of proposed project impacts and provide for the long-term protection of these areas in permanent open space. The vegetation associations and wildlife habitat they provide were evaluated for their biological value. The general criteria used to assign the rating of high, medium, or low values for each vegetation association were based on an assessment of the diversity and abundance of plant and wildlife species present or potentially present. A vegetation association that supports an abundance of native plants and wildlife with a relatively high diversity of species present would be assigned a high rating. Criteria used to assess the biological value of vegetation associations for wildlife includes the availability of resources such as food and cover, and the potential for nesting or other reproductive behaviors.

High valued vegetation associations onsite include coastal sage chaparral scrub, mixed coastal sage scrub, mixed willow riparian forest, native grassland, and southern coast live oak riparian forest.

Medium valued habitats onsite include annual grassland/coastal sage scrub, burnt annual grassland/coastal sage scrub, hoary leaf ceanothus chaparral, and mixed chaparral.

Low valued habitats onsite include annual grassland, developed, and ornamental areas.

The proposed development areas have been located in the lower portion of the project site. This has resulted in less impacts to some of the more pristine (high/medium value) habitats and habitat located closer to the Angeles National Forest.

Protection. These measures would allow the remaining habitat within the project site, but outside the proposed developed areas, to continue to function in as close to the existing state as possible. Biological resource protection for the proposed development areas should include the permanent dedication of non-developed open space containing avoided resources. The location and design of areas to be protected shall be consistent with the NCCP or other Habitat Conservation Plan (HCP). A mechanism of dedication should be decided and approved by the City of San Dimas, landowners, and appropriate resource agencies. Protection of the natural areas adjacent to the proposed development areas shall also include such actions as the proper design and placement of drainage facilities, and resource management and monitoring activities. Prior to the issuance of a grading permit for any proposed development area, a Resource Management Plan (RMP) should be designed and approved by the City to protect and manage natural resources before, during, and after construction.

Habitat Replacement. Replacement of high value habitats shall be required as part of the RMP to the satisfaction of the City of San Dimas and in coordination with the resource agencies (i.e., ACOE, USFWS, and CDFG).

FOCUSED SURVEYS

Mitigation Measure # 1

To fully document the potential impacts to sensitive plant and wildlife species, focused surveys for the following state or federally listed threatened or endangered plant and wildlife species will be conducted during the optimal survey period prior to any development approvals from the City for any project within the proposed development area.

PLANTS

Braunton's milkvetch

Nevin's barberry

Thread-leaved brodiaea

WILDLIFE

Quino checkerspot butterfly	**Least Bell's vireo**
Santa Ana sucker	**Bank swallow (nesting)**
Arroyo southwestern toad	**Coastal California gnatcatcher**
California red-legged frog	**Raptor (nesting)**
Southwestern willow flycatcher	

In addition, focused surveys may also be warranted for sensitive species that are not currently classified as endangered, threatened, or proposed for listing, but which may be listed in the future or would be of concern to state and federal resource agencies during future environmental review processes for projects within the proposed development areas. The following species may require focus surveys if specific project locations contain appropriate habitat:

PLANTS

Slender Mariposa lily	**Pious daisy**
Plummer's Mariposa lily	**Robinson's peppergrass**
San Gabriel Mountains dudleya	**Rayless ragwort**
Many-Stemmed dudleya	

WILDLIFE

Arroyo chub	**San Bernardino mountain kingsnake**	**Grasshopper sparrow**
Santa Ana speckled dace	**Coast patchnose snake**	**Tricolored blackbird**
Coast range newt	**Two-striped garter snake**	**Pallid bat**
Large-blotched ensantina	**Loggerhead shrike**	**Townsend's western big-eared bat**
Western spadefoot	**California horned lark**	**San Diego black-tailed jackrabbit**
Mountain yellow-legged frog	**San Diego cactus wren**	**Dulzura California pocket mouse**
Southwestern pond turtle	**Yellow warbler**	**Pallid San Diego pocket mouse**
San Diego horned lizard	**Yellow-breasted chat**	**Los Angeles pocket mouse**

Coastal western whiptail	**Summer tanager**	**San Diego desert woodrat**
Silvery legless lizard	**Southern California rufous-crowned sparrow**	**Southern grasshopper mouse**
San Bernardino ring-necked snake	**Bell's sage sparrow**	**American badger**

DEVELOPMENT OF HABITAT CONSERVATION PLAN

At the time of the preparation of this report, the City of San Dimas is no longer considered a participant in the NCCP program because the enrollment period for this program (which the City had originally signed onto) has expired. Depending on whether the City re-enrolls in the program, the NCCP program in its current form may not be an appropriate or adequate mitigation/conservation program for impacts to habitat within the proposed development areas. However, a separate HCP for all or several portions of the proposed development areas could be prepared in conjunction with permit approvals for the various development projects in the development areas. HCPs are usually prepared to mitigate for impacts to state or federally listed threatened or endangered species. However, an HCP can be prepared in anticipation of the listing of various plant and wildlife species, to ensure project applicants of a program by which to mitigate and permit the loss of such species in compliance with state and federal Endangered Species Acts.

Mitigation Measure #2

If the entire project site is considered for inclusion into an HCP program, the following recommendation should be incorporated into the reserve design to ensure the viability of these areas and surrounding natural open space areas:

A. The configuration and management of reserves should be based on sound ecological principles. Ecosystem processes need to be protected in addition to the species' immediate life history requirements. Factors of microclimate, nutrient input, water quality, watersheds and existing vegetation should be protected to the maximum extent possible. If these processes are not protected, habitat quality will be reduced and recovery may be limited, even if large blocks of habitat are protected.

   A successful reserve will incorporate the following factors:

   - Large contiguous blocks of habitat
   - Shape that maximizes the area of interior habitat, and minimizes area of edge habitat
   - Connections to other natural areas in the region
   - Variety of habitat types

- High quality habitat
- Adaptive management

RESOURCE MANAGEMENT PLAN

Mitigation Measure #3

Prior to approval of projects within the land development areas, a RMP shall be submitted to and approved by the City of San Dimas. The RMP shall contain procedures and performance standards that must be executed to protect, replace, or manage biological resources affected or potentially affected by construction and occupation of the development. The RMP shall contain a summary of mitigation milestones that will identify the schedule of completion, and the party or parties responsible for their implementation.

HABITAT REPLACEMENT

Mitigation Measures #4

Mixed Willow Riparian Forest and Coast Live Oak Riparian Forest

Impacts on wetlands and/or riparian habitats will be mitigated as part of the mitigation required for any CDFG Section 1601 Streambed Alteration Agreement and/or ACOE Permit that may be processed for proposed development projects. As part of the permit/agreement, a conceptual streambed/riparian related mitigation plan would need to be developed. The objective of the mitigation is to ensure no net loss of habitat values from proposed projects. The mixed willow riparian forest and coast live oak riparian forest are vegetation types that will be impacted by specific projects within the project and will require permitting. The mitigation plan shall include the following elements:

B. Responsibilities and qualifications of the personnel to implement/supervise the plan
C. Plant material and seed mixes
D. Site preparation and planting implementation
E. Performance criteria
F. Monitoring and maintenance plan
G. Long-term preservation of the site
H. Agency coordination
I. Construction document preparation

In addition, the native trees within the proposed development areas may also fall under the jurisdiction of the City of San Dimas Tree Ordinance or the Los Angeles County Oak Tree Ordinance. A detailed tree survey will need to be completed in the impact areas prior to

implementation of specific projects in the proposed development areas. The tree replacement shall consist of a minimum of two 15-gallon native tree specimens for each removal, unless approved otherwise by the City. Native tree mitigation programs shall include:

A. A minimum of two 15-gallon native trees shall be planted on site as replacement for one tree removed.

B. The Landscape Architect/designer for this project shall design into landscape these replacement trees.

C. Planting specification should consider the following:

The newly planted trees shall be planted high, as much as 3/4 above the new adjacent grade.

Amending the backfill soil with wood shavings, etc. Is not recommended when existing soil is high in natural organic matter with a sandy loam texture.

In regards to the need of planting amendments and drainage systems, recommendations shall be based on soil tests of this project and approved by the City.

D. Any City approved work within the driplines of saved trees, including branch removal, shall be under the inspection of a qualified arborist.

E. Copies of the "Tree Report", the "Tree Ordinance" and the "City approved Grading Plans" shall be maintained onsite during all site construction.

Mitigation Measures #5

Coastal Sage Scrub

To mitigate for impacts to coastal sage scrub, the following measure shall be incorporated into any specific projects within the proposed development areas that include the removal of coastal sage scrub habitat types.

A. All cut and fill slopes, other areas disturbed by construction activities, and additional areas supporting non-native vegetation, shall be reseeded with coastal sage scrub plant species. Revegetation shall occur at a ration of 2:1. That is, for every acre of coastal sage scrub removed, two acres of habitat shall be replaced. Revegetation shall be implemented in stages. The initial stage will begin during site grubbing and will consist of crushing/mulching scrub, within areas to be graded, with a dozer. The crushed/mulched material along with the top four to six inches (10 to 15 cm) of topsoil will then be removed in one operation with a loader or dozer and stockpiled nearby as directed by the project biologist. Soil stockpiles should be stored at depths no greater than seven feet (2 m) until revegetation sites are prepared and should be maintained

free of contamination (storage depths may require adjustment based upon length of storage). Stockpiles should be stored no longer than six months. Once a restoration site is prepared (roughened by sheep's foot or similar equipment) the stockpiled soil will be spread to a depth of approximately one foot (30 cm). Appropriate scrub container stock will be incorporated into the revegetation areas as outlined in the detailed mitigation/restoration plan to be developed by the project biologist. In addition, container stock consisting of native bunchgrasses will be incorporated into the planting. The redistributed material, along with the container stock, will be watered by a temporary irrigation system until established, as determined by the project biologist.

B. Crushed plant material and soil to be stockpiled will be obtained from various locations onsite. Areas to be revegetated will be determined by the project biologist based upon such factors as the configuration of the cut and/or fill slopes and proximity to areas of intact scrub communities.

C. The timing of the stockpiling of plant material and topsoil will be dictated by the grading/construction schedule. Reintroduction of stockpiled material to revegetation sites will be conducted between September 1 and November 30. Container stock will be planted during the same time period.

D. For each of proposed development areas, performance standards shall be developed and apply for the revegetation of coastal sage scrub. Generally these standards include 75 percent coverage by redistributed vegetative materials, seeded species, and container stock (whichever of the three or combination is used) at the end of five years. In addition, a 50 percent survival of any container stock originally planted is expected. If 50 percent survival has not been achieved, replanting with appropriate size container stock necessary to achieve this standard will be performed.

E. Monitoring of the revegetation areas shall be conducted for five years to ensure successful colonization of the restored areas by scrub species. If success standards are not met, remedial measures, including hand seeding, hydroseeding, or introduction of additional container stock will be implemented as directed by the City and the project biologist.

Mitigation Measures #6

Native Grassland

Impacts to native grassland shall be mitigated by the restoration of native grassland on the cut/fill slopes, other areas disturbed by construction activities, and additional areas supporting non-native vegetation, shall be reseeded with native grassland plant species Revegetation shall occur at a ration of 2:1. That is, for every acre of native grassland removed, two acres of habitat shall be replaced. Restoration will consist of hydroseeding with appropriate native bunchgrasses and forbs and include the following:

A. Establishment of restoration/revegetation sites will be conducted between September 1 and November 30. Introduction of hydroseed mix and container plants will be immediately after preparation of the restoration sites.

B. Revegetation will be considered successful at three years if the percent cover and species diversity of the restored and/or created habitat areas are similar to percent cover and species diversity of adjacent existing habitats, as determined by quantitative testing of existing and restored and/or created habitat areas.

C. Monitoring will be conducted for three years to ensure successful establishment of the restored areas by native grasses and forbs. If success standards are not met, remedial measures, including hydroseeding or introduction of additional container stock will be implemented as directed by the City and the project biologist.

Mitigation Measures #7

Special Status Plant Species

Several special status plant species may occur within the proposed development areas. Focused surveys to determine the presence or absence of these species on any specific development site should be conducted. If no state or federally listed threatened or endangered, or if a limited number of the other lower status special status species are found, no additional mitigation may be warranted. However, should focused surveys find a state or federally listed threatened or endangered species, or a substantial population of other lower status special status plant species onsite, mitigation will need to be coordinated with the USFWS, CDFG, and/or CNPS and may include habitat preservation offsite or population relocation to offsite natural open space areas.

Mitigation Measures #8

Special Status Wildlife Species

A total of 47 special status wildlife species have the potential to occur within the proposed development areas. Focused surveys to determine the presence or absence of these species on any specific development site should be conducted. If no state or federally listed threatened or endangered, or a limited number of other lower status special status species are found, no additional mitigation may be warranted. However, should surveys find a state or federally listed threatened or endangered species, or a substantial population of the other lower status special status wildlife species onsite, mitigation will need to be coordinated with the USFWS and CDFG. Mitigation may include habitat preservation offsite or habitat replacement through enhancement or restoration of onsite or offsite resources.

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ATTACHMENT A

FLORA COMPENDIUM
FOR THE SAN DIMAS NORTHERN FOOTHILLS PROJECT

SCIENTIFIC NAME	COMMON NAME
Selaginellaceae-Spike moss	
Selaginella bigelorii	Bigelow's spike moss
Pinaceae-Pine	
Pinus spp.*	ornamental pine
Pinus ponderosa	ponderosa pine
DICOTYLEDONES	
Anacardiaceae-Sumac	
Malosma laurina	laurel sumac
Rhus integrifolia	lemonade berry
Rhus trilobata	skunkbrush
*Schinus molle**	Peruvian pepper tree
Toxicodendron diversilobum	Western poison oak
Apocynaceae	
*Nerium oleander**	oleander
Asteraceae-Sunflower	
Artemisia californica	California sagebrush
Artemisia douglasiana	mugwort
Baccharis salicifolia	mule fat
Brickellia californica	California brickellbush
*Centaurea melitensis**	tocalote
Eriophyllum confertiflorum	golden yarrow
*Gnaphalium californicum**	California everlasting
Hazardia squarrosa	sawtooth goldenbush
Helianthus annuus	western sunflower
Hemizonia fasciculata	fascicled tarweed
Lessingia filaginifolia	cudweed aster
Malacothrix saxatilis	cliff malacothrix
Betulaceae-Birch	
Alnus rhombifolia	white alder
Boraginaceae-Borage	
Amsinkia menziesii	rancher's fiddleneck
Cryptantha sp.	cryptantha
Brassicaceae-Mustard	
*Hirschfeldia incana**	shortpod mustard
Rorippa nasturtium-aquaticum	water cress
Cactaceae-Cactus	
Opuntia occidentalis	prickly pear
Caprifoliaceae-Honeysuckle	
Lonicera subspicata	southern honeysuckle
Sambucus mexicana	Mexican elderberry
Caryophyllaceae-Pink	
Stellaria media	common chickweed
Chenopodiaceae-Goosefoot	
*Salsola tragus**	Russian thistle
Cucurbitaceae-Gourd	
Marah macrocarpus	wild cucumber
Euphorbiaceae-Spurge	
Eremocarpus setigerus	dove weed
Ricinus communis	castor bean

FLORA COMPENDIUM
FOR THE SAN DIMAS NORTHERN FOOTHILLS PROJECT

Fabaceae-Legume	
Lotus scoparius	deerweed
Lupinus sp.	lupine
Melilotus indica	yellow sweet-clover
Fagaceae-Beech	
Quercus agrifolia	coast live oak
Quercus berberidifolia	scrub oak
Geraniaceae-Geraniaceae	
Erodium cicutarium	red-stemmed filaree
Grossulariaceae-Gooseberry	
Ribes malvaceum	chaparral currant
Ribes aureum	golden currant
Ribes indecorum	white-flowering currant
Ribes speciosum	fuchsia-flowered gooseberry
Eucrypta chrysanthemifolia	common eucrypta
Juglandaceae-Walnut	
Juglans californica	southern california black walnut
Lamiaceae-Mint	
*Marrubium vulgare**	horehound
Salvia apiana	white sage
Salvia leucophylla	purple sage
Salvia mellifera	black sage
Trichostema lanceolatum	vinegar weed
Lauraceae-Laurel	
Umbellularia californica	California bay laurel
Malvaceae-Mallow	
Malva parviflora	cheeseweed
Myrtaceae-Myrtle	
Eucalyptus sp.*	gum tree
Nyctaginaceae-Four-O'Clock	
Mirabilis californica var. *californica*	wishbone bush
Oleaceae-Olive	
*Olea europaea**	olive
Onagraceae-Evening-Primrose	
Camissonia sp.	sun cup
Clarkia purpurea	four-spot clarkia
Oxalidaceae-Wood-Sorrel	
*Oxalis pes-caprae**	Bermuda buttercup
Plantanaceae-Plane Tree	
Plantanus racemosa	Western sycamore
Polygonaceae-Buckwheat	
Eriogonum fasciculatum ssp. *fasciculatum*	California buckwheat
*Rumex crispus**	curly dock
Rhamnaceae-Buckthorn	
Ceanothus crassifolius	hoaryleaf ceanothus
Rhamnus ilicifolia	holly-leaved redberry
Rosaceae-Rose	
Adenostoma fasciculatum	chamise
Cercocarpus betuloides	birch leaf mountain-mahogany
Heteromeles arbutifolia	toyon
Prunus illicifolia	holly-leafed cherry
Rubus ursinus	California blackberry

FLORA COMPENDIUM
FOR THE SAN DIMAS NORTHERN FOOTHILLS PROJECT

Rubiaceae-Madder	
Galium sp.	bedstraw
Salicaceae-Willow	
Salix sp.	willow
Salix gooddingii	black willow
Salix lasiolepis	arroyo willow
Scrophulariaceae-Figwort	
Keckiella cordifolia	heart-leaved bush-penstemon
Mimulus aurantiacus	orange bush monkeyflower
Mimulus cardinalis	scarlet monkeyflower
Mimulus guttatus	seep monkeyflower
Solanaceae-Nightshade	
*Nicotiana glauca**	tree tobacco
Solanum xanti	chaparral nightshade
Urticaceae-Nettles	
Urtica dioica	stinging nettle
MONOCOTYLEDONES	
Arecaceae-Palm	
Washingtonia sp.	fan palm
Liliaceae-Lily	
Dichlostemma capitatum	blue dicks
Yucca whipplei	Our Lord's candle
Poaeace-Grass	
Arudo donax	giant reed
*Avena spp.**	wild oats
Bromus spp.	bromes
*Bromus diandrus**	ripgut brome
Bromus hordeaceus	soft chess
Bromus madritensis ssp. *rubens*	foxtail chess
*Cynodon dactylon**	bermuda grass
Leymus condensatus	giant wild rye
Melica imperfecta	small-flowered melic grass
Nasella lepida	foothill needlegrass
Nasella pulchra	purple needlegrass
Phalaris sp.	canary grass
Schismus barbatus	Mediterranean schismus
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FAUNA COMPENDIUM
FOR THE SAN DIMAS NORTHERN FOOTHILLS PROJECT

Species	Known/Potential Occurance
FISH	
Lapomis cyanellus green sunfish	P
Micropterus salmoides largemouth bass	P
CYPRINIDAE - MINNOWS	
Gila orcutti arroyo chub	P
Pimephales promelas flathead minnow	E
Rhinichthys osailolus Santa Ana speckled dace	P
ICTALURIDAE - CATFISH	
Catostomus santaanae Santa Ana sucker	P
POECILIDAE - LIVEBEARERS	
Gambusia affinis western mosquitofish	E
AMPHIBIANS	
SALAMANDRIDAE-NEWTS	
Taricha torosa California newt	E
PLETHODONTIDAE - LUNGLESS SALAMANDERS	
Aneides lugubris arboreal salamander	E
Batrachoseps nigriventris black-bellied salamander	E
Batrachoseps pacificus Pacific slender salamander	E
Ensatina eschscholtzii ensatina	E
PELOBATIDAE -SPADEFOOT TOADS	
Scaphiopus hammondii western spadefoot	P
BUFONIDAE - TRUE TOADS	
Bufo boreas western toad	E
Bufo californicus arroyo toad	P
HYLIDAE - TREEFROGS	
Hyla cadaverina California treefrog	E
Hyla regilla Pacific treefrog	E
RANIDAE - TRUE FROGS	
Rana catesbeianan bullfrog *	E
REPTILES	
TESTUDINIDAE - WATER & BOX TURTLES	
Clemmys marmorata pallida southwestern pond turtle	P
GEKKONIDDAE - GECKOS	

FAUNA COMPENDIUM
FOR THE SAN DIMAS NORTHERN FOOTHILLS PROJECT

Coleonyx variegatus western banded gecko	P
ANNIELLIDAE - LEGLESS LIZARDS	
Anniella pulchra pulchra silvery legless lizard	P
IGUANIDAE - IGUANID LIZARDS	
Phrynosoma coronatum blainvillii San Diego horned lizard	P
Sceloporus occidentalis western fence lizard	E
Uta stansburiana side-blotched lizard	O
SCINCIDAE - SKINKS	
Eumeces skiltonianus western skink	E
TEIIDAE - WHIPTAIL LIZARDS	
Cnemidophorus hyperythrus orangethroat whiptail	P
Cnemidophorus tigris multiscutatus coastal whiptail	P
ANGUIDAE - ALLIGATOR LIZARDS	
Elgaria multicarinata southern alligator lizard	E
LEPTOTYPHLOPIDAE - SLENDER BLIND SNAKES	
Leptotyphlops humilis western blind snake	P
COLUBRIDAE - COLUBRID SNAKES	
Arizona occidentalis western glossy snake	E
Diadophis punctatus ringneck snake	E
Hypsiglena torquata night snake	P
Lampropeltis getulus common kingsnake	E
Lichanura trivirgata rosy boa	P
Masticophis flagellum coachwhip	P
Masticophis lateralis striped racer	P
Pituophis catenifer gopher snake	O
Rhinocheilus lecontei longnose snake	P
Salvadora hexalepis western patchnose snake	P
Tantilla planiceps western black-headed snake	P
Thamnophis hammondii two-striped garter snake	P
Trimorphodon biscutatus lyre snake	P
VIPERIDAE - VIPERS	

Crotalus viridis western rattlesnake	E
Crotalus michelii speckled rattlesnake	E
BIRDS	
CATHARTIDAE - NEW WORLD VULTURES	
Cathartes aura turkey vulture	O
ACCIPITRIDAE - HAWKS	
Elanus leucurus white-tailed kite	P
Circus cyaneus northern harrier	E
Accipiter striatus sharp-shinned hawk	E
Accipiter cooperii Cooper's hawk	E
Buteo lineatus red-shouldered hawk	E
Buteo swainsoni Swainson's hawk	P
Buteo jamaicensis red-tailed hawk	O
Buteo regalis ferruginous hawk	E
Aquila chrysaetos golden eagle	E
FALCONIDAE - FALCONS	
Falco sparverius American kestrel	E
Falco columbarius merlin	P
Falco peregrinus peregrine falcon	P
Falco mexicanus prairie falcon	P
ODONTOPHORIDAE - QUAILS	
Callipepla californica California quail	E
Oreotyx pictus mountain quail	P
COLUMBIDAE - PIGEONS & DOVES	
Columba livia rock dove *	P
Zenaida macroura mourning dove	O
Columba fasciata band-tailed pigeon	E
CUCULIDAE - CUCKOOS & ROADRUNNERS	
Coccyzus americanus yellow-billed cuckoo	P
Geococcyx californianus greater roadrunner	P
TYTONIDAE - BARN OWLS	

Tyto alba barn owl	P
STRIGIDAE - TRUE OWLS	
Otus kennicottii western screech-owl	P
Bubo virginianus great horned owl	E
Strix occidentalis occidentalis California spotted owl	P
Athene cunicularia burrowing owl	P
Asio otus long-eared owl	P
CAPRIMULGIDAE - GOATSUCKERS	
Chordeiles acutipennis lesser nighthawk	P
Phalaenoptilus nuttallii common poorwill	E
APODIDAE - SWIFTS	
Chaetura vauxi Vaux's swift	E
Aeronautes saxatalis white-throated swift	E
TROCHILIDAE - HUMMINGBIRDS	
Archilochus alexandri black-chinned hummingbird	E
Calypte anna Anna's hummingbird	O
Calypte costae Costa's hummingbird	E
Selasphorus rufus rufous hummingbird	E
Selasphorus sasin Allen's hummingbird	E
ALCEDINIDAE - KINGFISHERS	
Ceryle alcyon belted kingfisher	P
PICIDAE - WOODPECKERS	
Melanerpes formicivorus acorn woodpecker	O
Sphyrapicus ruber red-breasted sapsucker	P
Picoides nuttallii Nuttall's woodpecker	E
Picoides pubescens downy woodpecker	P
Colaptes auratus northern flicker	O
TYRANNIDAE - TYRANT FLYCATCHERS	
Contopus cooperi olive-sided flycatcher	P
Contopus sordidulus western wood-pewee	E
Empidonax traillii willow flycatcher	P

Empidonax hammondii Hammond's flycatcher	P
Empidonax oberholseri dusky flycatcher	P
Empidonax difficilis Pacific-slope flycatcher	E
Sayornis nigricans black phoebe	E
Sayornis saya Say's phoebe	O
Myiarchus cinerascens ash-thoated flycatcher	E
Tyrannus vociferans Cassin's kingbird	P
Tyrannus verticalis western kingbird	E
LANIIDAE - SHRIKES	
Lanius ludovicianus loggerhead shrike	O
VIREONIDAE - VIREOS	
Vireo bellii Bell's vireo	P
Vireo cassinii Cassin's vireo	E
Vireo huttoni Hutton's vireo	E
Vireo gilvus warbling vireo	P
CORVIDAE - JAYS & CROWS	
Aphelocoma californica western scrub-jay	O
Corvus brachyrhynchos American crow	O
Corvus corax common raven	O
ALAUDIDAE - LARKS	
Eremophila alpestris horned lark	E
HIRUNDINIDAE - SWALLOWS	
Tachycineta bicolor tree swallow	P
Tachycineta thalassina violet-green swallow	E
Stelgidopterx serripennis northern rough-winged swallow	P
Riparia riparia bank swallow	P
Hirundo pyrrhonota cliff swallow	E
Hirundo rustica barn swallow	P
Progne subis purple martin	P
PARIDAE - TITMICE	

Baeolophus inornatus oak titmouse	E
Baeolophus inornatus mountain chickadee	E
AEGITHALIDAE - BUSHTITS	
Psaltriparus minimus bushtit	E
SITTIDAE - NUTHATCHES	
Sitta carolinensis white-breasted nuthatch	P
TROGLODYTIDAE - WRENS	
Campylorhynchus brunneicapillus cactus wren	E
Salpinctes obsoletus rock wren	P
Catherpes mexicanus canyon wren	P
Thryomanes bewickii Bewick's wren	E
Troglodytes aedon house wren	E
REGULIDAE - KINGLETS	
Regulus calendula ruby-crowned kinglet	E
Regulus satrapa golden-crowned kinglet	P
SYLVIIDAE - GNATCATCHERS	
Polioptila caerulea blue-gray gnatcatcher	E
Polioptila californica California gnatcatcher	E
TURIDIDAE - THRUSHES & ROBINS	
Sialia mexicana western bluebird	P
Sialia currucoides mountain bluebird	P
Catharus ustulatus Swainson's thrush	P
Catharus guttatus hermit thrush	E
Turdus migratorius American robin	O
TIMALIIDAE - WRENTITS	
Chamaea fasciata wrentit	O
MIMIDAE - THRASHERS	
Mimus polyglottos northern mockingbird	O
Toxostoma redivivum California thrasher	O
STURNIDAE - STARLINGS	
Sturnus vulgaris European starling *	E
MOTACILLIDAE - PIPITS	

Anthus rubescens American pipit	P
BOMBYCILLIDAE - WAXWINGS	
Bombycilla cedrorum cedar waxwing	E
PTILOGONATIDAE - SILKY-FLYCATCHERS	
Phainopepla nitens phainopepla	P
PARULIDAE - WARBLERS	
Vermivora celata orange-crowned warbler	E
Vermivora ruficapilla nashville warbler	P
Dendroica petechia yellow warbler	E
Dendroica coronata yellow-rumped warbler	E
Dendroica nigrescens black-throated gray warbler	E
Dendroica townsendi Townsend's warbler	E
Dendroica occidentalis hermit warbler	E
Oporornis tolmiei MacGillivray's warbler	E
Geothlypis trichas common yellowthroat	E
Wilsonia pusilla Wilson's warbler	E
Icteria virens yellow-breasted chat	P
THRAUPIDAE - TANAGERS	
Piranga ludoviciana western tanager	E
Piranga rubra summer tanager	P
EMBERIZIDAE - SPARROWS & JUNCOS	
Pipilo maculatus spotted towhee	O
Pipilo crissalis California towhee	O
Aimophila ruficeps rufous-crowned sparrow	E
Amphispiza belli sage sparrow	P
Spizella passerina chipping sparrow	P
Pooecetes gramineus vesper sparrow	P
Chondestes grammacus lark sparrow	P
Passerculus sandwichensis savannah sparrow	P
Ammodramus savannarum grasshopper sparrow	P

Passerella iliaca fox sparrow	E
Melospiza melodia song sparrow	E
Melospiza lincolnii Lincoln's sparrow	E
Zonotrichia atricapilla golden-crowned sparrow	E
Zonotrichia leucophrys white-crowned sparrow	E
Junco hyemalis dark-eyed junco	E
CARDINALIDAE - GROSBEAKS & BUNTINGS	
Pheuticus melanocephalus black-headed grosbeak	E
Guiraca caerulea blue grosbeak	P
Passerina amoena lazuli bunting	E
Agelaius phoeniceus red-winged blackbird	P
Agelaius tricolor tricolored blackbird	P
Sturnella neglecta western meadowlark	P
Euphagus cyanocephalus Brewer's blackbird	E
Molothrus ater brown-headed cowbird	E
Icterus cucullatus hooded oriole	P
Icterus bullockii Bullock's oriole	E
FRINGILLIDAE - FINCHES	
Carpodacus purpureus purple finch	E
Carpodacus mexicanus house finch	E
Carduelis psaltria lesser goldfinch	E
Carduelis lawrencei Lawrence's goldfinch	P
Carduelis tristis American goldfinch	P
PASSERIDAE - OLD WORLD SPARROWS	
Passer domesticus house sparrow *	E
MAMMALS	
DIDELPHIDAE - NEW WORLD OPOSSUMS	
Didelphis virginiana Virginia opossum *	E
SORICIDAE - SHREWS	
Sorex ornatus ornate shrew	P

Notiosorex crawfordi desert shrew	P
TALPIDAE - MOLES	
Scapanus latimanus broad-footed mole	E
VESPERTILIONIDAE - EVENING BATS	
Antrozous pallidus pallid bat	P
Eptesicus fuscus big brown bat	P
Euderma maculatum spotted bat	P
Lasionycteris noctivagans silver-haired bat	P
Lasiurus blossevillii western red bat	P
Lasiurus cinereus hoary bat	P
Lasiurus ega southern-western yellow bat	P
Myotis californicus California myotis	P
Myotis leibii eastern small-footed myotis	P
Myotis lucifugus little brown myotis	P
Myotis yumanensis Yuma myotis	P
Pipistrellus hesperus western pipistrelle	P
Plecotus townsendii Townsend's big-eared bat	P
MOLOSSIDAE - MOLOSSID BATS	
Eumops perotis western mastiff bat	P
Nyctinomops femorosaccus pocketed free-tailed bat	P
Nyctinomops macrotis big free-tailed bat	P
Tadarida brasiliensis Brazilian free-tailed bat	P
LEPORIDAE - HARES & RABBITS	
Sylvilagus bachmani brush rabbit	E
Sylvilagus audubonii desert cottontail	E
Lepus californicus black-tailed jackrabbit	P
SCIURIDAE - SQUIRRELS	
Spermophilus beecheyi California ground squirrel	E
Tamias merriami Merriam's chipmunk	E
Sciurus griseus western gray squirrel	O

FAUNA COMPENDIUM
FOR THE SAN DIMAS NORTHERN FOOTHILLS PROJECT

GEOMYIDAE - POCKET GOPHERS	
Thomomys bottae Botta's pocket gopher	E
HETEROMYIDAE - POCKET MICE & KANGAROO RATS	
Perognathus longimembris little pocket mouse	P
Chaetodipus californicus California pocket mouse	P
Chaetodipus fallax San Diego pocket mouse	P
Dipodomys agilis agile kangaroo rat	E
MURIDAE - MICE, RATS, AND VOLES	
Microtus californicus California vole	E
Mus musculus house mouse *	P
Neotoma fuscipes dusky-footed woodrat	E
Neotoma lepida desert woodrat	P
Peromyscus californicus California mouse	P
Peromyscus eremicus cactus mouse	E
Peromyscus maniculatus deer mouse	E
Rattus norvegicus Norway rat*	P
Rattus rattus black rat*	E
Reithrodontomys megalotis western harvest mouse	P
CANIDAE - WOLVES & FOXES	
Canis latrans coyote	E
Urocyon cinereoargenteus gray fox	E
PROCYONIDAE - RACCOONS	
Procyon lotor common raccoon	E
MUSTELIDAE - WEASELS, SKUNKS & OTTERS	
Mephitis mephitis striped skunk	P
Mustela frenata long-tailed weasel	P
Spilogale gracilis western spotted skunk	P
Taxidea taxus American badger	P
FELIDAE - CATS	
Felis concolor mountain lion	P
Lynx rufus bobcat	O

CERVIDAE - DEERS	
Odocoileus hemionus mule deer	O
R:\Projects\RBF\J023 Fauna Comp-021799	

15.8 Scoping Meeting

NOTICE OF PUBLIC HEARING

SCOPING MEETING
for the
NORTHERN FOOTHILLS IMPLEMENTATION PROGRAM
DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT

Senior/Community Center - Multi-Purpose Room
Wednesday, January 20, 1999
7:00 to 9:00 p.m.

Notice is hereby given that a public hearing will be held in the multi-purpose room of the Senior/Community Center, 201 East Bonita Avenue, San Dimas, CA 91773 on Wednesday January 20, 1999 from 7:00 p.m. to 9:00 p.m., to receive comments on the scope of the environmental analysis necessary for the Northern Foothills Implementation Program. In accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq, the City of San Dimas released a Notice of Preparation and Initial Study for the proposed project on December 18, 1998, which initiated a 30-day public review/commenting period. The Initial Study identified several potential significant environmental impacts which may result from project implementation and concluded that further environmental review in the form of an Environmental Impact Report (EIR) is required for the project.

The purpose of this Scoping Meeting is to receive input from the public and public agencies on potential environmental impacts which may result from implementation of the proposed Northern Foothills Implementation Program. This initial scoping process will help identify the range of actions, alternatives, environmental effects, and mitigation measures to be analyzed in depth in the anticipated EIR. A brief project description is provided below.

Project Location: The project area is located within the northern portion of the City of San Dimas. The approximately 3,000 acre project area is generally bordered by the Angeles National Forest to the north and northeast, the City of La Verne to the southeast, residential areas to the south, and the City of Glendora immediately to the west.

Project Description: The proposed project involves a General Plan Amendment and Zone Change/Specific Plan. The General Plan Amendment would amend the San Dimas General Plan text to create a "Northern Foothills" land use designation and to outline development policies and requirements specific to the Northern Foothills area consistent with the "Northern Foothills Development Strategy." The Zone Change/Specific Plan would create either a new zone or specific plan to implement the policies and requirements of the General Plan and the adopted Development Strategy. The development strategy proposed in the *Northern Foothills Development and Infrastructure Study* (November 1998) would permit a maximum of 127 dwelling units on the 972 vacant acres.

City Contact: Scoping comments should be directed to:

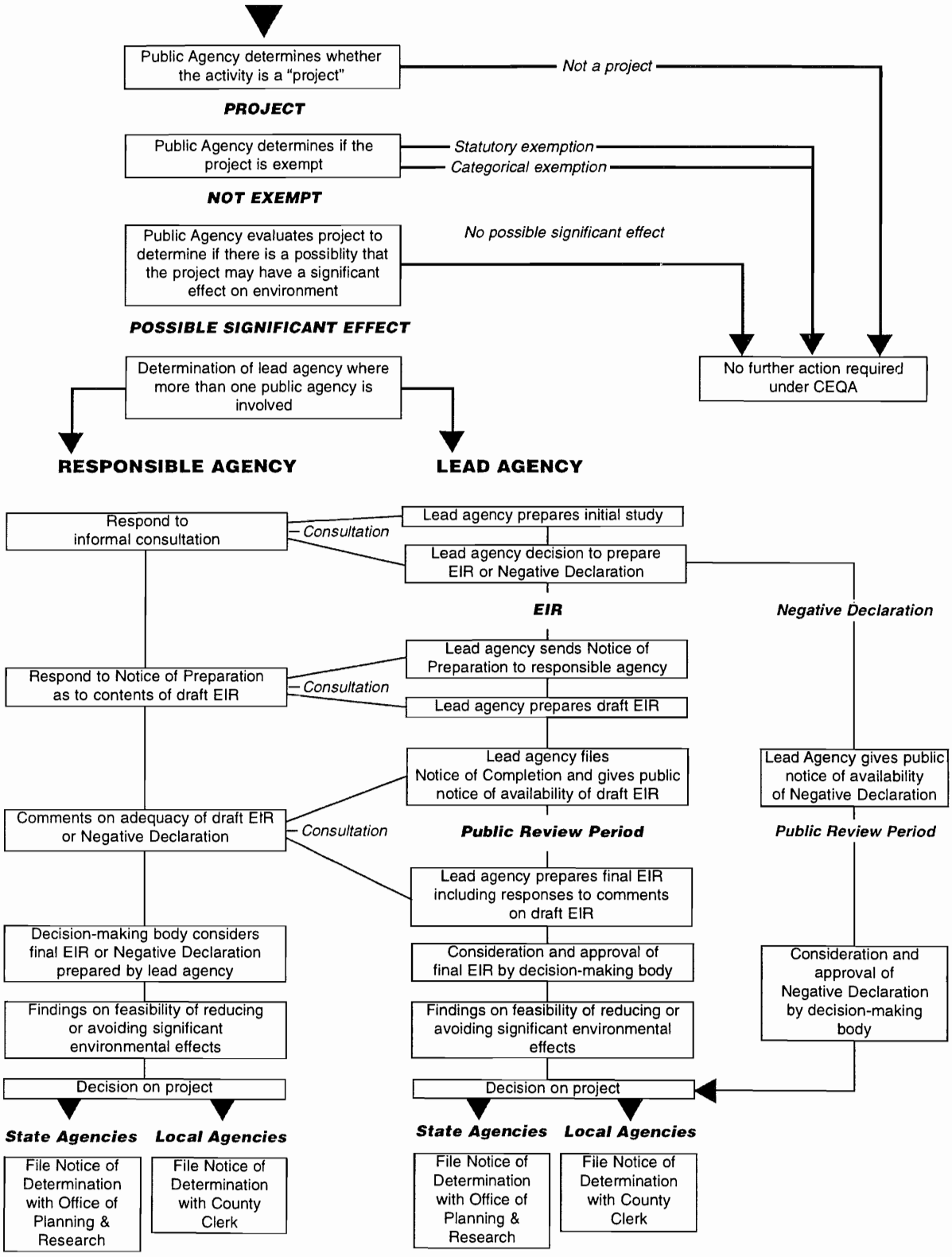
City of San Dimas
Planning Department
245 East Bonita Avenue
San Dimas, California 91773
Attention: Mr. Larry Stevens, AICP, Planning Director
(909) 394-6250

Consultant Contact: Comments and questions can also be directed to the project consultant:

Robert Bein, William Frost & Associates (RBF)
P.O. Box 75057
Irvine, CA 92619-7057
Attn: Collette L. Morse, AICP, Project Manager
(949) 472-3505

City of San Dimas
Planning Department
245 East Bonita Avenue
San Dimas, CA 91773

CEQA PROCESS FLOW CHART



SIGN-IN SHEET

PUBLIC SCOPING MEETING

DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT FOR THE NORTHERN FOOTHILLS IMPLEMENTATION PROGRAM

January 20, 1999
7:00 p.m. to 9:00 p.m.

Name	Address (Street, City, Zip Code)	Check Box If You Did Not Receive Notice of Meeting In The Mail
T. Gene Hsieh FORMA.	17500 Red Hill Ave Suite 100 Irvine, CA 92614	
DINO CARANNELLI	PUSCOE ENGINEERING 16735 VON KARMAN STE 100 IRVINE CA 92602	
JOHN BEAL CENTURY 21 BEACHSIDE FOR JANET DUVAL	400 N. MOUNTAIN AVE #121 UPLAND CA 91786	
Lonne Parker 1229 Deer Creek Rd. SD.	1229 Deer Creek Rd SD.	
GARY EDWARD	1449 SAN DIMAS AVE	
TOM & JOAN SOMMA	2034 TERRENCE AVE SD 91773	
JANICE & STEVE BURKE	821 DEERFLATS DR	
William Tigges	4799 B, Seayne St Chino	
Scott Holland	1303 N. Sinclair San Dimas CA.	
Gus Skouse	112 N. San Dimas Ave SAN DIMAS, CA 91773	✓

SIGN-IN SHEET

PUBLIC SCOPING MEETING

DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT FOR THE NORTHERN FOOTHILLS IMPLEMENTATION PROGRAM

January 20, 1999
7:00 p.m. to 9:00 p.m.

Name	Address (Street, City, Zip Code)	Check Box If You Did Not Receive Notice of Meeting In The Mail
SUSANNE SHOUSE	1120 N. SAN DIMAS AVE SAN DIMAS, CA 91773	✓
SAM TORRES	253 MAVERICK DR SAN DIMAS. CA.	
JOHN P. DANKOWSKI	[illegible] SAN DIMAS, CA	
Herb Herzog	1628 Grasscreek Dr. San Dimas Ca	
Ruth Herzog	1628 Grasscreek San Dimas	
SHEIRI & BRESKIN	1123 N. LASSEN CT.	

SIGN-IN SHEET

PUBLIC SCOPING MEETING

DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT FOR THE NORTHERN FOOTHILLS IMPLEMENTATION PROGRAM

January 20, 1999
7:00 p.m. to 9:00 p.m.

Name	Address (Street, City, Zip Code)	Check Box If You Did Not Receive Notice of Meeting In The Mail
MARK A. LEUZINGER SAN DIMAS FOOTHILLS CONSERVANCY	2692 TORREBONNE AVE. SAN DIMAS 91773	
Dick Mayer SAN DIMAS FOOTHILLS CONSERVANCY	1602 GRASSCREEK SAN DIMAS 91773	
URVASHI SURA MILAN VORA	840 Peninsula Ave Claremont CA 91711	
RICK WILLIAMS SAN DIMAS FOOTHILLS CONSERVANCY	2062 WHITEBCUFF DR SAN DIMAS. CA 91773	
Rudy Lauretta	1205 OAK CREEK RD SAN DIMAS, CA 91773	
Shawn Underwood 1400 N. Sherman	1409 N. Sherman San Dimas	✓

SIGN-IN SHEET

PUBLIC SCOPING MEETING

DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT FOR THE NORTHERN FOOTHILLS IMPLEMENTATION PROGRAM

January 20, 1999
7:00 p.m. to 9:00 p.m.

Name	Address (Street, City, Zip Code)	Check Box If You Did Not Receive Notice of Meeting In The Mail
CHARLES + [illegible]	3772 [illegible] AVE SAN DIMAS 91773	
Gary Laughlin Laughlin & Assoc	3949 Lexington St. Chino, CA 91710	
MIKE KALEY	1352 SHIRLMAR LN SAN DIMAS	
Anne Rayne	916 Segunda Ct San Dimas	
Denis Bertone	1615 Calle de Almonte	
NAGY KHATTAR THERESE KHATTAR	132 Prairie Dr San Dimas CA	
JESSE ASH	874 WINDERMERE RD SAN DIMAS, CA	
George Dunning		
CARL A. WILLIAMS	2010 WHITEBLUFF DR. SAN DIMAS	

A

SIGN-IN SHEET

PUBLIC SCOPING MEETING

DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT
FOR THE
NORTHERN FOOTHILLS IMPLEMENTATION PROGRAM

January 20, 1999
7:00 p.m. to 9:00 p.m.

Name	Address (Street, City, Zip Code)	Check Box If You Did Not Receive Notice of Meeting In The Mail
KAREN LEE (WITH N.S.D. LLP) MORRISON + FOERSTER LLP	19900 Mac Arthur Blvd 12th Floor IRVINE CA 92612	
KEN DAHLITZ	1348 N. CATARACT SAN DIMAS, 91773	
Marian Koranda	1398 ~~1400~~ N. Sherman San Dimas 91773	
JEAN DUNN	2022 TERREBONNE S. D. 91773	
Gil Gonzalez	2193 Terrebonne Ave San Dimas 91773	
Eugene Eck	1311 N. Shinlmer Av San Dimas 91773	
Waley [illegible]	1116 Eaton Rd San Dimas	
KAREN JUSTICE	200 RODEO CT. SAN DIMAS	
Kathy Curtis	952 Humbolt Ct San Dimas, CA 91773	
KEN HANSEN	1207 VALEBROOK Pl, GLENDORA CA 91740	

SIGN-IN SHEET

PUBLIC SCOPING MEETING

DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT
FOR THE
NORTHERN FOOTHILLS IMPLEMENTATION PROGRAM

January 20, 1999
7:00 p.m. to 9:00 p.m.

Name	Address (Street, City, Zip Code)	Check Box If You Did Not Receive Notice of Meeting In The Mail
JOHN SUMMA	2034 TERRE BONNE SAN DIMAS CA 91773	✓

PUBLIC COMMENT FORM
for
EIR SCOPING MEETING

January 20, 1999

PROJECT NAME: Program Environmental Impact Report (EIR) for the Northern Foothills Implementation Program

NAME AND ADDRESS OF COMMENTOR: (include group or public agency affiliation, as applicable)

SAMUEL A. TORRES
253 MAVERICK DR
SAN DIMAS CA 91773

Telephone Number: SATORRES @ EARTHLINK. NET

COMMENTS:

Please provide your comments on potential environmental issues/impacts which you feel should be addressed in further detail in the subject EIR. Attach additional pieces of paper, as needed.

This form and/or additional comments can be submitted to City Staff at the scoping meeting or mailed to the City of San Dimas, 245 East Bonita Avenue, San Dimas, CA 91773, Attention: Larry Stevens, AICP, Planning Director.

(1) UPGRADE RELREATION TO A "SIGNIFICANT" ENVIRONMENTAL IMPACT ITEM ON YOUR INITAL ENVIRONMENTAL STUDY CHECK LIST.

· TRAILS & THEIR USE IMPACT THE ENVIRONMENT (EROSION, ETC...)

PUBLIC COMMENT FORM
for
EIR SCOPING MEETING

January 20, 1999

PROJECT NAME: Program Environmental Impact Report (EIR) for the Northern Foothills Implementation Program

NAME AND ADDRESS OF COMMENTOR: (include group or public agency affiliation, as applicable)

Gil Gonzalez
2193 Terreloonno Ave
San Dimas, CA 91773

Telephone Number: (909) 592-0396

COMMENTS:

Please provide your comments on potential environmental issues/impacts which you feel should be addressed in further detail in the subject EIR. Attach additional pieces of paper, as needed.

This form and/or additional comments can be submitted to City Staff at the scoping meeting or mailed to the City of San Dimas, 245 East Bonita Avenue, San Dimas, CA 91773, Attention: Larry Stevens, AICP, Planning Director.

Natural Habitat. View Sheds
Quiet Streets.
Include existing E.I.R.'s

PUBLIC COMMENT FORM
for
EIR SCOPING MEETING

January 20, 1999

PROJECT NAME: Program Environmental Impact Report (EIR) for the Northern Foothills Implementation Program

NAME AND ADDRESS OF COMMENTOR: (include group or public agency affiliation, as applicable)

H. Gene Hsieh - FORMA
17500 Red Hill Ave
Suite 100, Irvine CA. 92614

Telephone Number: (949) 660 1900

COMMENTS:

Please provide your comments on potential environmental issues/impacts which you feel should be addressed in further detail in the subject EIR. Attach additional pieces of paper, as needed.

This form and/or additional comments can be submitted to City Staff at the scoping meeting or mailed to the City of San Dimas, 245 East Bonita Avenue, San Dimas, CA 91773, Attention: Larry Stevens, AICP, Planning Director.

ISSUES RAISED AT THE SCOPING MEETING
for the
NORTHERN FOOTHILLS IMPLEMENTATION PROGRAM
DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT

Senior/Community Center - Multi-Purpose Room
Wednesday, January 20, 1999
7:00 to 9:00 p.m.

Issues

1. Will there be Access from Glendora?
2. Viewshed Protection - linkage with General Plan Conservation Element
3. Viewshed Protection in General
4. Horse and Pedestrian Trails
5. Recreational Opportunities
6. Fire Department Access
7. School Buses - Ability to Get Up the Roads
8. Endangered Species
9. Roads/Access
10. Type of Controls for Future Traffic - Electronic Gates? Access From Cataract Avenue?
11. Access/Trail Easements
12. Trails - Their Impact on the Environment (Erosion, etc.)
13. Historical Use of Trails
14. Linkage of Trails (New and Old) with Other Trails in the Area
15. Need for Quiet Streets

Standards

Looking for standards to be developed for the following:

A. Roads - All Weather if Unpaved
B. Road Slopes/Grades
C. Grading
D. Visual
E. Utilities
F. Water
G. Sewer
H. Height Limits (One-Story)
I. Building Colors
J. Potential Development of Different Standards for Upper and Lower Areas