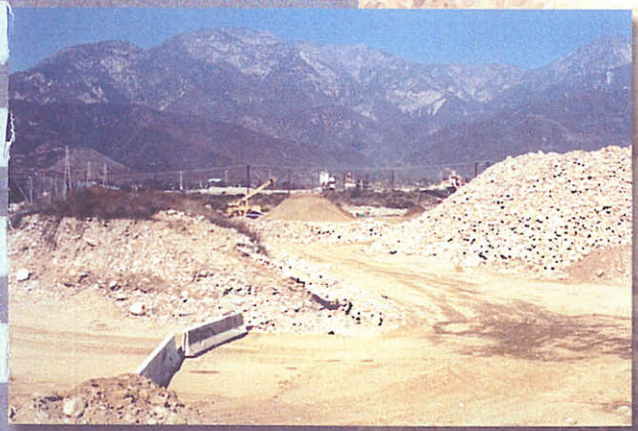
FINAL



The Colonies at San Antonio

Program Environmental Impact Report

CITY OF UPLAND CALIFORNIA

Administrative Draft EIR Completed: May 14, 2002
Draft EIR Completed: June 10, 2002
Final EIR Completed: September 24, 2002

FINAL
ENVIRONMENTAL IMPACT REPORT

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

SCH NO. 1998051075

Lead Agency:

CITY OF UPLAND
460 North Euclid Avenue
Upland, California 91786-4732
Contact: Ms. Sylvia Scharf, AICP
909.931.4100

Prepared by:

RBF CONSULTING
14725 Alton Parkway
Irvine, California 92618-2069
Contact: Mr. Glenn Lajoie, AICP
949.472.3505

September 2002

JN 10-101248

RESOLUTION NO. 5364

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF UPLAND CERTIFYING THE FINAL ENVIRONMENTAL IMPACT REPORT FOR THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT NO. SPA-7: MODIFICATION NO. 2, GENERAL PLAN AMENDMENT GPA 00-02, ZONE TEXT AMENDMENT 180, ZONE CHANGE ZC 00-01, DEVELOPMENT AGREEMENT DA 02-01, MASTER TENTATIVE TRACT MAP TT 16198, STREET VACATION SV 02-01, CONDITIONAL USE PERMIT CUP 02-04, AND SITE PLAN SP 00-07 AND MAKING FINDINGS PURSUANT TO THE STATE CEQA GUIDELINES SECTIONS 15091 AND 15093

WHEREAS: RBF Consulting, 14725 Alton Parkway, Irvine, CA 92618 on behalf of Colonies Crossroads, Inc., 1771 Colonies Parkway, Upland, CA 91784, submitted to the City of Upland an Environmental Impact Report (EIR 1372) on property generally described as:

An irregularly shaped 441-acre property located east of Campus Avenue, south of 20th Street, and west of Colonies Parkway and the Cucamonga Creek Channel.

Said property being legally described as:

LOT NOS. 276-281 AND 302-308 OF THE ONTARIO COLONY LANDS IN THE CITY OF UPLAND, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 11, PAGE 6, OF MAPS RECORDS IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY; PARCELS 2 AND 3 OF PARCEL MAP 15231 IN THE CITY OF UPLAND, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 187, PAGES 59-65, OF MAPS RECORDS IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY; AND TRACTS 14984, 15927 AND 15928 IN THE CITY OF UPLAND, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLATS RECORDED IN BOOK 284, PAGES 10-30 OF MAPS RECORDS IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

WHEREAS, the Upland City Council has conducted and concluded a duly noticed public hearing on the items listed in the title of this Resolution and EIR 1372.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF UPLAND, CALIFORNIA, DOES RESOLVE AS FOLLOWS:

SECTION 1. The City Council certifies that EIR 1372 has been prepared in accordance with the provision of the California Environmental Quality Act, California Public Resources Code Sections 21000 et seq., as amended. Further, that the City Council certifies that it has reviewed and considered the contents of EIR 1372 prior to its consideration of Specific Plan Amendment No.

EXHIBIT "A"

STATEMENT OF OVERRIDING CONSIDERATIONS
SEPTEMBER 2002

Pursuant to Section 15093 of the CEQA Guidelines, decision-makers are required to balance the benefits of a project against its unavoidable environmental risks in determining whether to approve a project. In the event the benefits of a project outweigh the unavoidable adverse effects, the adverse environmental effects may be considered "acceptable". The CEQA Guidelines require that, when a public agency allows for the occurrence of significant effects which are identified in the Final EIR but are not at least substantially mitigated, the agency shall state in writing the specific reasons the action was supported. Any statement of overriding considerations should be included in the record of project approval and should be mentioned in the Notice of Determination.

To the extent the significant effects of the project are not avoided or substantially lessened to a level of insignificance, the City of Upland, having reviewed and considered the information contained in the Final Environmental Impact Report for the project, and having reviewed and considered the information contained in the public record, and having balanced the benefits of the project against the unavoidable effects which remain, finds that such unmitigated effects to be acceptable in consideration of the following overriding considerations discussion.

The City finds that all feasible mitigation measures have been imposed to lessen project impacts to less than significant, and furthermore, that alternatives to the project are infeasible because they have greater environmental impacts, do not provide the benefits of the project, or are otherwise socially or economically infeasible as fully described in the project findings.

The environmental analysis undertaken for The Colonies at San Antonio Specific Plan Amendment project indicated the project would result in contributions to aesthetics (visual character and viewshed), traffic and circulation (CMP freeway evaluation) and air quality (short-term, long-term and cumulative) impacts that would represent a significant adverse environmental effect on a project basis. Furthermore, the analysis indicated that while mitigation measures would be effective in reducing the level of short-term and cumulative air impacts, the project would still result in significant environmental effects.

The City of Upland as Lead Agency and decision-maker for the project, has reviewed and considered the information contained in both the Draft and Final EIRs prepared for The Colonies at San Antonio Specific Plan Amendment project and the public record. The San Antonio Specific Plan incorporates design criteria that will guide the build out of the Colonies at the San Antonio project. This planning tool, together with the implementing entitlements establish numerous valuable benefits to the City. The project benefits this City Council finds include the following:

Primary Benefits

The creation of a clearly recognizable, mixed use community that provides a broad range of commercial opportunities, maintains a high quality living environment, and enhances the quality of life for present and future residents of the City of Upland.

Community Design Benefits

- The creation of a project which provides an identifiable "sense of place" within the City by using a central natural open space, trails, and community landscaping to define individual neighborhoods.

- A project that will provide a visually attractive development through consistent application of architectural and landscape standards/guidelines that would encourage commercial activities and a unique residential lifestyle.

- The establishment of a pattern of land uses which would place regional- and freeway-oriented commercial uses north of 19th Street, and which would separate residential land uses from major noise generators, such as the freeway and 19th Street.

- The provision of easy pedestrian connections between residential neighborhoods and neighborhood-level shopping opportunities that serve residents' daily needs (e.g., market, drug store, bank).

- The establishment of a complementary streetscape program to reinforce the Colonies at San Antonio design identity, while supporting the buffering needs of residential uses and the visibility needs of commercial uses.

- The adoption of a palette of compatible residential and commercial architectural design styles which will provide a visually attractive built environment within the Specific Plan area.

- A project that integrates use of design features such as walls, fencing, lighting, signs, and street furniture to enhance overall community image.

- The provision of an identifiable project and neighborhood entries to provide a sense of arrival within the project and to individualize each neighborhood area.

- A first class development project which capitalizes on potential views of the central open space area and of the San Gabriel Mountains.

TABLE OF CONTENTS

Section 1.0: Introduction and Purpose 1-1

1.1 Purpose of the EIR 1-1
1.2 Compliance with CEQA 1-3
1.3 EIR Scoping Process 1-4
1.4 Format of the EIR 1-6
1.5 Responsible and Trustee Agencies 1-8
1.6 Incorporation by Reference 1-9

Section 2.0: Executive Summary 2-1

2.1 Project Summary 2-1
2.2 Environmental Issues/Mitigation Summary 2-2
2.3 Summary of Project Alternatives 2-24

Section 3.0: Project Description 3-1

3.1 Project Location and Setting 3-1
3.2 Background and History 3-5
3.3 Project Characteristics 3-8
3.4 Project Goals and Objectives 3-27
3.5 Phasing 3-31
3.6 Agreements, Permits and Approvals 3-39

Section 4.0: Basis for Cumulative Analysis 4-1

Section 5.0: Description of Environmental Setting, Impacts and Mitigation Measures 5-1

5.1 Land Use and Relevant Planning 5.1-1
5.2 Aesthetics/Light and Glare 5.2-1
5.3 Traffic and Circulation 5.3-1
5.4 Air Quality 5.4-1
5.5 Noise 5.5-1
5.6 Biological Resources 5.6-1
5.7 Geology and Soils 5.7-1
5.8 Hydrology and Drainage 5.8-1
5.9 Public Services and Utilities 5.9-1

Section 6.0: Long-Term Implications of the Proposed Project 6-1

6.1 The Relationship Between Local Short-Term Uses of Man's Environment And the Maintenance and Enhancement of Long-Term Productivity 6-1
6.2 Irreversible Environmental Changes That Would Be Involved In The Proposed Action Should It Be Implemented 6-1
6.3 Growth-Inducing Impacts 6-2

TABLE OF CONTENTS (CONTINUED)

Section 7.0: Alternatives to the Proposed Action 7-1

7.1 Introduction 7-1
7.2 Alternative One 7-4
7.3 Alternative Two 7-6
7.4 Alternative Three 7-9
7.5 Alternative Four 7-12
7.6 Comparative Overview of Alternative's Impacts 7-15

Section 8.0: Inventory of Mitigation Measures 8-1

Section 9.0: Level of Significance After Mitigation 9-1

Section 10.0: Effects Found Not To Be Significant 10-1

Section 11.0: Organizations and Persons Consulted 11-1

Section 12.0: Bibliography 12-1

Section 13.0: Mitigation Monitoring Program 13-1

Section 14.0: Comments and Responses 14-1

Section 15.0: Appendices

15.1 Initial Study/Notice of Preparation
15.2 Traffic Study
15.3 Air Quality Data
15.4 Noise Data
15.5 Biological Assessment
15.6 Geology/Soils Assessment
15.7 Hydrology Data
15.8 Correspondence

LIST OF EXHIBITS

3-1 Regional Location 3-2

3-2 Site Vicinity 3-3

3-3 Existing Land Use Plan 3-9

3-4 Proposed Land Use Plan 3-11

3-5 Planning Areas and Conceptual Phasing 3-17

5.1-1 Existing Land Uses 5.1-3

5.1-2 Existing General Plan Designations and Zoning Districts 5.1-9

5.2-1 On-Site Photographs 5.2-3

5.2-2 Views from Project Site 5.2-7

5.2-3 Landscape Concept Plan 5.2-15

5.2-4 Transect A – View from South 5.2-20

5.2-5 Transect B – View from South 5.2-21

5.3-1 Study Intersections 5.3-3

5.3-2 Existing Average Daily Traffic Volumes 5.3-5

5.3-3 Existing Peak Hour Traffic Volumes 5.3-9

5.3-4 Existing Intersection Configurations 5.3-10

5.3-5 Project Traffic Distribution 5.3-18

5.3-6 Peak Hour Traffic Volumes – Phases 1 and 2 ..... 5.3-19

5.3-7 Peak Hour Traffic Volumes – Total Project 5.3-20

5.3-8 Year 2011 – Peak Hour Traffic Volumes (Without Project) 5.3-24

5.3-9 Year 2011 – Peak Hour Traffic Volumes (With Project) 5.3-27

5.3-10 Year 2015 – Peak Hour Traffic Volumes (Without Project) 5.3-29

5.3-11 Year 2015 – Peak Hour Traffic Volumes (With Project Phases 1, 2 and 3) 5.3-31

5.3-12 Year 2020 – Buildout Peak Hour Traffic Volumes (Without Project) 5.3-34

LIST OF EXHIBITS
(CONTINUED)

5.3-13 Year 2020 – Peak Hour Traffic Volumes (With Total Project) 5.3-37

5.5-1 Commercial Planning Areas 5.5-25

5.6-1 Vegetation Map 5.6-3

5.6-2 Significant Natural Area 5.6-12

5.7-1 Regional Geologic Map 5.7-2

5.7-2 Regional Groundwater Contour Map 5.7-6

5.7-3 Earthquake Fault Zone Map 5.7-7

5.7-4 Fault and Earthquake Epicenter Map 5.7-9

5.8-1 Open Space Concept 5.8-9

5.8-2 Planning Area 16 ..... 5.8-11

5.8-3 Proposed Storm Drain Concept 5.8-15

5.9-1 Sewer Facilities 5.9-19

5.9-2 Water Facilities 5.8-23

LIST OF TABLES

3-1 Backbone Infrastructure Phasing Matrix [Pending] 3-33

4-1 Cumulative Projects List 4-2

5.1-1 San Antonio Lakes Specific Plan Zone Districts 5.1-5

5.1-2 General Plan Consistency Analysis 5.1-23

5.3-1 Existing Conditions – Summary of Freeway Operation 5.3-6

5.3-2 Existing Conditions – Summary of Intersection Operation 5.3-7

5.3-3 Level of Service Criteria for Signalized Intersections 5.3-13

5.3-4 Phase 1 Trip Generation 5.3-14

5.3-5 Phase 2 Trip Generation 5.3-15

5.3-6 Phase 3 and Total Project Trip Generation 5.3-16

5.3-7 Summary of Traffic on CMP Freeway Segments 5.3-17

5.3-8 Comparison of Existing + Future Intersection Operation Without Project 5.3-25

5.3-9 Comparison of Intersection Operation – Year 2011 With and Without Project 5.3-28

5.3-10 Comparison of Intersection Operation Year 2015 – With and Without Project 5.3-32

5.3-11 Comparison of Intersection Operation Year 2020 – With and Without Project 5.3-36

5.3-12 Summary of Freeway Operations 2015 – General Plan Without Project 5.3-39

5.3-13 Summary of Freeway Operations Year 2015 – With Project 5.3-40

5.3-14 Summary of Freeway Operations 2020 – General Plan Without Project 5.3-41

5.3-15 Summary of Freeway Operations Year 2020 – With Project 5.3-42

5.3-16 Summary of Intersection Operations With Improvements 5.3-45

5.4-1 Local Air Quality Levels 5.4-3

5.4-2 Construction Emissions 5.4-12

5.4-3 Long-Term Project Emissions 5.4-15

LIST OF TABLES
(CONTINUED)

5.5-1 Sound Levels and Human Response 5.5-2

5.5-2 California Land Use Compatibility Noise Guidelines 5.5-5

5.5-3 City of Upland Noise Standards 5.5-6

5.5-4 Noise Levels and Duration 5.5-6

5.5-5 Noise Measurements 5.5-7

5.5-6 Existing Traffic Noise Levels 5.5-9

5.5-7 Significance of Changes in Cumulative Noise Exposure 5.5-11

5.5-8 Typical Construction Equipment Noise Levels 5.5-13

5.5-9 Exterior Noise Exposure Adjacent to Nearby Roadways – 2011 ..... 5.5-15

5.5-10 Exterior Noise Exposure Adjacent to Nearby Roadways – 2015 ..... 5.5-19

5.5-11 Exterior Noise Exposure Adjacent to Nearby Roadways – 2020 ..... 5.5-22

5.7-1 Notable Faults Within 100 Kilometers 5.7-10

5.7-2 Historic Strong Earthquakes 5.7-11

5.8-1 Inflow/Outflow Calculations 5.8-8

5.9-1 Fire Protection Facilities 5.9-1

5.9-2 Upland Unified School District Facilities 5.9-3

5.9-3 Recreation Facilities 5.9-5

5.9-4 Existing Wastewater Facilities 5.8-6

5.9-5 Sewage Flow Calculations 5.9-18

5.9-6 Estimated Water Demand 5.9-22

7-1 Comparison of Alternative Environmental Impacts With Proposed Project 7-16

1.0 Introduction and Purpose

1.0 INTRODUCTION AND PURPOSE

1.1 PURPOSE OF THE EIR

The City of Upland is the lead agency under the California Environmental Quality Act (CEQA), and is responsible for preparing the Environmental Impact Report (EIR) for The Colonies at San Antonio Specific Plan Amendment project (State Clearinghouse No. 2001041048). This EIR has been prepared in conformance with CEQA (California Public Resources Code Section 21000 et seq.), California CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.), and the rules, regulations, and procedures for implementation of CEQA, as adopted by the City of Upland. The principal CEQA Guidelines sections governing content of this document are Sections 15120 through 15132 (Content of an EIR), and Section 15168 (Program EIR).

The purpose of this Draft EIR is to review the existing conditions, analyze potential environmental impacts, and identify feasible mitigation measures to reduce potentially significant effects of the proposed approximately 447.8-acre Colonies at San Antonio Specific Plan Amendment project, located in the northeastern portion of the City of Upland (for more detailed information regarding the proposal, refer to Section 3.0, *Project Description*).

This EIR has been prepared as a Program EIR in accordance with Section 15168 of CEQA. Section 15168 states the following:

"(a) General. A Program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:

(1) Geographically,
(2) As logical parts in the chain of contemplated actions,
(3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or
(4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

(b) Advantages. Use of a Program EIR can provide the following advantages. The Program EIR can:

(1) Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action,
(2) Ensure consideration of cumulative impacts that might be slighted in a case-by-case analysis,
(3) Avoid duplicative reconsideration of basic policy considerations,
(4) Allow the Lead Agency to consider broad policy alternatives and program-wide mitigation measures at an early time when the

agency has greater flexibility to deal with basic problems or cumulative impacts, and

(5) Allow reduction in paperwork.

(c) Use with Later Activities. Subsequent activities in the program must be examined in the light of the Program EIR to determine whether an additional environmental document must be prepared.

(1) If a later activity would have effects that were not examined in the Program EIR, a new Initial Study would need to be prepared leading to either an EIR or a Negative Declaration.

(2) If the agency finds that pursuant to Section 15162, no new effects could occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the Program EIR, and no new environmental document would be required.

(3) An agency shall incorporate feasible mitigation measures and alternatives developed in the Program EIR into subsequent actions in the program.

(4) Where the subsequent activities involve site specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operations were covered in the Program EIR.

(5) A Program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible. With a good and detailed analysis of the program, many subsequent activities could be found to be within the scope of the project described in the Program EIR, and no further environmental documents would be required."

The discussion following Section 15168 describes the proper process for Program EIRs as follows:

"Use of the Program EIR also enables the Lead Agency to characterize the overall program as the project being approved at that time. Following this approach when individual activities within the program are proposed, the agency would be required to examine the individual activities within the program to determine whether their effects were fully analyzed in the Program EIR. If the activities would have no effects beyond those analyzed in the Program EIR, the agency could assert that the activities are merely part of the program which had been approved earlier, and no further CEQA compliance would be required. This approach offers many possibilities for agencies to reduce their costs of CEQA compliance and still achieve high levels of environmental protection."

(Discussion following CEQA Guidelines, Section 15168 (emphasis added).

In accordance with Section 15121 of CEQA, a primary purpose of this EIR is to provide decision makers and the public with specific information regarding the environmental effects associated with development of the site, identify ways to minimize the significant effects and describe reasonable alternatives to the project. Mitigation measures are provided which may be adopted as Conditions of Approval in order to reduce the significance of impacts resulting from the project. In addition, this EIR is the primary reference document in the formulation and implementation of a mitigation monitoring program for the proposed project.

The City of Upland, which has the principal responsibility of processing and approving the project, and other public agencies (i.e., responsible and trustee agencies, refer to Section 1.5 of this EIR) that may use this EIR in the decision making or permit process will consider the information in this EIR, along with other information that may be presented during the CEQA process. Environmental impacts are not always mitigable to a level considered less than significant; in those cases, impacts are considered significant unavoidable impacts. In accordance with Section 15093(b) of the State CEQA Guidelines, if a public agency approves a project that has significant impacts that are not substantially mitigated (i.e., significant unavoidable impacts), the agency shall state in writing the specific reasons for approving the project, based on the Final EIR and any other information in the public record for the project. This is termed, per Section 15093 of the State CEQA Guidelines, a "statement of overriding considerations."

This document analyzes the environmental effects of the project to the degree of specificity appropriate to the current proposed actions, as required by Section 15146 of the State CEQA Guidelines. This analysis considers the actions associated with the project, to determine the short-term and long-term effects associated with their implementation. This EIR discusses both the direct and indirect impacts of this project, as well as the cumulative impacts associated with other past, present, and reasonably foreseeable future projects. CEQA requires the preparation of an objective, full disclosure document to inform agency decision makers and the general public of the direct and indirect environmental effects of the proposed action; provide mitigation measures to reduce or eliminate significant adverse effects; and identify and evaluate reasonable alternatives to the proposed project.

1.2 COMPLIANCE WITH CEQA

The Draft EIR is subject to a 45-day review period by responsible and trustee agencies and interested parties. In accordance with the provision of Sections 15085(a) and 15087(a)(1) of the State CEQA Guidelines, as amended, the City of Upland, serving as the Lead Agency: 1) publishes a notice of availability of a Draft EIR in the Daily Bulletin, a newspaper of general circulation; and, 2) will prepare and transmit a Notice of Completion (NOC) to the State Clearinghouse. (Proof of publication is available at the offices of the Lead Agency.) A copy of the NOC is provided at the front of this document.

Any public agency or members of the public desiring to comment on the Draft EIR must submit their comments in writing to the individual identified on the document's NOC prior to the end of the public review period. During the public review period, the Upland Planning Commission will hold a regularly-scheduled public hearing regarding the Draft EIR. The public will be afforded the opportunity to orally

- Flood hazards associated with 100 and 500-year floodplains (Section 5.8, *Hydrology and Drainage*);
- Groundwater recharge affects to Basin No. 6 (Section 5.8, *Hydrology and Drainage*);
- Impacts associated with the proposed commercial uses on the local neighborhoods (Sections 5.2, *Aesthetics/Light and Glare*, 5.3, *Traffic and Circulation*, and 5.5, *Noise*);
- Impacts of project lighting on the neighboring Eastgate community and viewshed impacts for neighboring communities, i.e., heights of proposed structures (Section 5.2, *Aesthetics/Light and Glare*);
- Land Use compatibility (Section 5.1, *Land Use and Relevant Planning*);
- Safety issues with the proposed open space/water features area (Section 5.8, *Hydrology and Drainage*);
- Traffic related impacts associated with the 19th Street realignment and the diversion of traffic, including quarry trucks, onto residential streets, such as Carnelian Avenue, Mountain Avenue, etc. (Section 5.3, *Traffic and Circulation*);
- Traffic related impacts associated with the realignment of Campus Avenue/210 freeway (Section 5.3, *Traffic and Circulation*);
- Traffic related impacts associated with the proposed movie theater and other commercial uses (Section 5.3, *Traffic and Circulation*);
- Traffic impacts to the Eastgate community (Section 5.3, *Traffic and Circulation*);
- Traffic impacts to Euclid Avenue, 21st Street, and the Tanglewood Avenue/ Hummingbird Lane intersection, i.e., four-lane road into two lanes (Section 5.3, *Traffic and Circulation*);
- Water availability and increased water consumption due to the proposed project (Sections 5.8, *Hydrology and Drainage*, and 5.9, *Public Services and Utilities*); and
- Water quality and quantity from the outflow structures at 19th and 20th Streets (Section 5.8, *Hydrology and Drainage*).

1.4 FORMAT OF THE EIR

The Draft EIR is organized into 15 sections. Section 1.0, *Introduction and Purpose*, provides CEQA compliance information. Section 2.0, *Executive Summary*, provides a brief project description and summary of the environmental impacts and mitigation measures. Section 3.0, *Project Description*, provides a detailed project description

indicating project location, background and history, and project characteristics, phasing and objectives, as well as associated discretionary actions required. Section 4.0, *Basis for the Cumulative Analysis*, describes the approach and methodology for the cumulative analysis. Section 5.0, *Description of Environmental Setting, Impacts and Mitigation Measures*, contains a detailed environmental analysis of the existing conditions, project impacts, recommended mitigation measures and unavoidable adverse impacts. The analysis of each environmental category in this Section is organized as follows:

- "Existing Conditions" describes the physical conditions which exist at this time and which may influence or affect the issue under investigation;

- "Significance Criteria" provides the thresholds which are the basis for conclusions of significance. The primary resource for the criteria is Appendix G of CEQA;

- "Project Impacts" describes potential environmental changes to the existing physical conditions which may occur if the proposed project is implemented. Included in this subsection is a summary discussion of the conclusions rendered in the San Antonio Lakes EIR of 1988 and the Supplemental EIR prepared in 1998 for Phase 1, which is currently under construction. This information has been presented in order to provide the reader with an historical context of the previous environmental analysis and conclusions under the original plan and previous amendment;

- "Cumulative Impacts" describes potential environmental changes to the existing physical conditions which may occur with the proposed project together with all other reasonably foreseeable, planned, and approved future project;

- "Mitigation Measures" are those specific measures which may be required of the project in order to avoid a significant adverse impact; minimize a significant adverse impact; rectify a significant adverse impact by restoration; reduce or eliminate a significant adverse impact over time by preservation and maintenance operations; or compensate for the impact by replacing or providing substitute resources or environment. The measures presented in this EIR are separated into those that would be implemented as part of project design and measures that would mitigate project impacts above and beyond any reduction in potential impacts accomplished by project design features; and

- "Level of Significance After Mitigation" discusses whether the project and the project's contribution to cumulative impacts can be reduced to levels that are considered less than significant.

Section 6.0, *Long-Term Implications of the Proposed Project*, discusses significant environmental changes that would be involved in the proposed action, should it be implemented and discusses growth inducing impacts of the proposed project. Section 7.0, *Alternatives to the Proposed Project*, describes a reasonable range of alternatives to the project or to the location of the project which could feasibly attain the basic project objectives. Section 8.0, *Inventory of Mitigation Measures*, lists

mitigation measures proposed to minimize the significant impacts. Section 9.0, *Inventory of Significance After Mitigation*, describes those impacts which remain significant following mitigation. Section 10.0, *Effects Found Not to Be Significant*, provides an explanation of potential impacts which have been determined not to be significant. Section 11.0 *Organizations and Persons Consulted*, identifies all Federal, State or local agencies, other organizations and individuals consulted. Section 12.0, *Bibliography*, identifies reference sources for the EIR. Section 13.0, *Mitigation Monitoring Program*, identifies responsibilities for monitoring mitigation. Section 14.0, *Comments and Responses,* will be included in the Final EIR and will provide comments and responses pertaining to the Draft EIR. Section 15.0, *Appendices*, contains technical documentation for the project.

1.5 RESPONSIBLE AND TRUSTEE AGENCIES

Certain projects or actions undertaken by a Lead Agency require subsequent oversight, approvals, or permits from other public agencies in order to be implemented. Such other agencies are referred to as Responsible Agencies and Trustee Agencies. Pursuant to Sections 15381 and 15386 of the State CEQA Guidelines, as amended, Responsible Agencies and Trustee Agencies are respectively defined as follows:

> *"Responsible Agency"* means a public agency that proposes to carry out or approve a project, for which a Lead Agency is preparing or has prepared an EIR or Negative Declaration. For the purposes of CEQA the term "Responsible Agency" includes all public agencies other than the Lead Agency which have discretionary approval power over the project." *(Section 15381)*
>
> *"Trustee Agency"* means a State agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California. Trustee Agencies include...." *(Section 15386, part)*

Responsible and *Trustee Agencies* and other entities which may use this EIR in their decision-making process or for informational purposes include, but may not be limited to, the following:

- California Air Resources Board
- California Department of Fish and Game
- California Department of Transportation
- California Regional Water Quality Control Board
- City of Upland
- County of San Bernardino Public Works
- San Bernardino County - Environmental Public Works
- County Sanitation of San Bernardino County
- Upland Fire Department
- San Bernardino County Health Department
- Upland Police Department
- Upland Unified School District
- South Coast Air Quality Management Agency
- Southern California Association of Governments

- State Water Resources Control Board
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service

1.6 INCORPORATION BY REFERENCE

Pertinent documents relating to this EIR have been cited in accordance with Section 15148 of the CEQA Guidelines encourages "incorporation by reference" as a means of reducing redundancy and length of environmental reports. The following documents, which are available for public review at the City of Upland, are hereby incorporated by reference into this EIR. Information contained within these documents has been utilized for each section of this EIR. A brief synopsis of the scope and content of these documents is provided below:

- City of Upland General Plan, dates vary for each Element. The City of Upland General Plan is comprised of all seven elements mandated by State law and two permissive elements. The elements are: Land Use (1996); Circulation (1996); Housing (1996); Open Space/Conservation (1982); Noise (1982); Seismic Safety/Safety (1982); and Scenic Highways (1982). Supplements to the Open Space/Conservation Element include Recreation (1985) and Mineral Resources (1982). In addition, a Hazardous Waste Management Plan was prepared in 1990 and incorporated into the Seismic Safety/Safety Element. Each of the elements of the General Plan provide the goals, policies, and plans for the future of Upland.

- San Antonio Lakes Specific Plan/Environmental Impact Report, 1988. The Specific Plan and Environmental Impact Report (EIR) address the environmental impacts of a mixed-use planned community of single and multi-family residential, commercial, recreational, and community uses surrounding a flood control lake at an interchange of State Route (SR-) 30 on 440.5 acres. Significant impacts were identified in the San Antonio Lakes Specific Plan EIR for seismicity safety, slopes, and erosion; hydrology, drainage, water conservation; noise; climate and air quality; traffic and circulation; public services and facilities; biotic resources; and energy. A statement of overriding considerations for these impacts was adopted by the City Council on September 27, 1988, and is referenced in Resolution No. 3907.

- The Colonies At San Antonio Draft Supplemental Environmental Impact Report, 1998. The Supplemental EIR was prepared to identify the potential environmental effects that could result from the development of the amendment of the San Antonio Lakes Specific Plan (The Colonies at San Antonio) and to propose mitigation measures that would offset, minimize or avoid significant environmental impacts. The issue areas addressed in this EIR were public services (schools, fire, police, water and sewer), transportation and circulation, and biological resources. The Supplemental EIR concluded that the same significant impacts as those identified in the San Antonio Lakes Specific Plan EIR (EIR No. 800) would occur for The Colonies at San Antonio Specific Plan. Those significant impacts include: seismicity safety, slopes, and erosion; hydrology, drainage, water

conservation; noise; climate and air quality; traffic and circulation; public services and facilities; biotic resources; and energy. A statement of overriding considerations for these impacts was adopted by the City Council on October 26, 1998 and is referenced in Resolution No. 4979. Along with the Specific Plan Amendment, the City of Upland approved Tentative Tract Maps for 305 single-family dwelling units within Phase 1. These are located in the eastern portion of the Specific Plan area. Construction of improvements and residential units are currently under way.

- Upland Circulation Element Amendment/ Final Environmental Impact Report, 1991. This document is an amendment to the Circulation Element of the City of Upland General Plan. This Amendment addresses approved General Plan land uses in relation to the planned Route 30 Freeway and to ensure the compatibility with Caltrans' current freeway design.

- City of Upland Article IX, Planning and Zoning. Current through May 13, 1996. Article IX provides the provisions for promoting and protecting the public health, safety and welfare of the people of the City of Upland, and to provide for social, physical and economic advantages resulting from comprehensive and orderly planned use of land resources, a planning ordinance establishing objectives and policies of the general plan; a zoning article establishing classifications of zones and regulations within these zones.

2.0 Executive Summary

2.0 EXECUTIVE SUMMARY

2.1 PROJECT SUMMARY

The project site is located in the northeastern portion of the City of Upland, near the Upland-Rancho Cucamonga city boundary. This area is known as the Cucamonga Basin or "Spreading Grounds," which is an alluvial fan configuration, historically utilized to control surface water drainage. The project site is bounded by 20th Street to the north, Tract 12613 planned residential community and Upland Hills Country Club Golf Course to the south, the Cucamonga Creek Channel to the east, and the current alignment of Campus Avenue to the west.

A comprehensive amendment to the existing Colonies at San Antonio Specific Plan is being proposed. The amended Specific Plan and associated environmental document would supersede all previous specific plan and environmental documents for the project site.

The 447.8-acre project area includes multiple planning areas to accommodate single-family and multi-family residential, neighborhood and community-serving commercial and entertainment uses, natural and open space area, drainage and flood control features, and community facilities. At build-out, the project site has been designed to accommodate up to 1,150 new dwelling units of various types on approximately 168 acres. A variety of housing, ranging from single-family detached homes on 4,000 to 6,000 square foot lots to luxury attached residential units, would provide housing options for a broad cross section of residents.

Approximately 115 acres of commercial uses are planned. Highway commercial development would be located north and south of I-210 and provide large-scale retail and entertainment uses. A fire station site and school site (if purchased by the Upland Unified School District) provide for community facilities within the project site. An open space area located near the center of the project would offer a focal point for the project, a passive recreational area with trails and views, and flood control facilities with a natural appearance.

The proposed project consists of the following discretionary actions which are being requested of the City of Upland: a comprehensive amendment to the existing Colonies at San Antonio Specific Plan; an amendment to the City's General Plan Circulation Element to change the 19th Street alignment as an east-west through route; Site Plans for commercial areas south of the State Route 30/210 Freeway; a master tentative tract map to create the individual planning areas within the Colonies at San Antonio Specific Plan area; and tentative tract maps totaling 438 lots.

The proposed amendment would increase the amount of commercial development proposed within the Specific Plan area. The proposed amendment would also update design and development standards throughout the Specific Plan area, and would modify the originally proposed flood control lake to serve as a flood control detention facility which may also serve as a riparian mitigation area and major open space feature at the center of the project.

2.2 ENVIRONMENTAL ISSUES/MITIGATION SUMMARY

The following is a brief summary of the impacts, mitigation measures, and unavoidable significant impacts identified and analyzed in Section 5.0 of this EIR. Refer to the appropriate EIR Section for additional information.

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
5.1	**LAND USE AND RELEVANT PLANNING**		
	City of Upland General Plan		
	5.1-1 *The proposed Project has the potential to conflict with the land use plan, goals and strategies of the City of Upland General Plan. Analysis has concluded that a less than significant impact would occur with approval of a General Plan Circulation Element Amendment modifying the 19th Street alignment.*	5.1-1 No mitigation measures are recommended.	Implementation of the Specific Plan Amendment would not result in any significant and unavoidable land use impacts.
	City of Upland Municipal Code/Zoning Ordinance		
	5.1-2 *The proposed Project could conflict with the land use plan, policies and regulations of the City of Upland Municipal Code/Zoning Ordinance. Analysis has concluded that a less than significant impact would occur with approval of a Specific Plan Amendment.*	5.1-2 No mitigation measures are recommended.	
	Applicable Plans, Policies, and Regulations		
	5.1-3 *The proposed Project may conflict with the policies and regulations of relevant federal and state plans. Analysis has concluded that a less than significant impact would occur in this regard.*	5.1-3 No mitigation measures are recommended. Refer also to Section 5.4, *Air Quality*, Section 5.6, *Biological Resources*, and Section 5.8, *Hydrology and Drainage*.	
	Cumulative Impacts		
	5.1-4 *The proposed Project, combined with other future development, may increase the intensity of land uses in the area. Analysis has concluded that impacts are less than significant and no mitigation is required. Projects are evaluated on a project-by-project basis in accordance with the City of Upland General Plan, Development Code and Zoning requirements.*	5.1-4 No mitigation measures are recommended.	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
5.2	**AESTHETICS/LIGHT AND GLARE**		
	Short-Term Impacts		
	5.2-1 *Grading and construction activities associated with project implementation would temporarily impact the existing visual character of the project site and affect surrounding areas. Impacts would be reduced to a less than significant level with implementation of mitigation measures and compliance with City of Upland standard requirements for construction.*	5.2-1 Construction equipment staging areas shall be located away from existing residential uses and appropriate screening (i.e., temporary fencing with opaque material), shall be utilized to buffer views of construction equipment and material, when feasible. Staging locations shall be identified on project Final Development Plans and Grading Plans and subject to review and approval of the City. Compliance with this measure is subject to periodic field inspections by City staff.	Significant and unavoidable impacts have been identified for viewshed alterations involving existing residents to the north, south and northeast of the project site. If the City of Upland approves the project, the City shall be required to cite their findings in accordance with section 15091 of CEQA and prepare a Statement of Overriding Considerations in accordance with section 15093 of CEQA. No additional significant impacts related to Aesthetics/Light and Glare have been identified following implementation of mitigation measures and/or compliance with applicable standards and policies set forth in the proposed Specific Plan Amendment and requirements set forth by the City of Upland.
	Long-Term Impacts		
	Scenic Resources		
	5.2-2 *Analysis has concluded that the project would not have an adverse effect on scenic resources, including but not limited to trees, rock outcroppings, and historic resources within a state scenic highway. Although Euclid Avenue has been considered for designation as a scenic highway, the project would not impact the Euclid Avenue corridor due to the distance from the site.*	5.2-2 No mitigation measures are recommended.	
	Visual Character and Viewshed		
	5.2-3 *Project implementation would permanently alter the existing visual character and viewshed from surrounding locations. Analysis has concluded that a significant and unavoidable impact to the visual characteristics and viewshed from surrounding locations would occur which cannot be mitigated to a level less than significant.*	5.2-3 No mitigation measures are recommended.	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
	Light and Glare		
	5.2-4 *Development of the proposed Project would create a new source of light/glare which would affect day or nighttime views in the area. Compliance with the Specific Plan Development Regulations and Design Guidelines, and with applicable City codes would reduce potential impacts to less than significant levels.*	5.2-4 No mitigation measures are recommended.	
	Cumulative Impacts		
	5.2-5 *Project development, together with cumulative projects may result in greater aesthetic/light and glare in the Project area. Compliance with applicable City codes can reduce the significance potential impacts.*	5.2-5 No mitigation measures are recommended.	
5.3	**TRAFFIC AND CIRCULATION**		
	Trip Generation, Distribution and Assignment		
	5.3-1 *The proposed project would generate additional average daily trips (ADT) onto the local street network and freeway system beyond existing conditions. Analysis has concluded that with implementation of recommended mitigation measures, impacts are reduced to a less than significant level.*	5.3-1 Prior to the issuance of building permits, the Applicant shall pay fair share project costs for the following off-site intersection improvements. ♦ 16th Street and Mountain Avenue: Add an eastbound right turn lane, northbound left turn lane, and a northbound right turn lane. Modify existing traffic signal. ♦ Baseline Road and Carnelian Avenue: Add an eastbound right turn lane, westbound right turn lane, and a southbound left turn lane. Modify existing traffic signal. ♦ Baseline Road and Archibald Avenue: Add an eastbound through lane and a westbound right turn lane. Modify existing traffic signal. ♦ 19th Street and Sapphire Avenue: Add a westbound through lane. Modify existing traffic signal.	Following implementation of recommended mitigation measures and proposed project improvements, Traffic and Circulation impacts for years 2011, 2015 and 2020 would be reduced to a less than significant level. Due to the infeasibility of establishing a fair share contribution program for improvements to the I-210 between Monte Vista and Milliken, impacts cannot be mitigated to a less than significant level. If the City of Upland approves the project, the City shall be required to cite their findings in accordance with Section 15091 of CEQA and prepare a Statement of Overriding Considerations in accordance with Section 15093 of CEQA.
	Year 2011 Future Traffic Conditions		
	5.3-2 *Traffic generated by project Phases 1 and 2 would contribute to Year 2011 (without project) over capacity conditions at three intersections. This contribution would be considered a*	5.3-2 Refer to Mitigation Measure 5.3-1. No additional mitigation measures are required.	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
	significant impact. Phases 1 and 2 traffic would cause one additional intersection to operate at LOS "E". Impacts would be reduced to a less than significant level with implementation of recommended mitigation measures.		
	Year 2015 Future Traffic Conditions		
5.3-3	*Project generated traffic (Phases 1, 2 and 3) would contribute to Year 2015 (without project) over-capacity conditions at three intersections and cause one additional intersection to operate at an unacceptable LOS. Impacts would be reduced to a less than significant level with implementation of recommended mitigation measures.*	5.3-3 Refer to Mitigation Measure 5.3-1. No additional mitigation measures are required.	
	Year 2020 Buildout Traffic Conditions		
5.3-4	*Project buildout traffic would contribute to Year 2020 (without project) over-capacity conditions at four of six deficient intersections but would not cause additional intersections to operate at a deficient LOS. Impact would be reduced to a less than significant level with implementation of recommended mitigation measures.*	5.3-4 Refer to Mitigation Measure 5.3-1. No additional mitigation measures are required.	
	CMP Freeway Evaluation		
5.3-5	*The proposed project would contribute ADT to the I-10 and I-210 Freeways. The addition of project-generated traffic would result in an incremental contribution to an LOS F condition for the I-210 eastbound freeway lane from Monte Vista to Milliken. There are no feasible mitigation measures for this impact. Consequently, the impact is significant and unavoidable.*	5.3-5 No mitigation measures are recommended or are feasible.	
5.4	**AIR QUALITY**		
	Short-Term Air Quality Impacts		
5.4-1	*Significant short-term air quality impacts would occur during site preparation and project construction. These impacts are considered significant before and after mitigation for ROG, NOx and PM10 emissions from construction equipment exhaust and significant before and after*	5.4-1 In accordance with the City Development Code and SCAQMD Rules, the Project Applicant shall incorporate the following measures during the construction phase of the Project to the satisfaction of the SCAQMD and City Public Works Director. Compliance with this	The following air quality impacts would remain significant and unavoidable following mitigation: ♦ ROG, NOx and PM10 from construction vehicle exhaust and PM10 fugitive

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
	mitigation for PM10 fugitive dust. Impacts would be less than significant for other pollutants. (Mitigation in this instance refers to applicable City Development Code Sections and SCAQMD Rules.)	measure is subject to periodic field inspections by the SCAQMD and City Public Works Director. Grading: Apply non-toxic soil stabilizers according to manufacturer's specifications to all inactive construction areas (previously graded for ten days or more); ♦ Replace ground cover in disturbed areas as quickly as possible; ♦ Enclose, cover, water two times daily or apply non-toxic soil binders in accordance to manufacturer's specifications to exposed piles (i.e., gravel, sand, dirt) with 5% or greater silt content; ♦ Water active sites at least three times daily; ♦ Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph; and ♦ All trucks hauling dirt, sand, soil, or other loose materials shall be covered and shall maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer) in accordance with the requirements of the CVC Section 23114. Paved Roads: ♦ Sweep streets at the end of the day if visible soil material is carried onto adjacent public paved roads; and ♦ Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip.	dust emissions from construction activities; ♦ Project Operations: Phase 2 (ROG, NOx, CO and PM10) and Phase 3 (ROG, NOx and CO) emissions from project operations; ♦ Cumulative development would also result in significant and unavoidable impacts to regional air quality levels of ROG, NOx, CO and PM10. If the City Upland approves the project, the City shall be required to cite their findings in accordance with Section 15091 of CEQA and prepare a Statement of Overriding Considerations in accordance with Section 15093 of CEQA.
	Long-Term Operational Impacts		
5.4-2	*The project would result in an overall increase in the local and regional pollutant load due to direct impacts from vehicle emissions and indirect impacts from electricity and natural*	5.4-2 No mitigation measures are recommended.	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
	gas consumption. Combined mobile and area source emissions for Phase 2 would exceed SCAQMD thresholds for ROG, NOx, CO and PM10 and Phase 3 would exceed SCAQMD thresholds for ROG, NOx, and CO. These exceedances are considered significant and cannot be mitigated to a less than significant level.		
	Consistency with Air Quality Management Plan		
	5.4-3 *The project may conflict with the Air Quality Management Plan (AQMP). Analysis has concluded that the proposed project is consistent with the AQMP criteria.*	5.4-3 No mitigation measures are recommended.	
	Cumulative Impacts		
	5.4-4 *Impacts to regional air quality resulting from development of cumulative projects would significantly impact existing air quality levels. Impacts would be significant and unavoidable for ROG, CO, NOx and PM10 emissions.*	5.4-4 SCAQMD Standards and City Municipal Code requirements would be implemented on a project-by-project basis.	
5.5	**NOISE**		
	Short-Term Construction Noise and Vibration Impacts		
	5.5-1 *Grading and construction within the Specific Plan area would result in temporary noise and/or vibration impacts to nearby noise sensitive receptors. Analysis has concluded that construction noise and vibration impacts would be less than significant following compliance with the City Municipal Code requirements.*	5.5-1 No mitigation measures are recommended.	No unavoidable significant impacts related to noise have been identified following implementation of recommended mitigation measures and compliance with applicable City codes and ordinances, and standards specified in the Specific Plan Amendment.
	Long-Term Noise Impacts		
	5.5-2 *Implementation of the Specific Plan Amendment would generate additional vehicular travel on the surrounding roadway network, thereby resulting in noise level increases. Analysis has concluded that long-term noise impacts would be significant for roadway segments along 19th Street and Campus Avenue under the Year 2015 and 2020 traffic scenarios. Compliance with the recommended mitigation*	5.5-2 Residential units located south of 19th Street, within Planning Areas 4 and 5, shall be located or architecturally designed such that the noise levels do not exceed the City of Upland Noise Ordinance (Section 5400.500 and Section 5400.800) requirements for residential uses. Design features could include setbacks, berms, landscaping, and architectural features as stated in the Development Regulations (Section 7.0) and Design Guidelines (Section	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
	measures would reduce impacts to a less than significant level.	8.0) of the Colonies at San Antonio Specific Plan Amendment.	
	Stationary Noise Impacts		
5.5-3	*Implementation of the Specific Plan Amendment would result in the generation of on-site noise associated with commercial activities that include loading/unloading activities, mechanical equipment, P.A. systems and activities occurring in parking lots. Analysis has concluded that stationary source impacts would be reduced to less than significant levels with adherence to the City of Upland Municipal Code requirements relating to noise level standards and recommended mitigation measures.*	5.5-3a Prior to Final Development Plan approval for Commercial Planning Areas of the Specific Plan area, subsequent noise studies shall be prepared, to the satisfaction of the Community Development Director, which demonstrates the site placement of stationary noise sources would not exceed criteria established in the City of Upland Noise Ordinance Code. The analysis shall verify that loading dock facilities, rooftop equipment, trash compactors and other stationary noise sources are adequately shielded and/or located at an adequate distance from residential areas in order to comply with the City's noise standards. 5.5-3b Outdoor PA systems shall not be permitted to operate in Planning Area 19, within 300 feet of the easterly property line, between the hours of 10:00 p.m. and 7:00 a.m. and shall not exceed the City's Noise Ordinance standards. Adherence with this measure is subject to periodic site inspections by the City of Upland. 5.5-3c Directional speakers shall be shielded and/or oriented away from off-site residences to the satisfaction of the Community Development Director.	
	Cumulative Impacts		
5.5-4	*Implementation of the Specific Plan Amendment, combined with cumulative projects, would increase the ambient noise levels in the site vicinity. Impact analysis and mitigation of impacts are determined on a project-by-project basis.*	5.5-4 No mitigation measures are recommended.	
5.6	**BIOLOGICAL RESOURCES**		
	Sensitive Biological Resources		
5.6-1	*The proposed project is not expected to impact threatened or endangered species since none were detected on-site during previous focused surveys. Should future focused surveys determine presence, mitigation*	5.6-1 In the event focused surveys indicate that threatened or endangered wildlife species are present on the Project site, the following measures shall be implemented prior to Grading Permit issuance and to the	No significant impacts to Biological Resources have been identified following implementation of mitigation measures referenced in this Section.

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
	measures would be required to offset impacts to a level less than significant.	satisfaction of the City of Upland and applicable reviewing/permitting agencies: ♦ Vegetation removal shall be restricted to a time period outside of the breeding season; and ♦ Habitat of similar type and quality shall be acquired at a 1:1 replacement ratio; or ♦ Habitat shall be purchased through a mitigation bank (i.e., Team Arundo) at a 1:1 replacement ratio.	
	Riparian Habitat		
5.6-2	*The proposed Project could impact riparian habitat present on the Project site. Compliance with the California Department of Fish and Game's 1603 Streambed Alteration Agreement process would reduce impacts to a less than significant level.*	5.6-2 The Project Applicant shall obtain approval of a Section 1603 Streambed Alteration Agreement pursuant to the requirements of the California Department of Fish and Game. The Agreement shall provide a Mitigation Plan which specifies terms, conditions, criteria and monitoring requirements.	
	Sensitive Habitat Community		
5.6-3	*The proposed Project would impact sensitive alluvial fan sage scrub community present on the Project site. Compliance with recommended mitigation would reduce impacts to a less than significant level.*	5.6-3 Prior to Grading Permit issuance and to the satisfaction of the City of Upland and applicable reviewing/permitting agencies, the loss of 20 acres of Riversidean alluvial fan sage scrub and alluvial fan chaparral shall be mitigated by replacing habitat on and off-site at a 1:1 replacement ratio. Land shall be acquired at an off-site location to provide for the preservation of 20 acres of alluvial chaparral or alluvial fan sage scrub. The land to be acquired shall be located along the southern slope of the San Gabriel Mountains either on the alluvial fan or within the foothills. Acquisition may consist of land purchase, establishment of an easement, or other appropriate vehicle that shall ensure the preservation of habitat values. The land shall be in a location that will facilitate the long-term preservation and management of the on-site habitat; for instance, the land shall be adjacent to National Forest lands, adjacent to an existing natural preserve, or adjacent to lands otherwise designated for preservation	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
		of biological values. A management entity shall be identified to receive the easement, title, or other appropriate control of the property. The management entity shall determine costs associated with management of the site and an endowment shall be established to fund the management of the site in perpetuity. As an alternative to habitat acquisition, mitigation for impacts to 20 acres of alluvial fan sage scrub and alluvial chaparral shall be achieved by acquisition of 20 acres in a mitigation bank that would provide for the preservation and management of alluvial fan sage scrub and/or alluvial chaparral.	
	Wildlife Movement		
5.6-4	*Analysis has concluded that project implementation would not interfere with the movement of a native resident or migratory wildlife species. Impacts are less than significant.*	5.6-4 No mitigation measures are recommended.	
	Habitat Conservation Plan/Significant Natural Areas Program		
5.6-5	*Analysis has concluded that Project implementation would not conflict with the provisions of the San Bernardino Habitat Conservation Plan but would result in a potentially significant impact to the Significant Natural Areas Program. Implementation of recommended mitigation would reduce impacts to a less than significant level.*	5.6-5 Refer to Mitigation Measure No. 5.6-3. No additional mitigation measures are recommended.	
	Cumulative Impacts		
5.6-6	*Cumulative development in the Project area could impact the area's biological resources. Analysis has concluded that Project implementation would result in potentially significant cumulative impacts to Riversidean Sage Scrub. Implementation of recommended mitigation would reduce impacts to a les than significant level.*	5.6-6 Refer to Mitigation Measure 5.6-3. No additional mitigation measures are required.	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
5.7	**GEOLOGY AND SOILS**		
	Seismicity		
	Rupture of a Known Earthquake Fault		
	5.7-1 *Development of the proposed Project would not expose people/structures to effects associated with rupture of a known earthquake fault. Analysis has concluded, based on the available data, that a less than significant impact would occur in this regard. Project compliance with the City Municipal Code, the Uniform Building Code, and recommended mitigation, would confirm that impacts are less than significant.*	5.7-1 Geologic mapping shall be performed during grading to verify the findings of the Ryland and Mills studies (i.e., to confirm features attributable to the Red Hill fault are not present on the Project site).	No significant impacts related to Geology and Soils have been identified following implementation of mitigation measures and/or compliance with applicable standards, policies and/or City of Upland Municipal Code.
	Ground Shaking		
	5.7-2 *Development of the proposed Project would increase the number of people/structures exposed to potential effects associated with seismically induced ground shaking. Implementation of the recommended mitigation and compliance with the City Municipal Code and the Uniform Building Code would reduce this potential impact to a less than significant level.*	5.7-2a Prior to Grading Permit issuance, additional design-level geotechnical studies shall be performed to provide the adequate level of information to properly design and engineer the Project. The Applicant shall submit a Geotechnical Report for review and approval by the City's Geotechnical Consultant which further analyzes on-site soil conditions and includes appropriate measures to control erosion and dust. 5.7-2b Engineering design for all structures shall be based on the probability that the Project area will be subjected to strong ground motion during the lifetime of development. Construction plans shall be subject to the City of Upland Municipal Code and shall include applicable standards, which address seismic design parameters. 5.7-2c For each specific Planning Area of development, mitigation of earthquake ground shaking shall be incorporated into design and construction in accordance with Uniform Building Code requirements and site specific design. The Cucamonga fault shall be considered the seismic source for the Project site and specified design parameters shall be used. 5.7-2d The potential damaging effects of regional earthquake activity shall be considered in the design of each	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
		structure. The preliminary seismic evaluation shall be based on basic data including the Uniform Building Code Seismic Parameters and the RMA Report's exhibits and tables. Structural design criteria shall be determined in consideration of building types, occupancy category, seismic importance factors and possibly other factors. A determination of seismic factors for each individual Planning Area of development shall be conducted. The Cucamonga fault shall be considered the seismic source for the Project site and specified design parameters shall be used.	
		5.7-2e Geologic and geotechnical studies shall be submitted to the City of Upland for development of each planning area in order to verify the findings, conclusions and recommendations of the RMA Group Report, and to develop specific design parameters. Studies shall be reviewed for approval of Plans prior to issuance of Building Permits.	
	Other Seismic Hazards	Liquefaction	
	5.7-3 *Analysis has concluded that based on the available data, a less than significant impact would occur in association with other seismic hazards. Project compliance with the recommended mitigation, City Municipal Code, and the Uniform Building Code would confirm that potential impacts at less than significant levels.*	5.7-3a Prior to Grading Permit issuance, geotechnical investigations for Planning Areas shall confirm that conditions favorable to liquefaction are not present on-site. The results of the studies shall be reviewed by the City's Geotechnical Engineer. A Grading Permit shall not be issued until the City deems conditions and/or remedial actions acceptable to reduce the significance of potential impacts from liquefaction..	
		5.7-3b Backdrains/weep holes shall be provided for retaining walls. Backdrains may be required for slopes descending into Quarry No. 1, as referenced in the RMA's Report Group February, 2002, which would continue to be used as infiltration basins for surface runoff. Further evaluation shall be conducted during geotechnical studies for each Planning Area to determine the need for backdrains.	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
		Seismically Induced Settlement and Lurching	
		5.7-3c Loose surficial soils and non-engineered fill on the Project site shall be removed and recompacted during future grading.	
		Seismically Induced Landslides	
		5.7-3d To ensure stability, created slopes shall be inclined no steeper than 2:1 (horizontal to vertical) and shall be keyed, benched and compacted to the satisfaction of the City Engineer. Specific slope stability calculations, analysis and design of slopes shall be conducted during future geotechnical studies for each Planning Area.	
		5.7-3e The existing steep pit walls shall be sloped to provide a stable earth mass where failure may cause damage to persons or property.	
Soils			
Erosion			
5.7-4	*Development of the proposed Project could result in substantial soil erosion. Project compliance with the City Municipal Code, the Uniform Building Code, and the recommended mitigation measures would reduce impacts to a less than significant level.*	5.7-4a Project grading shall comply with the following requirements: ♦ All grading shall occur in conformance with City engineering guidelines and shall, whenever possible, be balanced on-site. ♦ Prior to any development within Planning Areas of the Specific Plan, an overall conceptual grading plan for the portion in process shall be submitted to the Engineering Department of the City of Upland for approval. The grading plan for each such area shall be used as a guideline for subsequent detailed grading plans for individual stages of development within that area, and shall include techniques utilized to prevent erosion and sedimentation during and after the grading process; approximate time frames for grading; and preliminary pad and roadway elevations. ♦ Prior to initial grading activities, a soils report and geotechnical study shall be completed that further analyzes on-site soil conditions	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
		and includes appropriate measures to be implemented to control erosion and dust. ♦ Where cut and fill slopes are created higher than 10 feet in vertical height and exceeding a 5:1 slope, slope erosion control plans shall be submitted to the City of Upland Community Development Department. ♦ The overall shape, height and grade of any cut and fill slope shall be developed in concert with the existing natural contours and scale of the natural terrain of a particular site. The graded form shall reflect the natural, rounded terrain, where possible. All cut and fill slopes shall be constructed at inclinations of no steeper than 2:1. Exceptions for steeper slopes can be included, if supported by technical analysis and approved by the City Engineer. The grading plan shall reflect a contouring and landscaping program intended to control erosion. ♦ The toes and tops of all slopes higher than 10 feet in vertical height (except freeway slopes) shall be rounded with curves with radii designed in proportion to the total height of the slope, where drainage and stability permit such rounding. ♦ Potential brow ditches, terrace drains or other minor swales determined necessary at future stages of project review shall be lined with natural erosion control materials or concrete. ♦ The applicant shall be responsible for maintenance and upkeep of all planting and irrigation systems until those operations become the responsibility of other parties. ♦ MWD guidelines are to be followed for grading within the existing 200-foot-wide MWD right-of-way extending northeast-southwest across the Project site.	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
		5.7-4b Non-engineered fill shall be over-excavated to competent natural ground or approved engineered fill. Over-excavation shall encompass cobble and boulder stockpiles, any non-engineered fill in the soil stockpile area created during the Phase I grading, miscellaneous fill, quarry bottom fill, quarry side slope fill, and berm and levee fill.	
		5.7-4c Loose surficial natural soils shall be over-excavated to competent alluvium. The quantity of over-excavation shall be determined based upon the performance of additional geotechnical study and when grading plans are being finalized. Excavated soils may be utilized for engineered fill provided they are free of deleterious organic matter and deleterious man-made materials.	
		5.7-4d Prior to Grading Permit issuance, the Project Applicant shall prepare a Soil Erosion and Sedimentation Plan for submittal and approval by the City Engineer.	
		Also, refer to Section 5.4, *Air Quality*, and Section 5.8, *Hydrology and Drainage*.	
	Unstable Geologic Units and Expansive Soils		
5.7-5	*Development of the proposed Project may increase the number of people/structures exposed to significant effects associated with geologic units that are unstable and/or located on expansive soils. Project compliance with the City Municipal Code, the Uniform Building Code, and the recommended mitigation would reduce potential impacts to a less than significant levels.*	5.7-5 Further evaluation of the soil properties of the fine-grained fill soils placed in Quarry No. 4 (as referenced in the RMA Group's February 2002 Report) and other areas of the site shall be conducted during future geotechnical studies for each Planning Area and during rough grading of the site.	
	Mineral Resources		
5.7-6	*Development of the proposed Project may result in the loss of availability of a known mineral resource. Analysis has concluded that a less than significant impact would occur in this regard.*	5.7-6 No mitigation measures are recommended.	
	Cumulative Impacts		
5.7-7	*The proposed Project, combined with future development, could result in*	5.7-7 No mitigation measures are recommended.	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
	increased short-term impacts such as erosion and increased sedimentation, as well as long-term seismic and mineral resource impacts within the area. Mitigation is to be incorporated on a project-by-project basis to reduce impacts to a less than significant level in areas deemed suitable for development.		
5.8	**HYDROLOGY AND DRAINAGE**		
	Water Quality – Construction		
5.8-1	*Grading, excavation and construction activities associated with the proposed project may impact water quality due to sheet erosion of exposed soils and subsequent deposition of particles and pollutants in drainage areas. Impacts would be reduced to a less than significant level with incorporation of NPDES and SWPPP requirements.*	5.8-1a Prior to issuance of any grading permit, a General Construction Activity Storm Water Permit shall be obtained from the State Water Resources Control Board. Such permits are required for specific (or a series of related) construction activities which exceed five acres in size and include provisions to eliminate or reduce off-site discharges through implementation of a Storm Water Pollution Prevention Plan (SWPPP). Specific SWPPP provisions include requirements for erosion and sediment control, as well as monitoring requirements both during and after construction. Pollution-control measures also require the use of best available technology, best conventional pollutant control technology, and/or best management practices to prevent or reduce pollutant discharge (pursuant to definitions and direction).	No significant impacts related to hydrology, drainage, water quality or groundwater resources have been identified following implementation of mitigation measures and/or compliance with applicable policies and standards.
		5.8-1b Prior to issuance of any building permit, specified vehicle fueling and maintenance procedures and hazardous materials storage areas shall be designated to preclude the discharge of hazardous materials used during construction (e.g., fuels, lubricants and solvents). Such designations shall include specific measures to preclude spills or contain hazardous materials, including proper handling and disposal techniques and use of temporary impervious liners to prevent soil and water contamination.	
		5.8-1c Concurrent with grading permit application submittal, the Applicant shall submit a Storm Water Pollution Prevention Plan (SWPPP), subject to	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
		approval by the Regional Water Quality Control Board, which would include the following BMPs: ♦ Development of temporary stream crossings to minimize potential increases in sediment transport and wetlands impacts. ♦ Construction road utilizing aggregate over geotextile fabric stabilization to minimize erosion. ♦ Utilization of sand bags, straw bales and silt fences to divert and slow storm water run-off. ♦ Utilization of temporary earth dikes, drains and swales as a form of spill protection and storm water run-off control. ♦ Development of a maintenance plan for grading equipment. ♦ Development of a Spill Prevention and Control Plan for construction-related substances. ♦ Development of a Use and Disposal Plan for hazardous materials.	
	Project Development Storm Flows/ Percolation		
5.8-2	*Development of the proposed project could interfere with groundwater recharge, such that there would be a substantial reduction in aquifer capacity, or a substantial lowering of the local groundwater table (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses. Impacts would be reduced to a less than significant level with the adoption of the Open Space Design Concept, and implementation of recommended mitigation measures.*	5.8-2a Prior to issuance of grading permits, a Detention Basin Study shall be prepared and submitted to the City of Upland for review and approval to confirm adequacy of the proposed detention system. The Detention Basin Study should account for optimal percolation rates in accordance with established standards for storm water treatment. 5.8-2b A finalized and approved Vegetation System Plan which accounts for optimal percolation rates in accordance with established standards for storm water treatment shall be approved by the City and applicable agencies prior to issuance of grading permits.	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
		5.8-2c A Basin Maintenance Agreement is required between the Project Applicant and all other applicable agencies for operation and maintenance of the basin system and drainage facilities. The Agreement shall confirm ownership and operation of facilities.	
	Flooding Impacts		
5.8-3	*The proposed project could result in flood control deficiencies to on- and off-site infrastructure facilities. Impacts would be reduced to a less than significant level with implementation of recommended mitigation measures.*	5.8-3a Drainage systems within or crossing 19th, 20th, the new Campus Avenue and along the southern boundary of the site shall be sized to collect and convey 100-year storm flows.	
		5.8-3b Due to the preliminary nature of in-tract storm drain facilities, individual tract maps shall be further reviewed by the City of Upland, based upon final grading plans to confirm design, sizing and facilities to meet required standards.	
		5.8-3c Tracts north of Basin A shall be designed to dewater in-tract sump areas for 100-year storm surface flows.	
		5.8-3d Existing easements held by the ~~County of~~ San Bernardino County Flood Control District for on-site flood control shall be reviewed in consideration of ownership and maintenance agreements that are to be established.	
		5.8-3e Prior to Grading Permit issuance, the Final Hydrology and Hydraulic Study shall be approved by the County of San Bernardino.	
	Storm Water Quality – Project Buildout		
5.8-4	*Development of the proposed project may result in a long-term impacts to the quality of storm water and urban runoff, subsequently impacting water quality. Impacts would be reduced to less than significant levels with incorporation of recommended mitigation measures and State, County, and City Standards and Code requirements.*	5.8-4a The project applicant shall prepare a Storm Water Pollution Prevention Plan (SWPPP), subject to approval by the Regional Water Quality Control Board, which shall cite water quality control measures for the project. The approved SWPPP shall be submitted concurrent with grading permit application to the City Engineer. The SWPPP may include the following components: ♦ Description of significant potential sources of pollutants in storm water discharges. ♦ A listing of all chemicals which	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
		may contact storm water and estimates of concentrations. ♦ An estimate of the area of impervious surfaces. ♦ Source controls. ♦ Isolation/separation of hazardous from non-hazardous pollutant sources. ♦ Treatment/conveyance structures and their impacts on groundwater quality. ♦ Design criteria for the structures/ conveyances. ♦ Maintenance schedules. ♦ Erosion control measures. ♦ An estimate of pollutant reduction levels expected from implementing the controls. ♦ Establishment of internal record keeping and internal reporting procedures. ♦ Eliminate illicit discharges of storm water to storm water system. ♦ Develop and implement a storm water monitoring, sampling, testing, and reporting program. ♦ Develop a special management plan for loading dock areas and vehicle refueling and maintenance areas. ♦ Installation and maintenance of oil/water separators for all parking lot areas.	
		5.8-4b Non-structural BMPs shall be incorporated into the project, to the satisfaction of the Regional Water Quality Control Board. The applicable BMPs include: ♦ Plant materials that require fertilization and pest control shall be maintained in accordance with San Bernardino County Management Guidelines for Use of Fertilizers and Pesticides. ♦ BMP structures and facilities shall be cleaned and maintained on a scheduled basis by a City-appointed person. ♦ All hazardous wastes shall be handled in accordance with Title 22 of the California Code of Regulations and relevant sections of the California Health and Safety Code regarding hazardous waste management.	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
		5.8-4c Routine structural BMPs shall be incorporated into the proposed project design to facilitate future water quality measures, to the satisfaction of the City Engineer, prior to issuance of grading permits.	
	Non-Point Source Pollutants – Project Buildout		
	5.8-5 *Development of the proposed project may result in long-term increases in non-point source pollutant levels. Impacts would be reduced to less than significant levels with incorporation of recommended mitigation measures and State, County and City Standards and Code Requirements.*	5.8-5 Refer to Mitigation Measures 5.8-4a, 5.8-4b and 5.8-4c. No additional mitigation measures are recommended.	
	Cumulative Impacts		
	5.8-6 *The proposed project along with cumulative projects may result in increased drainage and water quality impacts. Impacts are evaluated and mitigated to a less than significant level on a project-by-project basis.*	5.8-6 No mitigation measures are recommended.	
5.9	**PUBLIC SERVICES AND UTILITIES**		
	Fire Protection		
	5.9-1 *Potential fire service impacts resulting from the proposed Project are considered less than significant following implementation of the recommended mitigation and compliance with all applicable requirements, codes and ordinances.*	5.9-1 Prior to recordation of a subdivision map for residential development or issuance of a building permit for commercial development, an irrevocable offer of dedication for the proposed fire station site within the Specific Plan area (Planning Area 14) shall be granted to the City.	No unavoidable significant impacts related to public services and utilities have been identified following implementation of recommended mitigation measures and compliance with applicable City, service or utility provider requirements, City Codes and Ordinances, and standards specified in the Specific Plan Amendment.
	Police Protection		
	5.9-2 *Project implementation could result in significant physical impacts with respect to police protection. Analysis has concluded that potential impacts would be reduced to a less than significant level with implementation of recommended mitigation.*	5.9-2a To reduce the demand for short-term police services to the site during project construction, building materials storage shall be consolidated to the extent practical, and shall be fenced. Where appropriate, construction contractors shall provide an on-site security person.	
		5.9-2b As part of the development of Planning Areas 17, 18 and 19, the Developer shall provide up to 1,500	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
		square feet of space within a retail building for the City, at no cost to the City of Upland, to establish a satellite police facility within one of these Planning Areas, as approved by the Upland Police Chief.	
	Schools		
5.9-3	*Project implementation could result in significant physical impacts to existing school facilities. Potential impacts to school facilities are considered less than significant following compliance with all applicable requirements, codes, ordinances and recommended mitigation.*	5.9-3 Prior to the issuance of certificate of occupancy, Project Applicant shall submit evidence to the City of Upland that legally required school impact mitigation fees have been paid per the mitigation established with the Upland Unified School District.	
	Roadway Maintenance		
5.9-4	*The increased usage of area roadways could result in increased maintenance requirements. Potential impacts are concluded as less than significant level with implementation of the required mitigation.*	5.9-4 No mitigation measures are recommended.	
	Libraries		
5.9-5	*Project implementation may increase the demand on library services. Analysis has concluded that potential impacts would be reduced to a less than significant level with implementation of recommended mitigation.*	5.9-5 Prior to the issuance of building permits, the Project Applicant shall pay any legally required library impact mitigation fees established by the City of Upland.	
	Recreation		
5.9-6	*Project implementation may increase the use of existing neighborhood and regional parks and other recreational facilities thereby creating the potential for physical deterioration of each facility. Analysis has concluded that since no new parks are proposed with the Amendment, a significant impact may occur. Implementation of recommended mitigation would reduce impacts to a less than significant level.*	5.9-6 The Applicant shall submit a park impact fee payment to the City of Upland in the amount of $1.5 million dollars to permit the City to construct improvements to existing City parks.	
	Wastewater		
5.9-7	*Project implementation would generate additional wastewater beyond current conditions, which could require the incremental expansion of the existing sewerage system and expansion of the water*	5.9-7a Prior to issuance of building permits, the Project Applicant shall provide the on-site and off-site sewer improvements required to support development of the portion of the Colonies at San Antonio Specific	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
	treatment facility. With mitigation, impacts to wastewater systems and facilities would be considered as less than significant.	Plan for which building permits are being requested. Such improvements shall be provided to the satisfaction of the Upland Public Works Director, and may include replacement of existing sewer lines rather than construction of parallel lines.	
		5.9-7b Prior to issuance of building permits, the Project Applicant shall provide evidence that the Inland Empire Utilities District has sufficient transmission and treatment plant capacity to accept sewage flows from the buildings for which building permits are being requested.	
Water			
5.9-8	*Project implementation would increase the demand for water beyond current conditions requiring the construction of new water facilities and the expansion of existing facilities. Analysis has concluded implementation of recommended mitigation measures would reduce impacts to a less than significant level.*	5.9-8a Prior to issuance of building permits, the Project Applicant shall provide the on-site and off-site water system improvements required to support development of the portion of the Colonies at San Antonio Specific Plan for which building permits are being requested. Such improvements shall be provided to the satisfaction of the Upland Public Works Director.	
		5.9-8b To mitigate the facilities deficiencies in Zone III, the Applicant shall construct a 0.75 MG reservoir for system operational storage and utilize the jointly owned 5 MG San Antonio Water Company-City reservoir for emergency and fire flow storage together with construction of a sodium hypo-chlorite disinfection system and a 16" transmission pipeline connecting the system to the project. In addition, the 5 MG reservoir is located beyond the Zone III pressure zone, requiring construction of a pressure reducing system to permit use in Zone III. Prior to issuance of building permits, fees shall be submitted to the City of Upland, which includes a water production impact fee of $1.3 million. Fee requirements are based upon square footage for commercial and office development, and per dwelling unit for residential development.	
		5.9-8c Developer shall determine if off-site transmission and pumping improvements are required for the	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
		project. Such improvements shall be constructed by the Applicant to satisfaction of the Upland Public Works Director.	
	Solid Waste		
5.9-9	*Development of the Project area would result in increased solid waste generation. Project compliance with the City's AB 939 waste reduction requirements would reduce the amount of solid waste which is ultimately disposed of at the Olinda Alpha landfill and maintain potential impacts at a less than significant level.*	5.9-9 No mitigation measures are recommended.	
	Natural Gas		
5.9-10	*Project implementation would result in an increase in the demand for natural gas service beyond existing conditions and would require expansion of the existing gas system. Analysis has concluded that a less than significant impact would occur in this regard.*	5.9-10 No mitigation measures are recommended.	
	Electricity		
5.9-11	*Project implementation would result in an increase in the demand for electrical service beyond existing conditions and would require expansion of the existing electrical system. Analysis has concluded that impacts would be less than significant.*	5.9-11 No mitigation measures are recommended.	
	Cumulative Impacts		
5.9-12	*Cumulative development could result in an increase in the demand for public services and an increase in the consumption rates for public utilities, potentially requiring expansions of the existing utility systems. Analysis has concluded that cumulative development is subject to standards and requirements of reviewing agencies and no additional mitigation is required.*	5.9-12 No mitigation measures are recommended.	

2.3 SUMMARY OF PROJECT ALTERNATIVES

In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15126.6, Section 7.0 describes a range of reasonable alternatives to the proposed project which could feasibly attain the basic objectives of the proposed project, while evaluating the comparative merits of each alternative. The analysis focuses on alternatives capable of eliminating significant adverse environmental effects or reducing them to less than significant levels, even if these alternatives would impede, to some degree, the attainment of the project objectives. Potential environmental impacts are compared to impacts from the proposed project. The following is a description of each of the alternatives evaluated in Section 7.0.

ALTERNATIVE ONE

Alternative One proposes the completion of 305 dwelling units on approximately 70 acres under Phase One, with no additional development on the remainder of the project site. Alternative One serves as the "No Project" Alternative in accordance with CEQA Section 15126.6(e). Alternative One was a part of the approved Amendment of 1998 and is currently under construction.

ALTERNATIVE TWO

Alternative Two involves development of the project site based primarily upon the existing entitlements. This Alternative proposes the development of 305 dwelling units in Phase One and buildout of the balance of the 1998 Colonies at San Antonio Specific Plan. Alternative Two would result in the development of 1,464 dwelling units; 530,000 square feet of commercial uses; and 52,000 square feet of business park uses. The acreage by land use for Alternative Two is detailed below:

- 239.3 acres of Residential Uses;
- 48.9 acres of Commercial Uses;
- 3.0 acres of Business Park Uses;
- 16.8 acre School/Park Site;
- 2.4 acre Fire Station Site;
- 40.0 acre Lake and Greenbelt Area;
- 6.1 acre Flood Control Corridor;
- 5.4 acre Drainage Basin; and
- 78.6 acres of Freeways and Roads.

ALTERNATIVE THREE

Alternative Three involves the development of 520,000 square feet of commercial uses on 50 acres and a maximum of 1,110 dwelling units, which includes the 305 dwelling units currently under construction part of Phase One. Two hundred (200) of the 1,100 dwelling units would be multi-family dwelling units. In addition, the school would be constructed.

ALTERNATIVE FOUR

Alternative Four proposes the development of 1.2 million square feet of commercial uses on 102 acres and a maximum of 850 dwelling units, which includes the 305 dwelling units currently under construction as part of Phase One. One hundred ten (110) of the 1,100 dwelling units would be multi-family dwelling units, and the remaining 750 dwelling units would be single-family units. In addition, the school would be constructed.

3.0 Project Description

3.0 PROJECT DESCRIPTION

3.1 PROJECT LOCATION AND SETTING

3.1.1 PROJECT LOCATION

The City of Upland is located in the western portion of San Bernardino County, north of Ontario and Montclair, between the cities of Claremont and Rancho Cucamonga (refer to Exhibit 3-1, *Regional Location*).

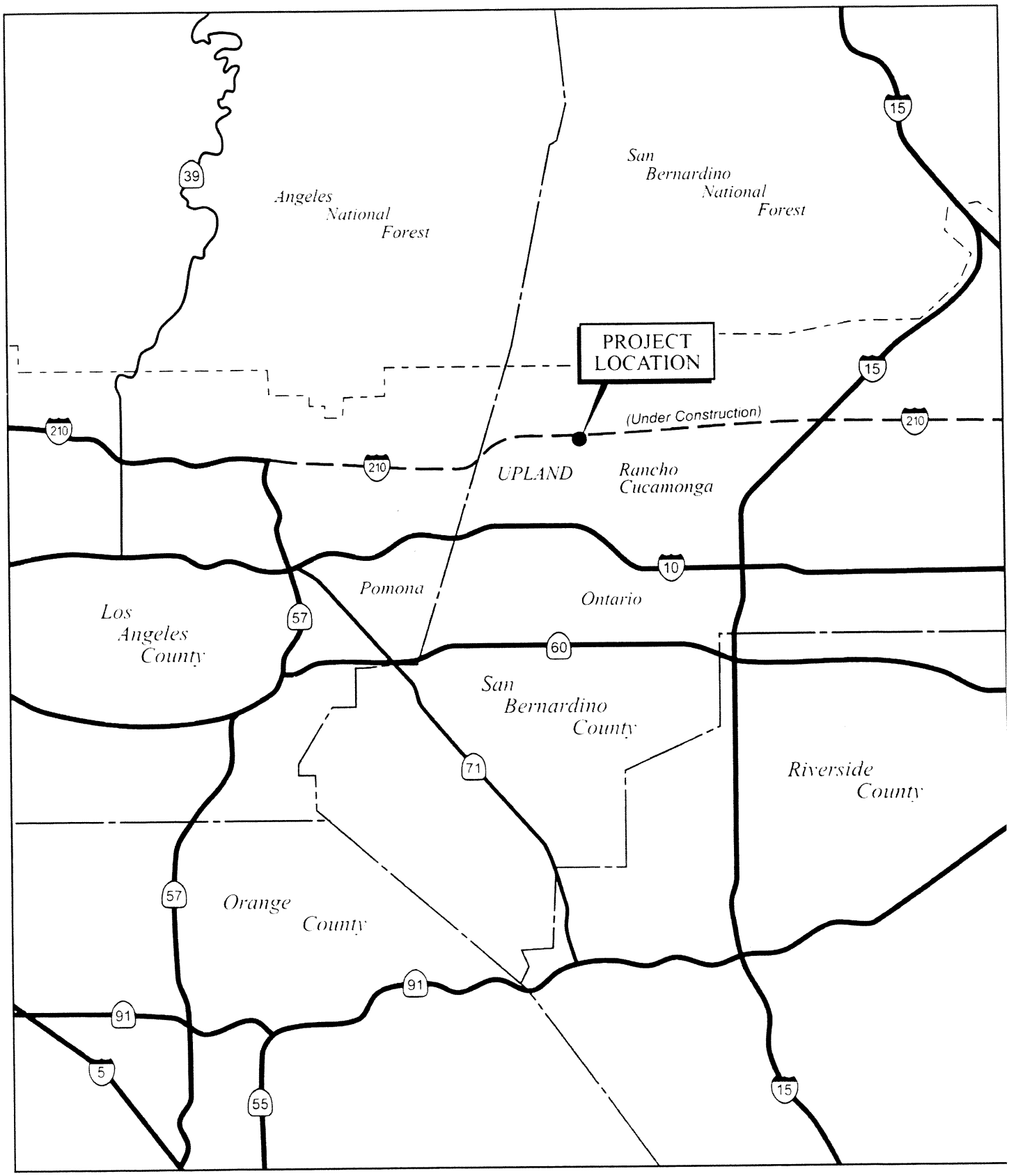
The 447.8-acre project site is located in the northeastern portion of the City of Upland, near the Upland-Rancho Cucamonga city boundary (refer to Exhibit 3-2, *Site Vicinity*). This area is known as the Cucamonga Basin or "Spreading Grounds," which is an alluvial fan configuration, historically utilized to control surface water drainage. The project site is bounded by 20th Street to the north, Tract 12613 planned residential community and Upland Hills Country Club Golf Course to the south, the Cucamonga Creek Channel to the east, and the current alignment of Campus Avenue to the west. The project site is bisected by 19th Street and the I-210 freeway, which extends in an east-west direction through the northern portion of the project site.

3.1.2 OVERVIEW OF EXISTING CONDITIONS

On-site conditions north of 19th Street include undisturbed areas covered with native grass and dense brush. Man-made features for this portion of the project area include the following:

- 19th Street, a heavily traveled collector roadway through Upland and Rancho Cucamonga, extends east to west through the central portion of the site.
- Interstate 210 (I-210) freeway, which is under construction.
- The Cucamonga Creek concrete channel along the eastern margin.
- The Holliday Rock Company sand and gravel operation, industrial asphalt facility, and truck-loading area at Campus Avenue and the 20th Street extension, as shown on the City's General Plan.
- The 200-foot-wide Metropolitan Water District (MWD) right-of-way trending northeast-southwest through the central portion of the property. A 10-foot diameter pipe is buried underground within this right-of-way.
- Dirt roadways and trails associated primarily with the MWD right-of-way.

South of 19th Street, the project area is largely altered due to sand and gravel mining activities. On-site vegetation consists of native grasses and dense brush. Although mining has been discontinued, the land surface remains irregular, and there are several depressions varying in size, some of which are filled with water.



Not to Scale

CITY OF UPLAN
THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMEN

Regional Locatio

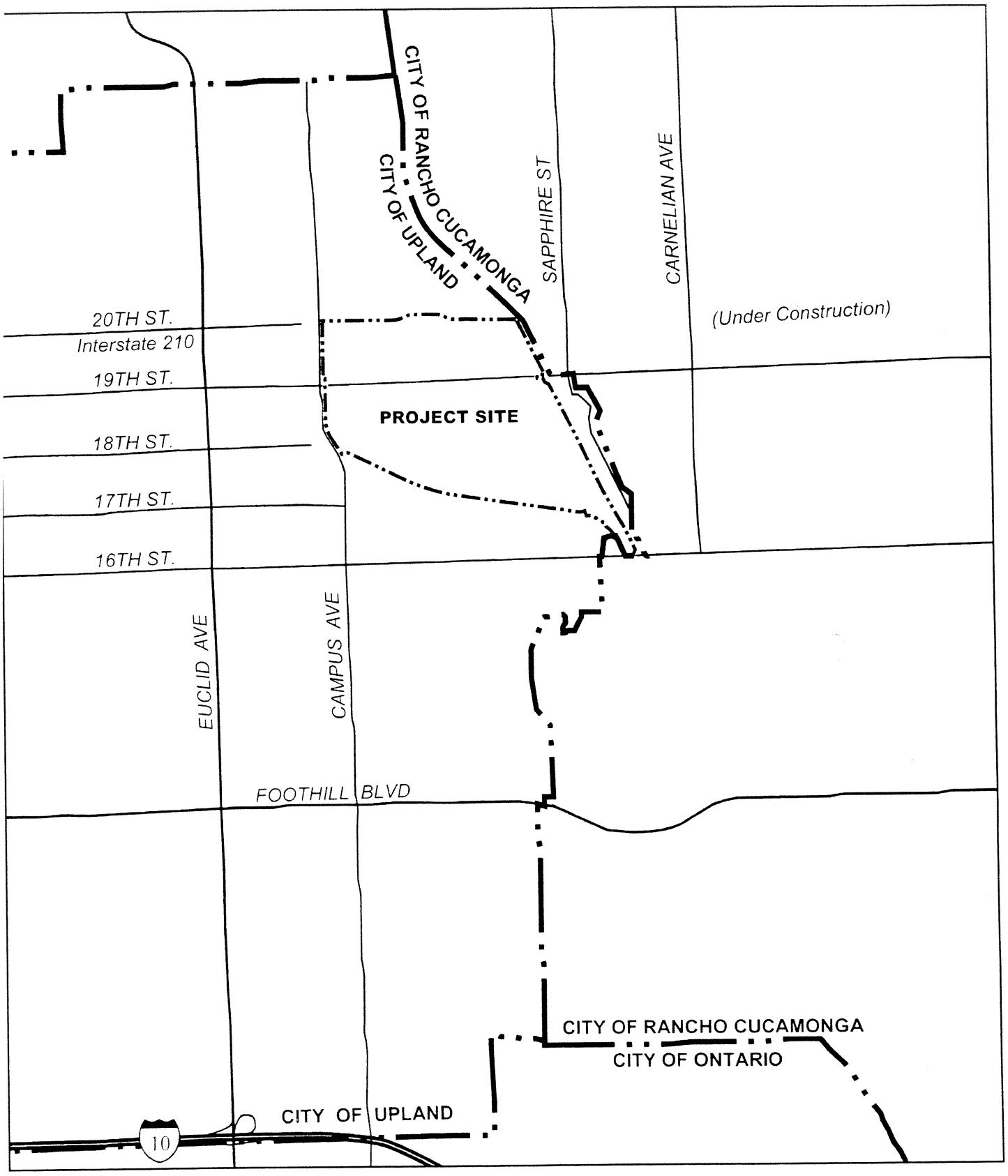
RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

06/02

JN 10-101248

Exhibit 3



Not to Scale

CITY OF UPLAND
THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Site Vicinity

RBF CONSULTING
PLANNING ■ DESIGN ■ CONSTRUCTION

06/02

JN 10-101248

Exhibit 3-2

A large basin is located in the south-central portion of the property. A dense growth of bushes and small trees is present in the bottom of this basin area.

Man-made features within the southern portion of the project area include the following:

- An extensive, abandoned sand and gravel mining operation characterizes the site. Much of the area west of the Cucamonga Creek Channel has been excavated 40 to 60 feet below the original ground surface, necessitating remedial grading to create stable slopes. In addition, mining debris and derelict equipment further hinder the use of the site.

- San Bernardino County Flood Control District flood control facilities. Some existing excavations in the southern part of the site may be from flood control activities rather than mining. Surface waters from west of the site are diverted into the existing sand and gravel pit by way of an improved channel that lies under Campus Avenue. The main area of ponding water is at the western end of the abandoned mining pit. A gunited rock fill levee is located about 300 feet west of the Cucamonga Creek Channel, at the eastern end of the pit. The levee base appears above the top of the channel.

- The recently constructed outlet of the City of Upland's 20th Street storm drain.

Additional flood control features south of 19th Street include an elevated east-west road located south of the existing pit. Service walkways extend from the roadway. Another significant flood control feature is the east-west levee along the southern margin of the site. A roadway extends on top of the levee and a concrete box culvert-type outlet is located halfway across. From this point south, the culvert lies underground and connects with an open air, improved trapezoidal channel at the edge of the Upland Hills Country Club Golf Course.

Isolated piles of artificial fill are widely scattered. The largest are clean sand and gravel stockpiles. A concrete dump area is located approximately 600 feet northwest of the levee outlet.

In addition, the easterly portion of the site, consisting of Planning Areas 1, 2, 3 and 16C, is currently under construction for 305 residential units in accordance with the 1998 Specific Plan Amendment.

3.1.3 EXISTING SURROUNDING LAND USES

Existing and planned residential uses are located to the east, west, and south of the project site. Cucamonga Creek borders the east side and separates the project site from single-family residences in the Cities of Upland and Rancho Cucamonga. North of the site is 20th Street and Holliday Rock Company's sand and gravel extraction operation. South of the project site is Tract No. 12613, an established planned community of 160 medium density (7 to 12 du/ac) dwelling units and the Upland Hills Country Club Golf Course. The western boundary of the project site is formed by Campus Avenue. West of Campus Avenue is the Southern California Edison north/south transmission line. West of the transmission line are low density single-family residences and two City reservoirs between 19th and 20th streets. Other uses

in the area include the Great Western Rose Warehouse, groves and sheds, the extension of MWD's right-of-way, and an area of vacant land.

3.1.4 EXISTING GENERAL PLAN AND ZONING DESIGNATIONS

GENERAL PLAN

With the exception of the I-210 right-of-way that is designated Freeway Open Space, the project site is designated Residential/Commercial-SP. The Upland General Plan designation north of the project site is Open Space. The area immediately west of Campus Avenue is the Edison Easement for an electrical transmission facility. To the south of the project site is a designation of Single-Family Residential (7-10 du/ac) and Multi-Family Residential (7-12 du/ac condominium). East of the Cucamonga Creek Channel within the City of Upland boundaries is a designation of Single-Family Residential (4-6 du/ac). The area east of the Cucamonga Creek Channel, within Rancho Cucamonga, is designated Low Density Residential (2-4 du/ac).

ZONING

With the exception of the I-210 right-of-way, the project site is currently designated "Specific Plan" on the City's Zoning Map. North of 20th Street, the project site is bordered by land zoned "OS" (Open Space). The area east of the Cucamonga Creek Channel within the City of Upland is zoned "RS-7.5" (Residential, Single-Family, 7,500 square foot minimum lot area). The residential area east of the Cucamonga Creek Channel, within the City of Rancho Cucamonga is zoned Low Density Residential (2-4 dwelling units per acre). Immediately west of Campus Avenue are electrical transmission facilities on land zoned "OS" (Open Space). Land immediately south of the project site is zoned "(RM-4.4)S" (Residential, Multiple-Family, 4,400 square foot minimum lot per dwelling) and "(RM-3.6)S" (Residential Multiple-Family, 3,600 square foot minimum lot area per unit). These two areas have a further designation of "Supplemental Use District."

3.2 BACKGROUND AND HISTORY

3.2.1 1988 SPECIFIC PLAN AND ENVIRONMENTAL IMPACT REPORT

The Colonies at San Antonio Specific Plan was originally adopted in September and October 1988 as the "San Antonio Lakes" Specific Plan, along with a Final Environmental Impact Report (EIR) that was certified by the City of Upland. These actions included an amendment to the City's General Plan and a Zone Change, granting specific development rights for an undeveloped 440.5-acre parcel of land located in the northeastern corner of the City of Upland. The Specific Plan included a mixed-use planned community of single and multi-family residential, commercial, recreational, and community uses surrounding a flood control lake at an interchange of the proposed I-210, which is currently under construction. A key feature of this original project was a 23.5-acre lake surrounded by 16.5 acres of "private greenbelt." Residential and commercial development was intended to be implemented in six phases over an eight-year period.

As previously mentioned, an EIR was prepared for the San Antonio Lakes Specific Plan. The EIR evaluated potential impacts associated with the following issues:

- Land Use;
- Topography, Geology, Soils, and Seismicity;
- Hydrology, Drainage and Water Conservation;
- Noise;
- Air Quality;
- Water Quality;
- Wildlife and Vegetation;
- Mineral Resources;
- Energy Resources;
- Scenic Highways
- Cultural Resources;
- Circulation;
- Water and Sewer
- Utilities/Services
- Fire and Police Protection;
- Schools;
- Parks and Recreation;
- Solid Waste;
- Health and Library Services;
- Airports; and
- Disaster Preparedness.

The EIR concluded that significant, unavoidable adverse impacts would result with the proposed San Antonio Lakes Specific Plan regarding the following issue areas:

- Seismicity, Safety, Slopes and Erosion;
- Hydrology, Drainage and Water Conservation;
- Noise;
- Climate and Air Quality;
- Traffic and Circulation;
- Public Services and Facilities;
- Biotic Resources; and
- Energy.

The City Council certified Final EIR No. 800 on September 27, 1988 with Resolution No. 3907. Exhibit A of Resolution No. 3907 included the Statement of Overriding Considerations for the significant and unavoidable impacts associated with the San Antonio Lakes Specific Plan. On that same day, the City Council approved the General Plan Amendment (GPA-96-04) for the project with Resolution No. 3908. In October 1988, the City Council adopted the zone change (ZC-86-05) for the project and the Specific Plan (SPR-7).

3.2.2 1998 SPECIFIC PLAN AND SUPPLEMENTAL EIR

Soon after adoption of the 1988 Specific Plan, the regional development market and the general economy was depressed, and the project was abandoned. Nine years

later, there was renewed interest in developing the site. However, to realistically proceed with site development required certain modifications to the original Specific Plan.

Therefore, the new owner of the property requested an amendment to the adopted Specific Plan to reflect current economic realities. Exhibit 3-3, *Existing Land Use Plan*, provides a breakdown by planning areas and intended land uses. The City of Upland approved the Specific Plan amendment in October 1998, and certified a Supplemental EIR. In general, the Specific Plan amendment accomplished the following:

- Changed the name of the project from "San Antonio Lakes" to "Colonies at San Antonio."
- Modified the Specific Plan's phasing to reverse the order of Phases 1 and 2. As a result, the development of the Specific Plan would begin along its eastern boundary and proceed westerly. The Specific Plan Amendment also modified the infrastructure development plan to correspond to the proposed modification of land development phasing.
- Reduced the minimum lot size in Planning Area 1 from 7,500 square feet to 6,000, 5,000, and 4,500 square feet.
- Changed the zoning of Planning Area 1 from Single-family Residential SFR-7.5 (7,500 sq. ft. lots) to SFR-4.5 (4,500 sq. ft. lots), SFR-5 (5,000 sq. ft. lots), and SFR-6 (6,000 sq. ft. lots).
- Realigned roadways to discourage through traffic on 19th Street through the project.
- Modified the configuration of planning areas along Tanglewood Avenue and Colonies Parkway, reflecting the roadway realignments.
- Revised certain development standards in the zoning regulations portion of the Specific Plan.

Along with the Specific Plan Amendment, the City of Upland approved tentative tract maps for 305 single-family dwelling units within Phase 1 in the eastern portion of the Specific Plan area, which is currently under construction.

Based on the proposed Amendments to the Specific Plan, the City determined that preparation of a Supplemental EIR was warranted and that additional review of the following environmental resource areas would be required:

- Schools;
- Fire;
- Police;
- Water;
- Sewer;

- Traffic; and
- Biological Resources.

The Supplemental EIR concluded that of the issue areas identified in Final EIR No. 800 as significant unavoidable adverse impacts, implementation of The Colonies at San Antonio Specific Plan would result in similar impacts, with the exception of Traffic and Circulation.[1] With respect to Traffic and Circulation, the Supplemental EIR concluded that with implementation of the recommended intersection improvements, significant traffic impacts would be reduced to less than significant levels.[2]

The significant, unavoidable impacts include:

- Seismicity, Safety, Slopes and Erosion;
- Hydrology, Drainage and Water Conservation;
- Noise;
- Climate and Air Quality;
- Traffic and Circulation;
- Public Services and Facilities;
- Biotic Resources; and
- Energy.

The City Council certified The Colonies at San Antonio Specific Plan Supplemental EIR (EIR No. 1222), and adopted The Colonies at San Antonio Specific Plan Amendment in October 1998. A Statement of Overriding Considerations was included in the City Council's certification of the Supplemental EIR. In September 1998, the Planning Commission approved Tentative Tract 14983 with Resolution No. 3982, which allowed a Master Tentative Tract Map to create four lots intended for future residential, and flood control facility and to establish a circulation system in accordance with the Colonies at San Antonio Specific Plan (SPR-7). ~~In December 1998, the City Council certified the EIR for Tentative Tract 14983 with Resolution No. 4186.~~

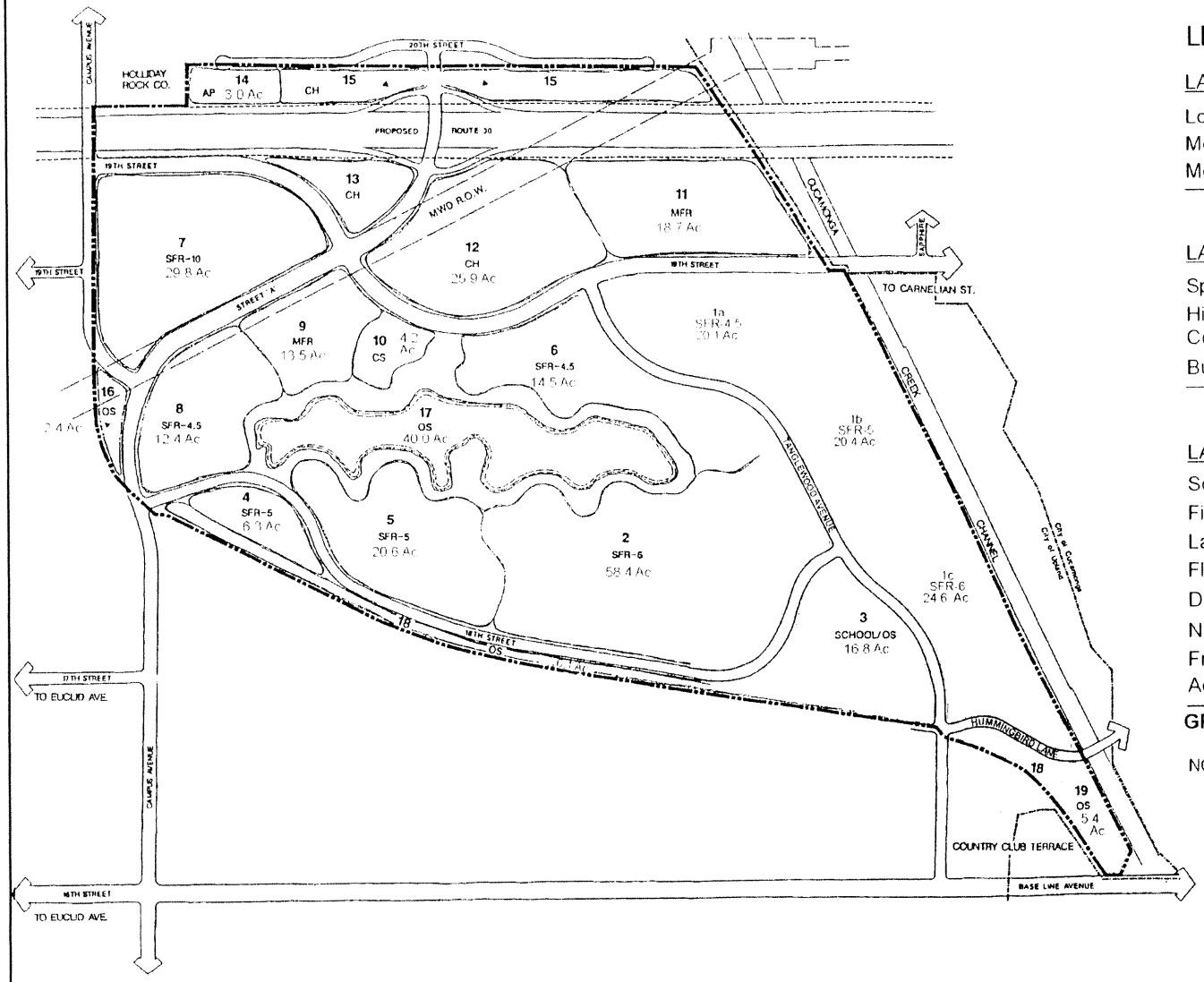
3.3 PROJECT CHARACTERISTICS

A comprehensive amendment to the existing Colonies at San Antonio Specific Plan is being proposed. The amended Specific Plan and associated environmental document will supersede all previous specific plan and environmental documents for the project site.

The 447.8-acre project area includes multiple planning areas to accommodate single-family and multi-family residential, neighborhood and community-serving commercial and entertainment uses, natural and open space area, drainage and flood control features, and community facilities. At build-out, the project site has been designed to accommodate up to 1,150 new dwelling units of various types on approximately 168 acres. A variety of housing, ranging from single-family detached

[1] The Colonies at San Antonio Draft Supplemental EIR, prepared by LSA Associates, Inc., August 5, 1998, Page 7-1.

[2] Ibid.



LEGEND

LAND USE:	ACREAGE:	UNITS:
Low Density	180.1	751
Medium-Low Density	27.0	162
Medium Density	32.2	566
TOTAL:	**239.3**	**1,479**

LAND USE:	ACREAGE:	SQ. FT.:
Specialty Commercial	4.2	45,521
Highway-Community Commercial	44.7	484,479
Business Park	3.0	52,000
TOTAL:	**51.9**	**582,000**

LAND USE:	ACREAGE:
School/Park	16.8
Fire Station	2.4
Lake/Greenbelt	40.0
Flood Control Corridor	6.1
Drainage Basin	5.4
Non-Residential Subtotal	122.6
Freeway	35.2
Access Roads	43.4
GRAND TOTAL:	**440.5**

NOTES:

FOR THE PURPOSE OF THE SAN ANTONIO LAKES SPECIFIC PLAN THE "AP" AND "BP" DESIGNATIONS ARE INTERCHANGEABLE AND SYNONYMOUS FOR THE AP/BP ZONE THE PROVISIONS, COVENANTS AND RESTRICTIONS OF SEC. 9628 ART. IX OF THE UPLAND MUNICIPAL CODE SHALL APPLY.

Source: LSA Associates, Inc.

Not to Scale

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

06/02 JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Existing Land Use Plan

Exhibit 3-3

homes on 4,000 to 6,000 square foot lots to luxury attached residential units, would provide housing options for a broad cross section of residents. Refer to Exhibit 3-4, *Proposed Land Use Plan*, for a complete breakdown of proposed uses.

Approximately 115 acres of commercial uses are planned. Highway commercial development would be located north and south of I-210 and provide large-scale retail and entertainment uses. Neighborhood commercial uses would serve nearby residential uses.

A fire station site and school site (if purchased by the Upland Unified School District) provide for community facilities within the project site. An open space area located near the center of the project offers a focal point for the project, a passive recreational area with trails and views, and flood control facilities with a natural appearance.

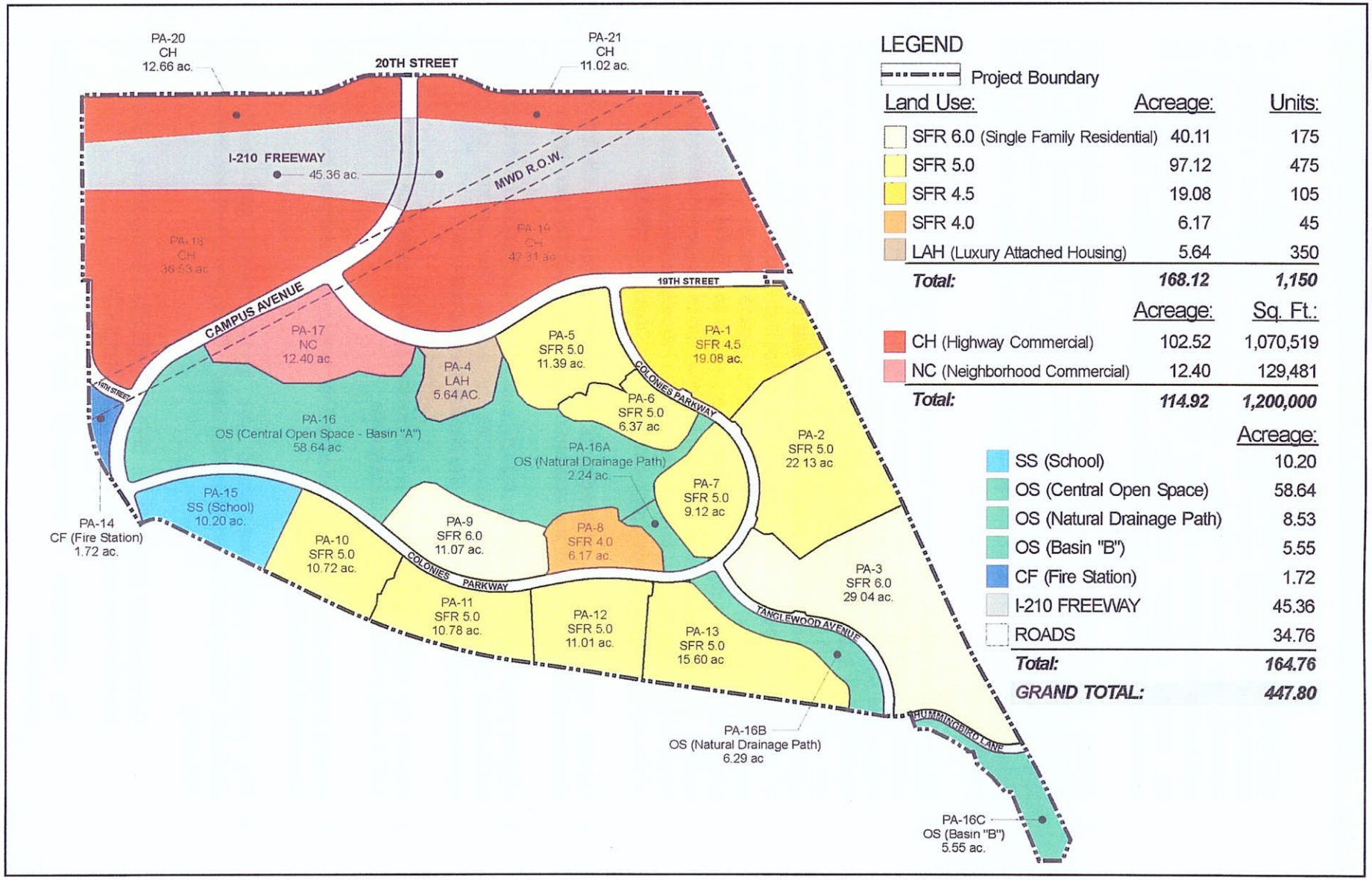
3.3.1 SPECIFIC PLAN AMENDMENT

A comprehensive amendment to the approved Colonies at San Antonio Specific Plan is being proposed by the property owner. The proposed amendment would increase the amount of commercial development proposed within the Specific Plan area. The proposed amendment would also update design and development standards throughout the Specific Plan area, and would modify the originally proposed flood control lake to serve as a flood control detention facility which may also serve as a riparian mitigation area and major open space feature at the center of the project. The proposed project consists of the following discretionary actions which are being requested of the City of Upland:

- A comprehensive amendment to the existing Colonies at San Antonio Specific Plan.
- An amendment to the City's General Plan Circulation Element to change the 19th Street alignment as an east-west through route.
- Site Plans for commercial areas south of the State Route 30/210 Freeway.
- A master tentative tract map to create the individual planning areas within the Colonies at San Antonio Specific Plan area.
- Tentative tract maps totaling 438 lots.

The proposed amendment is intended to accomplish the following:

- Increase the amount of commercial development proposed within the Specific Plan area. The proposed Specific Plan amendment would devote the freeway frontage portion of the Specific Plan area to commercial uses such as retail, in line shops, restaurants and fast food outlets, office uses, a theater complex, and automobile sales dealerships. A total of 114.92 acres would be devoted to commercial uses. Currently the Specific Plan proposes 48.9 acres of commercial development and 3.0 acres of business park use, which would be



Source: LSA Associates, Inc.

Not to Scale

Exhibit 3-4

RBF CONSULTING
PLANNING ■ DESIGN ■ CONSTRUCTION

06/02 JN 10-101248

CITY OF UPLAND
THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Proposed Land Use Plan

deleted as part of the proposed amendment in favor of commercial uses. A maximum of 1,200,000 square feet of commercial development is proposed. Currently, the Specific Plan does not specify maximum square footage of commercial and business park uses; however, it is estimated that build out of the existing approved Specific Plan would yield 530,000 square feet of commercial development and 52,000 square feet of business park use.

- Reduce the residential development yield. Currently, the Colonies at San Antonio Specific Plan permits development of up to 1,479 dwelling units, up to 728 could be attached products. The amended Specific Plan would permit a maximum of 1,150 dwelling units, up to 350 of which could be luxury attached dwelling units.

- Modify the originally proposed flood control lake to serve as a 60-acre flood control detention facility which would serve as a riparian mitigation area and major open space feature at the center of the project. At the time of the original Specific Plan approval, the abandoned sand and gravel pits within the project site were barren of vegetation. Over the years subsequent to Specific Plan approval, stormwater flowing onto the project site resulted in the establishment of riparian and open water areas. The proposed Specific Plan amendment proposes modifying the purpose of the open space area at the center of the project from a flood control and recreational lake to a flood control detention facility. The open space area will also be designed to accommodate stormwater flows which currently run through the site, and thereby ensure that the capacity of the adjacent Cucamonga Creek channel would not be exceeded.

- Update implementation provisions of the Specific Plan in relation to the development and timing of the riparian mitigation and central open space area.

- Update provisions for ensuring ongoing maintenance of project open space and landscaped area, including provisions to ensure the success of riparian restoration and mitigation within the central open space area.

- Modify the statistical summary for the overall specific plan area from 440.5 to 447.8 aces, reflecting updated survey data.

- Modify project objectives to better reflect the concepts underlying the proposed Colonies at San Antonio project.

- The proposed amendment would also update design and development standards throughout the Specific Plan area. These modifications include the following:

    - Development standards for SFR-4 residential development, decreasing the minimum lot size in certain planning areas.

    - The description of commercial uses and commercial development standards.

- An update of design guidelines text and graphics, including separating commercial and residential guidelines from each other. Thus, the updated Specific Plan provides separate sections for single-family residential, multiple family residential and commercial land uses[3].

- An update of landscape plans to describe the modified open space area and riparian mitigation, as well as to describe proposed edge conditions along the open space area; clarify entry designs and locations.

- A revised discussion of roadways based on an updated traffic study. A focus of this revision is to ensure adequate access for the proposed expansion of commercial uses, and to minimize through traffic on Colonies Parkway.

- A revised trails plan, consistent with the central open space area and proposed riparian mitigation.

- Revisions to the drainage plan, reflecting modifications to the previous lake concept.

- Updated water and sewer plans.

- Updated grading program, including a description of how grading will be used to recreate/maintain riparian areas.

- Modifications to the infrastructure phasing program to ensure that adequate infrastructure is available to support development of individual portions of the specific Plan area.

- Updated discussion of infrastructure financing and project maintenance funding.

- Additional zones and zoning regulations to reflect proposed residential and commercial development, since not all residential and commercial development types are reflected in the existing Specific Plan zoning ordinance.

- Modifications to parking standards to ensure adequate parking for all proposed uses, while minimizing the amount of land which needs to be paved over for parking.

- Addition of development and environmental performance standards to minimize the potential environmental effects of specific plan buildout.

- Identification of a development review and entitlement processes for subsequent development of individual planning areas within the Specific Plan area.

[3] Currently, the guidelines are organized to discuss facades, roofs, and other features for all uses.

3.3.2 SUMMARY OF DEVELOPMENT TYPES

Development types within the proposed project are summarized below. A detailed description of each of the individual Planning Areas, including the acreage, location, uses, and access, follows this discussion.

RESIDENTIAL

The project proposes a mix of single-family residential neighborhoods and attached housing products, encompassing up to 1,150 residential dwelling units. Included in the planned housing mix are the following.

- Single-Family Residential (Minimum Lot Size of 6,000 Square Feet): This residential type is planned to occupy 40.11 acres. Up to 175 units would be developed.

- Single-Family Residential (Minimum Lot Size of 5,000 Square Feet): This residential type is planned to be developed on a total of 97.12 acres, located within eight Planning Areas (nine Planning Areas if Planning Area 15 is developed as single-family residential instead of as a school site). Up to 475 dwelling units are envisioned.

- Single-Family Residential (Minimum Lot Size of 4,500 Square Feet): Up to 105 units of this housing type are planned on 19.08 acres.

- Single-family Residential (Minimum Lot Size of 4,000 Square Feet): It is planned that up to 45 dwelling units of this type would be developed on 6.17 acres.

- Luxury Attached Housing: It is planned that up to 350 luxury attached multi-story residential units would be developed on 5.64 acres.

COMMERCIAL

Neighborhood, community, and regional commercial uses would be located adjacent to the I-210 freeway. The following commercial land uses are proposed.

- Highway Commercial: Approximately 102.52 acres of highway-related commercial uses are planned, focusing on the I-210/Campus Avenue interchange. This location provides high visibility and convenient access to and from I-210 and internal roadways. Development of highway commercial uses has been planned to provide commercial and entertainment opportunities for project residents and regional consumers, and to act as a buffer between I-210 and residential uses located south of 19th Street.

- Neighborhood Commercial Development: Over 12 acres of neighborhood commercial uses are envisioned to provide retail, service, and convenience uses within a neighborhood center designed to meet the daily needs of the immediate community. Pedestrian links between the neighborhood commercial center and adjacent residential areas would facilitate access to neighborhood-serving uses.

OPEN SPACE

In order to provide local and regional flood control, as well as to provide recreational amenities to project residents, the core of the project site area would be devoted to open space use. This area would provide a focal point for the residential areas bordering the open space, and an aesthetic amenity for the entire project site. Within this area, acreage would be devoted to restored riparian habitats and passive open space and trails. The open space area would also be designed to handle local and regional storm water flows through the site, and thereby ensure that the capacity of the adjacent Cucamonga Creek Channel would not be exceeded.

SCHOOL

A school site is located adjacent to a single-family residential neighborhood and across Colonies Parkway from the central open space area. The site is being offered for sale to the Upland Unified School District by the Applicant. Should the District choose not to purchase the site, it would be developed with single-family dwelling units with a minimum lot size of 5,000 square feet (SFR 5.0). If residential development ultimately occurs within Planning Area 15, development density may be transferred from other planning areas such that the 1,150 dwelling unit maximum for the project site area is not exceeded.

FIRE STATION

A public fire station site is proposed on the west edge of the project site. The fire station, if built, and emergency equipment would be managed and maintained by the City of Upland Fire Department.

ROADWAYS

Approximately 80.12 acres of roadways are included within the project site. This figure includes 34.76 acres of backbone surface roadways (19th Street, Colonies Parkway, Campus Avenue, and Tanglewood Avenue), in addition to local roadways within individual residential Planning Areas and 45.36 acres within the right-of-way for I-210. The roadway network would be compatible with the existing City roadway network, and would provide an appropriate level of access to the project site from adjacent land uses in the Cities of Upland and Rancho Cucamonga, while providing project residents with safe, efficient, and convenient access to internal land uses.

3.3.3 LAND USE AND DEVELOPMENT PLAN

To facilitate the discussion and analysis of pertinent issues, the project site has been partitioned into 21 separate Planning Areas, based on land use and/or location within the project site. Exhibit 3-5, *Planning Areas and Conceptual Phasing*, illustrates the location and configuration of the Planning Areas within the project site.

Each Planning Area has been designed to facilitate vehicular access from primary roadways, provide pedestrian access where appropriate, and ensure compatibility between adjacent uses through orientation and design. The following is a description of each of the Planning Areas within the project site.

PLANNING AREA 1

Planning Area 1 (19.08 acres) is located along the eastern boundary of the project site, bordered by 19th Street to the north, the regional trail along Cucamonga Creek Channel to the east, Planning Area 2 to the south, and Colonies Parkway to the west. This Planning Area features detached single-family residences with minimum lot sizes of 4,500 square feet. Planning Area 1 was approved as a part of the 1998 Specific Plan Amendment and is under construction.

Access into Planning Area 1 is provided by a neighborhood intersection, identified with a monument sign, at the west side of the Planning Area at Colonies Parkway. This access leads to a network of local residential streets within the Planning Area.

A community trail and greenbelt follows the southern boundary of Planning Area 1, and intersects with the enhanced parkway (which runs along the local residential street that parallels the Cucamonga Creek Channel). Just to the east of the project site and Planning Area 1 boundary lies the Cucamonga Creek regional hiking and bike trail.

PLANNING AREA 2

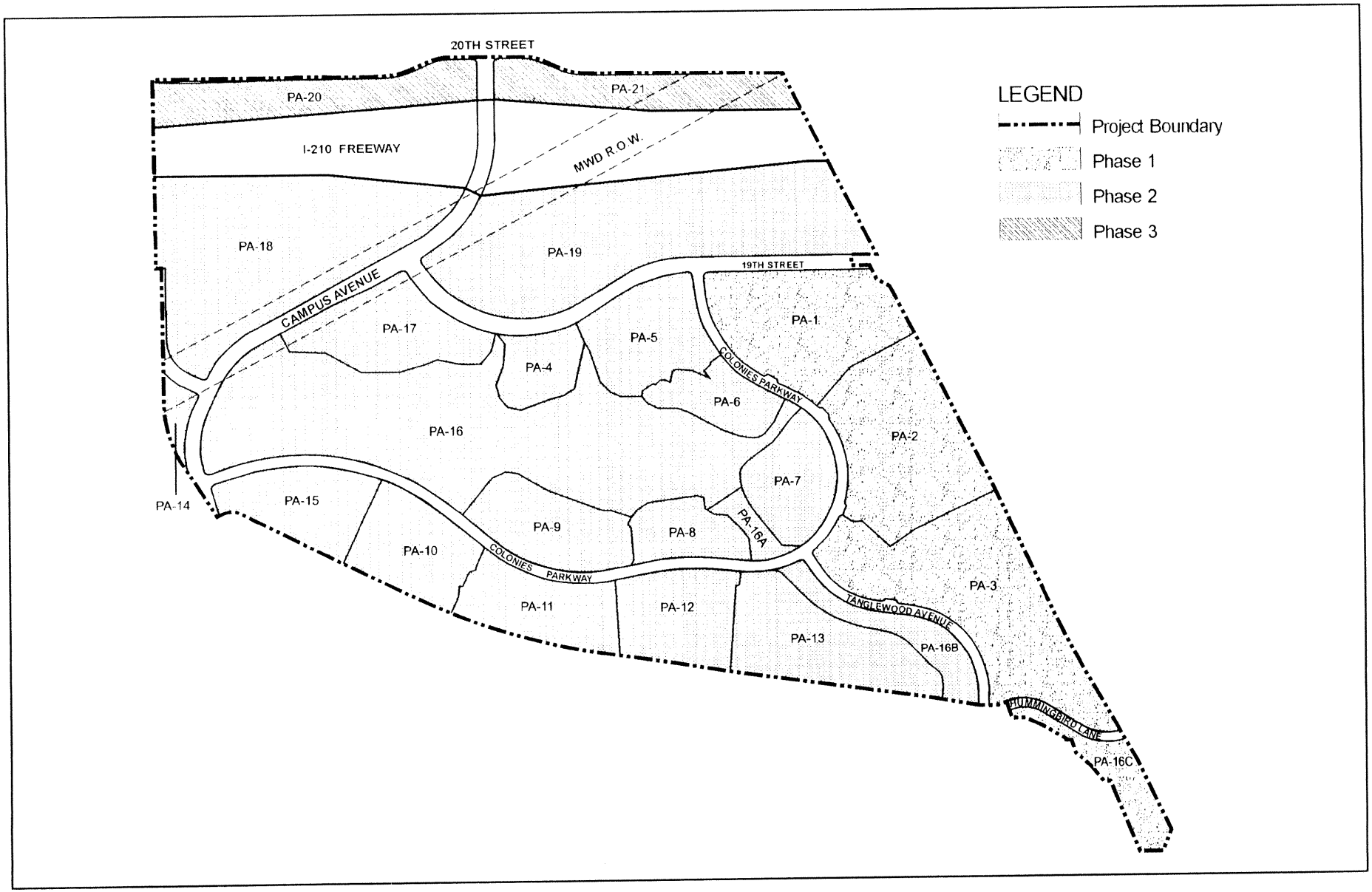
Planning Area 2 (22.13 acres) is located on the east side of the Colonies at San Antonio, south of Planning Area 1 and north of Planning Area 3. To the west is Colonies Parkway and to the east is Cucamonga Creek Channel. Planning Area 2 features detached single-family residential uses on lots at least 5,000 square feet in size. Planning Area 2 was approved as a part of the 1998 Specific Plan Amendment and is under construction.

Access is via two neighborhood intersections (identified with monument signs) at Colonies Parkway, which lead to a network of local residential streets within the Planning Area. Community trails and greenbelts flank both the north and south boundaries of the Planning Area, continuing across Colonies Parkway and an offshoot leading south to Tanglewood Avenue. Near the eastern edge of the Planning Area is a parkway, including a pedestrian walkway, that parallels the Cucamonga Creek Channel located to the east. The Cucamonga Creek regional hiking and bike trail is located immediately adjacent to the creek channel just outside the boundaries of Planning Area 2.

PLANNING AREA 3

Planning Area 3 (29.04 acres) is located in the southeasterly corner of the project site. To the north is Planning Area 2 and to the south is drainage basin B (Planning Area 16C). Planning Area 3 features detached single-family residential units on minimum 6,000 square feet lots. Planning Area 3 was approved as a part of the 1998 Specific Plan Amendment and is under construction.

Planning Area 3 is accessed by two neighborhood intersections (identified with monument signs), one located at Tanglewood Avenue approximately half way between Colonies Parkway and Hummingbird Lane and the other located off Hummingbird Lane between Tanglewood Avenue and the eastern project site



Source: LSA Associates, Inc.

Not to Scale

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

06/02

JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Planning Areas and Conceptual Phasing

Exhibit 3-5

boundary. Just beyond the northwest edge of the Planning Area is another neighborhood intersection, but this serves Planning Area 2 located to the north.

A community trail and greenbelt follows the northern boundary of Planning Area 3, coming across Colonies Parkway and heading east to the Cucamonga Creek regional hiking and bike trail just outside the project site boundary. This community trail and greenbelt also diverts from the north boundary of the Planning Area and connects to the western neighborhood intersection located at Tanglewood Avenue. The parkway, a local residential street featuring landscaping and a pedestrian walkway, is located near the eastern edge of the Planning Area. It connects to the Cucamonga Creek regional hiking and bike trail, located just east of Planning Area 3 outside of the project site, via a community trail.

PLANNING AREA 4

Planning Area 4 is located north of the central open space area, fronting on the south side of 19th Street, between the neighborhood commercial uses of Planning Area 17 to the west and the single-family residential uses of Planning Area 5 to the east.

Planning Area 4 provides for approximately 6 acres of luxury attached housing in a multi-story setting. Up to 350 units are planned at a density of up to approximately 62 dwelling units per acre. The density of the luxury attached housing units is appropriate to their proximity to the 19th Street arterial and the Highway Commercial designation across the street. A pedestrian bridge would be provided across 19th Street to facilitate access between the residential area and the commercial center. The luxury attached units would be designed as multi-story, terraced buildings that reflect the slope of the land towards the central open space area. This housing would have a view potential towards the open space amenity.

Planning Area 4 has a vehicular access point along 19th Street, toward the eastern side of the Planning Area's northern border. A community open space hiking trail lies just outside the eastern, southern, and western perimeters of Planning Area 4 within the adjacent open space area. An overlook providing views of the open space area is located on the southern edge of the Planning Area. Bio-swale drainage channels are designed to collect storm and nuisance water runoff from adjacent developments and are located within the open space area to the west and east of Planning Area 4.

PLANNING AREA 5

Planning Area 5 is located north of the central open space area at the southwest corner of the intersection of 19th Street and Colonies Parkway between Planning Areas 4 and 6. Planning Area 5 consists of approximately 11 acres of detached single-family residential uses on minimum 5,000 square foot lots.

A neighborhood intersection, identified with a monument sign, is located at the southeast boundary of the Planning Area. This neighborhood intersection would provide access to Planning Area 5 and its local residential streets. A community trail and greenbelt is located at the boundary with Planning Area 6 to the south. This trail leads from the neighborhood intersection to the open space area, where it transitions into a community open space hiking trail. The general location of this transition

between the two types of trails also features an overlook towards the open space area. At the northwest corner of the Planning Area, another community open space hiking trail leads into and out of the open space area. Bio-swales provide for storm and nuisance water runoff from adjacent developments via channels located to the south and east of Planning Area 5.

PLANNING AREA 6

Planning Area 6 consists of approximately 6 acres located northeast of the open space area adjacent to Planning Area 5 west of Colonies Parkway. Planning Area 6 is planned for detached single-family residential units on lots at least 5,000 square feet in size. Planning Area 6 is accessed by a neighborhood intersection, identified with a monument sign, at the west side of Colonies Parkway. Another neighborhood intersection is located just north of the Planning Area 6 boundary; however, this serves Planning Area 5 to the north.

A community trail and greenbelt follows the northern perimeter of the Planning Area and a community open space hiking trail is located within the adjacent open space to the southeast and southwest of the Planning Area. Bio-swale drainage channels located on the north and northwest perimeters and below the southern perimeter within the open space area collect storm and nuisance water runoff from adjacent development.

PLANNING AREA 7

Planning Area 7 is located east of the central open space area, northeast of the drainage pathway leading from Basin A in the central open space area, and to the west of Colonies Parkway. The approximately 9-acre Planning Area provides for detached single-family residential units on minimum 5,000 square foot lots. Access into the Planning Area is via a neighborhood intersection, identified with a monument sign, off Colonies Parkway along the northeast boundary of Planning Area 7, with an emergency vehicle access located in the southern portion of the Planning Area at the terminus of Tanglewood Avenue.

A community open space hiking trail lies just beyond the northwest perimeter, and provides access into the Planning Area. In this area, a bio-swale drainage channel also collects storm and nuisance water runoff. An overlook feature provides for an amenity area with views of the central open space and the rock basin outlet of the floodway located in Planning Area 16A immediately to the southwest. A roadway bridge crossing featuring a community trail and greenbelt over the floodway below is located at Colonies Parkway at the southern end of Planning Area 7.

PLANNING AREA 8

Planning Area 8 lies south of the central open space area between Planning Area 9 to the west and the floodway in Planning Area 16A to the east. Planning Area 8 consists of approximately 6 acres planned for detached single-family residential units on minimum 4,000 square foot lots. Colonies Parkway provides access into Planning Area 8 through a neighborhood intersection, identified with a monument sign.

A community open space hiking trail follows the perimeter of the Planning Area within the open space area, with access directly into the Planning Area provided by trail spurs. Near the northwest side of the Planning Area, a bio-swale drainage channel directs water runoff into Basin A within the central open space area. To the east outside of the Planning Area lies the floodway of Planning Area 16A and the roadway bridge crossing of Colonies Parkway above it.

PLANNING AREA 9

Located south of the central open space area and west of Planning Area 8, Planning Area 9 consists of approximately 11 acres planned for detached single-family residential uses on lots at least 6,000 square feet in size. Access to Planning Area 9 is provided by two neighborhood intersections, identified with monument signs, located on the south side of the Planning Area at Colonies Parkway.

A community open space hiking trail, located within the adjacent open space area, follows the north and west perimeter of Planning Area 9. This hiking trail transitions into a community trail and greenbelt on the east side. An overlook amenity along the northern edge of the Planning Area allows views into the central open space area.

PLANNING AREA 10

Planning Area 10 is situated south of Colonies Parkway at the southern edge of the project site. Approximately 11 acres in size, it features detached single-family residential uses on minimum 5,000 square foot lots. Vehicular access is provided by a neighborhood intersection, identified with a monument sign, located in the northern portion of the Planning Area off Colonies Parkway.

A community trail and greenbelt is located at the southern perimeter of the Planning Area along a utility easement. This trail segment links to similar sections in adjacent Planning Areas and also provides a spur allowing pedestrian access directly into the interior of Planning Area 10.

PLANNING AREA 11

Planning Area 11 is located at the southern edge of the project site, south of Colonies Parkway, between Planning Area 10 to the west and Planning Area 12 to the east. This approximately 11-acre Planning Area is designated for detached single-family residential uses on minimum 5,000 square foot lots. Access for vehicles is provided by a neighborhood intersection, identified with a monument sign, on the north side of the Planning Area off Colonies Parkway.

Pedestrian access into Planning Area 11 is to be provided at multiple locations via trail spurs off the community trail and greenbelt located at the utility easement on the south side of the Planning Area. This backbone trail links with similar trails along the southern edge of adjacent Planning Areas, providing continuous pedestrian access along the southern perimeter of the project site.

PLANNING AREA 12

Planning Area 12, approximately 11 acres in size, is located at the southern edge of the project site south of Colonies Parkway, adjacent to Planning Areas 11 and 13 on the west and east, respectively. Planning Area 12 features detached single-family residential uses on minimum 5,000 square foot lots. Access to Planning Area 12 is via a neighborhood intersection, identified with a monument sign, off Colonies Parkway. Another neighborhood intersection near the northeast corner of the Planning Area serves the adjacent Planning Area to the east.

A community trail and greenbelt lies at the southern edge of Planning Area 12 along the utility easement, providing pedestrian access into the Planning Area interior and connecting with similar trail segments to the west and east.

PLANNING AREA 13

Planning Area 13 (15.60 acres in size) is located on the southern boundary of the project site, south of Colonies Parkway, between Planning Area 12 to the west and the drainage path of Planning Area 16B to the east. The land use for Planning Area 13 would be detached single-family residential units on lots at least 5,000 square feet in size. Vehicular access to Planning Area 13 occurs at two neighborhood intersections (identified with monument signs), one located in the northwest section of the Planning Area and the other on the northeast via a roadway bridge crossing from Tanglewood Avenue across the adjacent floodway path. Another roadway bridge crossing occurs to the northeast of Planning Area 13 as Colonies Parkway crosses the drainage path underneath.

The community trail and greenbelt along the southern perimeter of the Planning Area (which would be visible from the existing residential development to the south located outside the project site) provides pedestrian access into the interior of the Planning Area at several locations and connects to similar trail segments in adjacent Planning Areas. An overlook at the southeast corner of the Planning Area allows views of the natural drainage path and surrounding area.

PLANNING AREA 14

Planning Area 14 lies to the west of the intersection of the western portion of 19th Street and Campus Avenue at the western edge of the project site. This 1.72-acre Planning Area would be dedicated to the City of Upland. The City may develop a fire station on this site, which would be operated and maintained by the City of Upland Fire Department. Planning Area 14 would be characterized by secondary intersection monumentation placed at the intersection of 19th Street and Campus Avenue. An MWD right-of-way lies within the northern half of the Planning Area. Development within the right-of-way in Planning Area 14 would comply with the MWD's guidelines.

PLANNING AREA 15

Planning Area 15 is located in the southwest corner of the project site, along the south side of Colonies Parkway, adjacent to Planning Area 10. This 10.20-acre Planning Area would be offered for purchase by the Upland Unified School District.

The District has indicated that they would develop a school on this site if purchased. Should this not occur, this Planning Area would be developed with single-family residential uses on minimum 5,000 square foot lots.

Primary intersection monumentation would be located at Campus Avenue and Colonies Parkway to the northwest of the Planning Area. If the Planning Area is developed with single-family residential uses, two neighborhood intersections (identified with monument signs) would be located on the north side of the Planning Area off of Colonies Parkway. A community trail and greenbelt spur would terminate into Planning Area 15.

PLANNING AREA 16

A central open space area located near the center of the project site encompasses Planning Area 16. This 58.64 acre open space area provides a focal point for the project site, local and regional flood control facilities with a natural appearance, a riparian wildlife area, and passive recreation with trails.

The central open space area of Planning Area 16 is designed to accommodate stormwater flows that the site is required to accept from local, regional, and I-210 tributary areas by the San Bernardino County Flood Control District. The storage of these flows would ensure that the capacity of the adjacent Cucamonga Creek Channel would not be exceeded by the drainage from on-site or upstream development. By designing the open space basin as three sub-basins, flows to the open space area would also allow the restored riparian habitat to be sustained by the stormwater runoff. A component of the sub-basins, the braided, sand-bottom channel would convey low-volume flows, allowing percolation to groundwater and serving as a "bio-filter" to remove contaminants from first-flush storm flows and nuisance flows. A raised overflow area at the downstream end of the basin would detain low-volume flows, and allow greater storm flows to spill over into Planning Area 16A.

The passive recreational area within Planning Area 16 is designed for picnicking, jogging, strolling, and viewing wildlife habitat. A system of community trails provides convenient access between neighborhoods, commercial centers, and the open space area, with connections to the regional trail system along the Cucamonga Creek Channel.

Vehicular access within Planning Area 16 is limited to maintenance vehicles; however, a primary intersection with monumentation is located adjacent to the Planning Area at the intersection of Campus Avenue and Colonies Parkway. A pedestrian system within the Planning Area is provided via community open space hiking trails located primarily at the perimeter or traversing the open space area, but with some offshoot trails linking to 19th Street and Colonies Parkway. Overlook features are located along the community open space hiking trails at several locations throughout the perimeter of Planning Area 16 to provide views of the open space amenity.

Service drives lead from the community open space hiking trails to the 20th Street and 19th Street outlet structures to allow for necessary maintenance. Within Planning Area 16, flood control facilities are designed so that water would flow east

from the 19th Street and 20th Street outlet structures and be supplemented by water from the bio-swale drainage channels bringing runoff from adjacent development. Water would settle into Basin A of the central open space area, or, if of a sufficient volume, would continue east through Planning Area 16 to the outlet facility in the southeast portion of the Planning Area.

PLANNING AREA 16A

Planning Area 16A is located southeast of the open space area (Planning Area 16) between Planning Areas 7 and 8. This 2.24-acre Planning Area is designed to appear as a natural drainage path for conveying water. Planning Area 16A features a community open space hiking trail along the western edge of the Planning Area, which diverts into a community trail and greenbelt to provide pedestrian access to the adjacent Planning Area. The main feature of Planning Area 16A is the rock basin outlet that originates in the adjacent Planning Area 16. The floodway directs water south under Colonies Parkway.

PLANNING AREA 16B

Planning Area 16B is located in the southern portion of the project site between Planning Areas 13 and 3 to the west and east, respectively. Planning Area 16B consists of 6.29 acres that serve as a floodway taking water south to the adjacent basin in Planning Area 16C.

A primary intersection with monumentation is designated along Tanglewood Avenue at Hummingbird Lane at the southern boundary of the project site. A secondary intersection with monumentation is located at the junction of Colonies Parkway and Tanglewood Avenue. A neighborhood intersection, identified with a monument sign, lies just to the south of the Planning Area, allowing vehicular access into Planning Area 13 to the west, via a road over the drainage path in Planning Area 16B. Another roadway bridge crossing at the north portion of the Planning Area allows Colonies Parkway to continue over the drainage path below. A community trail and greenbelt follows Tanglewood Avenue beginning from Colonies Parkway at the roadway bridge crossing, continuing to the project boundary at the south edge of the Planning Area, and turning west along the utility easement. The trail features an overlook amenity located near the southern edge of the Planning Area to highlight views of the natural appearance of the drainage pathway.

PLANNING AREA 16C

Planning Area 16C (5.55 acres) is the southernmost Planning Area. It does not have common boundaries with other Planning Areas, and is separated from Planning Area 3 to the north by Hummingbird Lane. Planning Area 16C was approved as a part of the 1998 Specific Plan Amendment and is currently under construction. This Planning Area encompasses "Detention Basin B," where flood waters await their metered flow into the Cucamonga Creek Channel located to the east just outside the project boundary.

PLANNING AREA 17

Planning Area 17, located north of the central open space area and south of the intersection of Campus Avenue and 19th Street, is designated Neighborhood Commercial. This 12.40-acre Planning Area provides for neighborhood-scale retail and commercial service uses such as a supermarket, drug store, bank, in-line retail shops, a gas station and car wash, and drive-through restaurants.

Planning Area 17 is accessible from the nearby residential uses to the south and east within the project site. An MWD right-of-way lies along the northwest edge of the Planning Area. Development within the right-of-way in Planning Area 17 would comply with the MWD's guidelines.

A major commercial intersection provides vehicular access off Campus Avenue at the western edge of the Planning Area. Another commercial intersection with monumentation is located to the north of the Planning Area; however, this intersection of Campus Avenue and 19th Street does not provide access into Planning Area 17. An additional commercial intersection provides vehicular access into Planning Area 17 from 19th Street. A right in/right out vehicular access point also occurs on the northeast side of the Planning Area off 19th Street.

A pedestrian bridge would be located at the eastern edge of the Planning Area across 19th Street. A community open space hiking trail follows the east side of the Planning Area. Along the southern perimeter of the Planning Area, an overlook feature allows for a pedestrian rest area and view opportunity.

PLANNING AREA 18

Located just south of I-210, Planning Area 18 is approximately 37 acres and lies on the west side of the project site. Planning Area 18 is designated Highway Commercial and features uses that draw from the project site, City, and the region by providing for major retail uses, smaller retailers, and in-line shops and restaurants. Uses would include general and specialized retail, restaurants (sit-down and fast food facilities), and gas station and car wash facilities.

A secondary intersection featuring monumentation is located adjacent to the southern corner of Planning Area 18 at the intersection of the west segment of 19th Street and Campus Avenue. The uses within Planning Area 18 are visible from Interstate 210 (I-210). However, they take primary vehicular access from two commercial intersections, one off Campus Avenue located mid-way between the west and east segments of 19th Street and another with monumentation located at the junction of Campus Avenue and 19th Street. Two right in/right out vehicular access points occur off Campus Avenue and one off 19th Street. A right in only access point also occurs on Campus Avenue.

The freeway edge along the northern boundary of Planning Area 18 at I-210 would feature a landscape area that provides views into the commercial center, and project identification signage. A 30-foot wide easement at the southern edge of the Planning Area allows for placement of utility lines.

PLANNING AREA 19

Planning Area 19 consists of 42 acres and is located south of I-210 and east of Campus Avenue. The west half of the Planning Area provides a commercial destination retail and entertainment area. An MWD right-of-way lies along the northwest edge of the Planning Area.

A primary intersection with monumentation provides vehicular access to Planning Area 19 at the intersection of 19th Street and Colonies Parkway. Vehicular access into the Planning Area via a commercial intersection is located approximately mid-way between the intersection of Campus Avenue/19th Street and the primary intersection at 19th Street/Colonies Parkway. A commercial intersection with monumentation at Campus Avenue and 19th Street is located within view of Planning Area 19; however, it does not provide direct access into the Planning Area. Two right in/right out vehicular access points occur off 19th Street and one off Campus Avenue. Pedestrian access would be provided via a pedestrian bridge across 19th Street, facilitating connection between Planning Area 19 and the neighborhood commercial center and the luxury attached housing to the south.

Landscaped project entry monumentation, similar to the design used in the hierarchy system for a secondary intersection, is located at 19th Street at the eastern boundary of the project site. The freeway edge along the northern boundary of Planning Area 19 at I-210 would feature a landscape area that provides views into the commercial center, and project identification signage. Just to the east of the Planning Area and project boundary lies the Cucamonga Creek regional hiking and bike trail. Within Planning Area 19, a landscaped buffer located at the eastern edge of the Planning Area adjacent to the Cucamonga Creek Channel shall screen commercial development within the Planning Area.

PLANNING AREA 20

Planning Area 20 (approximately 12 acres) is located in the northwest quadrant of the I-210/Campus Avenue interchange in the northern portion of the project site. The permitted uses in this Planning Area include automobile dealership, hotel, retail, restaurant, gas station, and other freeway-oriented commercial uses. The Planning Area's size and orientation, which is much wider than deep, increases the exposure of the permitted uses to freeway traffic.

A primary intersection with monumentation would be located to the east of Planning Area 20 at Campus Avenue north of the freeway. For a typical independent tenant of approximately one acre, a minimum of two vehicular access points along the 20th Street frontage is expected.

The southern boundary of Planning Area 20 adjacent to I-210 would feature a landscape area that provides views into the Planning Area, and project identification signage.

PLANNING AREA 21

Planning Area 21 (approximately 11 acres) is located in the northeast quadrant of the I-210/Campus Avenue interchange in the northern portion of the project site. The

permitted uses in this Planning Area include automobile dealership, hotel, retail, restaurant, gas station, and other freeway-oriented commercial uses. The Planning Area's size and orientation increase the exposure of the uses to freeway travelers. An MWD right-of-way traverses the Planning Area; development within the right-of-way in Planning Area 21 would comply with the MWD's guidelines.

A primary intersection with monumentation would be located to the west of Planning Area 21 at Campus Avenue north of the freeway. For a typical independent tenant of approximately one acre, a minimum of two vehicular access points along the 20th Street frontage is expected.

The southern boundary of Planning Area 21 adjacent to I-210 would feature a landscape area that provides views into the development, and project identification signage. Just to the east of the Planning Area and project site boundary lies the Cucamonga Creek regional hiking and bike trail. A landscaped buffer located at the eastern edge of Planning Area 21 adjacent to the Cucamonga Creek Channel shall screen commercial development within the Planning Area.

3.3.4 PROPOSED VEHICULAR CIRCULATION SYSTEM

The project proposes a total of approximately 34.66 acres of access roads including major highways, secondary highways, and collector roads. The I-210 freeway right-of-way is located east-west through the northern portion of the property. This freeway is currently under construction. An interchange would be constructed at the realigned Campus Avenue.

Proposed as a two-lane collector road with dedicated left turn lanes into residential planning areas, Colonies Parkway would serve the southern and eastern portions of the site, between Campus Avenue (west) and Tanglewood Avenue (east) and 19th Street (north). Along the northern site boundary, 20th Street is proposed as a two-lane collector road to serve the commercial uses. Tanglewood Avenue, which would terminate at Colonies Parkway, would provide access to residential areas to the south.

Key east-west routes include 19th Street, which is proposed to be realigned as a four-lane major highway with a raised landscaped median from Campus Avenue to Colonies Parkway, and a painted median east of Colonies Parkway. The curved realignment of 19th Street is intended to encourage drivers who might use it as a through-street to instead use the freeway for this purpose. Primary north-south routes include Campus Avenue at the western boundary. The northern portion of Campus Avenue is proposed to have a new alignment, connecting to the I-210 freeway. The realigned Campus Avenue is designed as a four-lane divided major highway to carry traffic flows diagonally northeast through the site, and directly to the freeway and commercial land uses. Another north-south route is Colonies Parkway, serving the eastern portion of the project site and bringing traffic north from existing Tanglewood Avenue in the southern portion of the project site. This roadway is proposed as a two-lane collector road.

3.3.5 STORM DRAIN SYSTEM CONCEPT

The project site would be required to manage the runoff from several off-site areas, in addition to its own, which currently discharge to the site. Flows from the 19th Street Storm Drain and the 20th Street Storm Drain discharge into Basin A within the project site's central open space. The Campus Avenue Storm Drain would connect to the 20th Street Storm Drain, and then flow in the central open space area. Flows from the I-210 culvert located at the east boundary of the project site are conveyed to the storm drain in Colonies Parkway that discharges directly to Basin B. Also considered was collection and/or safe direction overland of 100-year storm surface flows. Drainage systems in or crossing 19th Street, 20th Street, Campus Avenue and along the southern boundary of project site must be sized to collect and convey 100 year storm flows.

The central open space area of Planning Area 16 is designed to accommodate stormwater flows that currently run through the site, ensuring that the capacity of the adjacent Cucamonga Creek Channel would not be exceeded by on-site or upstream development. This area is composed of three sub-basins to aid in ground water recharge and help sustain the riparian plant habitat. A controlled outlet at the downstream end of the basin would detain and discharge flows up to a 100-year storm level into Planning Area 16B. Flows from storms greater than a 100-year level would exit Basin A over a different controlled outlet, discharging into Planning Area 16A. The main feature of Planning Area 16A is the rock outlet facility that originates in the adjacent Planning Area 16. The floodway directs water south under Colonies Parkway to Detention Basin B, where flood waters are outlet at a controlled rate of flow into the Cucamonga Creek Channel located to the east just outside the project site boundary.

3.4 PROJECT GOALS AND OBJECTIVES

3.4.1 OVERALL GOAL

As stated in the proposed Specific Plan Amendment document the intent of the Colonies at San Antonio Specific Plan is to provide the City of Upland, its citizens, nearby residents, and project developers with a document that identifies objectives, directions for development, and development regulations which would aid in the achievement of mutual goals. These goals, which evolved during a series of meetings and conferences with all parties concerned, include responding to public demand for a variety of residential product types and housing densities; providing compatible commercial facilities and open space areas; facilitating efficient vehicular circulation flow within the project site while minimizing through traffic on Colonies Parkway; providing essential flood control detention facilities; and responding to existing natural and man-made site conditions. These goals, then, are the framework upon which the Specific Plan is constructed. The success of this Specific Plan depends, in large part, upon its ability to respond to and adequately meet these goals. When implemented, the Colonies at San Antonio project would prove a safe, attractive, and economically viable addition to the City of Upland and the region. Thus, the overall goal of the Colonies at San Antonio Specific Plan is:

To establish a clearly recognizable, mixed use community that provides a broad range of commercial opportunities, maintains a high quality living environment, and enhances the quality of life for present and future residents of the City of Upland.

To further define this overall goal statement, goals and objectives are provided by the Applicant for Community Design, Land Use, Circulation, Infrastructure, and project Implementation.

3.4.2 COMMUNITY DESIGN GOAL AND OBJECTIVES

Goal: To create an identifiable image of the Colonies that builds upon the positive character of Upland, and establishes a distinguishable visual identity so that one can recognize when they enter the community. Rather than limiting the new community to only one architectural style, a palette of compatible architectural styles and related design elements should be selected to encourage visual diversity and avoid monotony, creating a harmonious community.

Objectives:

- To create an identifiable "sense of place" within the City by using a central natural open space, trails, and community landscaping to define individual neighborhoods.
- To create a visually attractive development through consistent application of architectural and landscape standards/guidelines that would encourage commercial activities and a unique residential lifestyle.
- To establish a pattern of land uses which would place regional- and freeway-oriented commercial uses north of 19th Street, and which would separate residential land uses from major noise generators, such as the freeway and 19th Street.
- To provide easy pedestrian connections between residential neighborhoods and neighborhood-level shopping opportunities that serve residents' daily needs (e.g., market, drug store, bank).
- To establish a complementary streetscape program to reinforce the Colonies at San Antonio design identity, while supporting the buffering needs of residential uses and the visibility needs of commercial uses.
- To establish a palette of compatible residential and commercial architectural design styles which would provide a visually attractive built environment within the Specific Plan area.
- To promote the use of design features such as walls, fencing, lighting, signs, and street furniture to enhance overall community image.
- To provide identifiable project and neighborhood entries to provide a sense of arrival within the project and to individualize each neighborhood area.

- To capitalize on potential views of the central open space area and of the San Gabriel Mountains.

- To minimize the potential visual intrusiveness of the Interstate 210 (I-210) freeway from future residential areas.

3.4.3 LAND USE GOAL AND OBJECTIVES

Goal: To provide a mixture of commercial, residential, and open space uses which is consistent with Upland's community image.

Residential Objectives:

- To meet anticipated public demand by providing housing that is marketable in the West Valley portion of San Bernardino County.

- To provide high quality housing that would attract a broad spectrum of buyers, including attractive, upper end housing that would provide "move-up" opportunities for local residents within the project vicinity and the City of Upland.

- To establish residential neighborhoods that are identifiable by their mix of compatible architectural styles and location within the community, each with safe and convenient pedestrian and vehicular access to a central open space area, as well as to commercial and recreational opportunities.

Commercial Objectives:

- To establish a well balanced, productive, and carefully planned collection of specialized and general retail uses that serve both regional and neighborhood needs, taking advantage of the site's visibility and accessibility from the I-210 freeway and convenient location near residential uses.

- To attract retail commercial uses that would:

  - Serve as a destination for a regional market (e.g., automobile dealerships adjacent to I-210 to attract shoppers from a market area substantially larger than the City of Upland);

  - Provide services to travelers along I-210 on parcels located adjacent to the freeway (e.g., restaurants, automobile service stations, hotel);

  - Serve community needs by providing large scale commercial uses that are visible from I-210, attracting shoppers and patrons from throughout the City of Upland and adjacent areas outside the City (e.g., home improvement, durable goods, entertainment, electronics, clothing and similar retailers); and

  - Expand the retail and service options for local consumers (e.g., supermarket, drug stores, and personal services) by providing a neighborhood commercial shopping area near the residential uses.

- To provide daytime and nighttime shopping and entertainment opportunities in a safe and secure environment.
- To create employment generating opportunities for the citizens of Upland and surrounding communities.
- To augment the City's economic base by providing a variety of sales tax generating uses which minimize the leakage of taxable sales from Upland and attract taxable purchases from a regional marketplace.

Open Space Objectives:

- To establish a central open space area as the dominant visual feature of the Colonies at San Antonio, as well as for passive recreational opportunities.
- To provide a system of trails providing access from neighborhoods within the Colonies at San Antonio to the central open space area.
- To mitigate potential impacts on existing riparian areas.
- To provide for the safety of Upland and San Bernardino County residents by detaining flood flows within the central open space area and the flood control basin located in the southeastern portion of the Specific Plan area.

3.4.4 CIRCULATION GOAL AND OBJECTIVES

Goal: To provide for safe and efficient vehicular, pedestrian, and bicycle movement within and through the Specific Plan area, while protecting the integrity of the Colonies at San Antonio planned community.

Objectives:

- To recognize the substantial traffic carrying capacity of the I-210 freeway, maximizing its use for regional through traffic in order to minimize traffic speeds and noise along 19th Street adjacent to existing and future residential neighborhoods.
- To minimize through traffic and reduce traffic speeds on Colonies Parkway by providing a loop road connecting individual neighborhoods within the Specific Plan area, rather than a direct connection between 19th Street and residential areas to the south.
- To provide safe and convenient pedestrian and bicycle connections between residential neighborhoods, the central open space area, and commercial uses within the Specific Plan area.

3.4.5 INFRASTRUCTURE GOAL AND OBJECTIVES

Goal: To provide adequate utility, drainage, fire protection, and school facilities to serve the needs of all uses within the Specific Plan area.

Objectives:

- To provide the water, sewer, electrical, and natural gas utility systems needed to support build out of the uses proposed for the Colonies at San Antonio Specific Plan.
- To enhance fire protection services within the eastern portion of the City of Upland by providing a site for a new fire station.
- To mitigate impacts of proposed development on the Upland Unified School District by setting aside a school site within the Specific Plan area and offering it for sale to the Upland Unified School District and providing for the mitigation of school impacts as required by law.
- To provide adequate capacity for the detention of local and regional drainage flows, including drainage from I-210, protecting residents within and downstream of the Colonies at San Antonio.

3.4.6 PROJECT IMPLEMENTATION GOAL AND OBJECTIVES

Goal: To provide a clear and comprehensive program for implementation of the development proposed by the Colonies at San Antonio Specific Plan.

Objectives:

- To correlate the installation of water, sewer, electrical, and natural gas utility systems, and project open space and amenities with land development in a manner that is economically feasible and that ensures adequate service to residential uses and businesses within the Specific Plan area.
- To establish environmental performance standards within the Specific Plan's development regulations chapter that minimize the potential impacts of project development.
- To ensure the ongoing maintenance of project open space and landscaped areas through identification of responsible parties.
- To provide comprehensive, understandable zoning regulations and design guidelines that will result in a high quality of development within the Specific Plan area that is consistent with the goals of the project.
- To provide a clear program for review of development proposals within individual neighborhoods and commercial planning areas, which recognizes the detailed planning and review which went into the Colonies at San Antonio Specific Plan.

3.5 PHASING

The Colonies at San Antonio Specific Plan provides great flexibility in the order that individual planning areas may be developed. The Specific Plan provides that individual Planning Areas may be constructed in any order, and that individual

Planning Areas may be developed in two or more increments. Thus, while the Specific Plan identified two general development phases (refer to Exhibit 3-5, *Planning Areas and Conceptual Phasing*), it does not set forth any requirement that all or any portion of the first development phase be completed prior to initiating or completing development of Phase 2.

The Specific Plan delineates the infrastructure requirements for each Planning Area in tabular form (refer to Table 3-1, *Backbone Infrastructure Phasing Matrix*). As shown in Table 3-1 (Table 10.A of the Specific Plan), the Specific Plan identifies each of the backbone infrastructure facilities (roadway, water, sewer, drainage, etc.) that would serve the Specific Plan area, and defines which specific components of the project's roadway, water, sewer, and drainage facility systems are to be provided as part of the development of each Planning Area. This Table also defines the required timing for improving the Specific Plan's central open space area. Within Table 10.A of the Specific Plan, each backbone infrastructure component needed to support development of each Planning Area is identified by a "T" in the Table. As part of the development of any individual planning area, every backbone infrastructure component identified in the Specific Plan by a "T" for that Planning Area must be constructed.

The Specific Plan further requires that, as standard conditions of approval for development of any planning area within the Colonies at San Antonio, the following requirements will apply:

- "Each of the prior backbone infrastructure components identified in Table 10.A (of the Specific Plan) with a "T" shall be constructed and operational prior to the first occupancy of structure within the affected Planning Area."

- "Unless a specific infrastructure and development phasing plan is approved by the City to permit incremental development of an individual Planning Area, all of the internal roadway, water, sewer, and drainage facilities serving an individual Planning Area shall be constructed and completed prior to the first occupancy of the Planning Area."

- "Prior to delivery of combustible materials to the site, base roadways and community water systems shall be available."

The Colonies at San Antonio Specific Plan states that tentative subdivision maps may not be submitted covering only a portion of a planning area, nor can any such map be approved by the City. Similarly, site plans covering only portions of the three commercial areas south of the I-210 freeway (Planning Areas 17, 18, and 19) may not be submitted, and would not be approved. Thus, Planning Areas 17, 18, and 19 must each be designed as a cohesive development. By contrast, the Specific Plan permits site plans within Planning Areas 20 and 21 to be submitted for a portion of the Planning Area, provided that a conceptual development plan for the entire Planning Area is submitted concurrent with the site plan application.

While the Specific Plan requires that individual Planning Areas to be designed and planned as a cohesive unit, the Specific Plan also permits actual development of individual residential, commercial, and community facilities Planning Areas on an

Table 3-1
Backbone Infrastructure Phasing Matrix

Backbone Infrastructure Components	Planning Area																			
	Phase 1			Phase 2															Phase 3	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Roadway Improvements																					
Signalize:																					
I-210 Interchange																	✓	✓	✓	✓	✓
Campus Avenue/19th Street (two locations)				✓													✓	✓	✓		
19th Street/Colonies Parkway				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓		
Colonies Parkway/Campus Avenue								✓	✓	✓	✓	✓	✓		✓						
Commercial Center Entry (full turning movements)																	✓	✓	✓		
Construct Colonies Parkway From:																					
19th Street to Tanglewood Avenue	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓
Tanglewood Avenue to Campus Avenue								✓	✓	✓	✓	✓	✓		✓						
Construct Campus Avenue From:																					
I-210 Interchange to existing Campus Avenue				✓													✓	✓	✓		
Construct 19th Street From:																					
New 19th St. to old 19th St. along westerly Specific Plan boundary				✓													✓	✓	✓		
Colonies Pkwy. to eastern project boundary	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓
Colonies Pkwy. to realigned Campus Avenue (realignment)				✓													✓	✓	✓		
Construct 20th Street From:																					
Campus Avenue to west SP boundary																				✓	
Campus Avenue to east SP boundary																					✓
Construct Tanglewood Avenue	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓

Backbone Infrastructure Components	Planning Area																			
	Phase 1			Phase 2															Phase 3	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Drainage Improvements																					
Central open space area , basins, appurtenances, and connection to Cucamonga Creek (Planning Areas 16, 16A, 16B)				✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓						
Colonies Parkway:																					
19th Street to Tanglewood Avenue	✓	✓	✓		✓	✓	✓												✓		
Tanglewood Avenue to Campus Avenue								✓	✓												
Adjacent to PA 12 and PA 13, including line though PA 13								✓	✓				✓								
Adjacent to PA 9 and 11									✓		✓										
19th Street:																					
West of Colonies Parkway					✓														✓		
20th Street From:																					
Campus Avenue to west SP boundary																				✓	
Campus Avenue to east SP boundary																					✓
Tanglewood Avenue, Colonies Parkway to Hummingbird Lane	✓	✓	✓				✓														
42" to 60" line along MWD right-of-way																		✓		✓	✓
Connection from 19th Street storm drain into Basin A				✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓						
Storm drain along southerly SP boundary, west of Tanglewood Ave.								✓	✓	✓	✓	✓	✓		✓						
36" line from PA 9 through PA 11									✓		✓										
24" to 36" line through PA 5 and PA 6					✓	✓															
24" line from PA 10 through PA 11										✓	✓										

Backbone Infrastructure Components	Planning Area																			
	Phase 1			Phase 2															Phase 3	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Water Facilities																					
Colonies Parkway From:																					
19th Street to Tanglewood Avenue	✓	✓	✓	✓	✓	✓	✓										✓	✓	✓		
Tanglewood Avenue to Campus Avenue								✓	✓	✓	✓	✓	✓		✓						
Campus Avenue From:																					
Existing Campus Avenue to southerly 19th Street intersection								✓	✓	✓	✓	✓	✓		✓						
I-210 Interchange to existing southerly 19th Street intersection				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓
19th Street From:																					
Realigned Campus Avenue to existing 19th Street								✓	✓	✓	✓	✓	✓		✓			✓			
Colonies Parkway to eastern project boundary	✓	✓	✓	✓	✓	✓	✓											✓	✓	✓	✓
Colonies Parkway to realigned Campus Avenue				✓	✓	✓	✓										✓	✓	✓	✓	✓
20th Street From:																					
Campus Avenue to west SP boundary																				✓	
Campus Avenue to east SP boundary																					✓
Tanglewood Avenue, Colonies Parkway to Hummingbird Lane	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓		
Sewer Facilities																					
Offsite Sewer Connections																					
Grove Avenue between 15th Street basins and 14th Street				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓		✓		
Memorial Park Road, San Bernardino Road, 13th Avenue, Arrow Highway				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓
Tanglewood Avenue from Baseline Road to 15th Street	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓

Backbone Infrastructure Components	Planning Area																				
	Phase 1			Phase 2																Phase 3	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Colonies Parkway From:																					
19th Street to Tanglewood Avenue	✓	✓	✓	✓	✓	✓	✓										✓		✓		
Tanglewood Avenue to Campus Avenue								✓	✓												
Campus Avenue From:																					
I-210 Interchange to existing Campus Avenue																		✓		✓	
19th Street From:																					
Colonies Parkway, west				✓													✓		✓		
20th Street From:																					
Campus Avenue to west SP boundary																				✓	
Campus Avenue to east SP boundary																					✓
Tanglewood Avenue, Colonies Parkway to Hummingbird Lane	✓	✓	✓	✓	✓	✓	✓										✓		✓		
Line along southerly Specific Plan boundary								✓	✓	✓	✓	✓	✓		✓						
Common line within PA 6, serving PA's 5, 6					✓	✓															
Common line within PA 11, serving PA 9									✓		✓										
Common line within PA 11, serving PA's 10 and 11										✓	✓										
Common line within PA 12, serving PA's 9 and 12									✓			✓									
Common line within PA 13, serving PA's 8 and 13								✓					✓								

Backbone Infrastructure Components	Planning Area																			
	Phase 1			Phase 2															Phase 3	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Trails																					
Trails, overlooks, and service roads within Planning Areas 16, 16A, 16B, 16C																✓					
Trail between Planning Areas 1 and 2	✓	✓																			
Trail between Planning Areas 2 and 3		✓	✓																		
Trail between Planning Areas 5 and 6					✓	✓															
Trail between Planning Areas 8 and 9								✓	✓												
Trail along the south side of:																					
Planning Area 10										✓											
Planning Area 11											✓										
Planning Area 12												✓									
Planning Area 13													✓								

incremental basis, subject to approval of a phasing plan by the City. Such phasing plans are required to provide for the phasing of land development and internal infrastructure within the planning area in a manner that ensures adequate infrastructure from initial occupancy to final build-out and that avoids routing of construction traffic along streets fronted by occupied dwelling units.

For development phasing purposes, the Colonies at San Antonio Specific Plan defines specific requirements for roadway improvements, as well as for screening of undeveloped planning areas and portions thereof.

Although the Specific Plan does not set forth any particular order of development, for the purposes of conducting this environmental review, three scenario phases have been established. Phase 1 consists of the 305 single-family homes currently under construction within the eastern portion of the Specific Plan area. Phase 2, which is analyzed based upon completion in Year 2011, consists of developing the remaining project area south of the future I-210 freeway. This includes 350 condominium/ townhomes, 495 single-family residences, an elementary school, 786,000 square feet of regional and local shopping center uses, a 3,800-seat theater and 80,000 square feet of office space. Phase 3, which is analyzed based upon opening year 2015, consists of developing the project area north of the I-210 freeway. This includes a 150-room hotel, a 40,000 square foot Health Club, a daycare center, two service/gasoline stations, restaurants and auto sales lots.

The following is a possible sequence for development of the Planning Areas which is consistent with the three scenario phases discussed above:

- Planning Areas 1, 2, 3 (single-family residential); Planning Area 16C (open space flood control basin).
- Planning Area 18 and the east half of Planning Area 19 (highway commercial).
- Planning Areas 16, 16A, and 16B (Open Space); Planning Area 17 (neighborhood commercial) and the west half of Planning Area 19 (highway commercial).
- Planning Areas 5, 6, and 7 (single-family residential).
- Planning Areas 20 and 21 (highway commercial north of the freeway).
- Planning Areas 10, 11, 12, and 13 (single-family residential).
- Planning areas 8 and 9 (single-family residential).
- Planning Area 4 (luxury attached housing).

3.6 AGREEMENTS, PERMITS AND APPROVALS

3.6.1 CITY OF UPLAND

The City of Upland is the Lead Agency for the project and has discretionary authority over the project which includes, but is not limited to, the following:

- General Plan Amendment 00-02.
- Zone Change 00-01.
- Zone Text Amendment 180.
- Environmental Impact Report (EIR 1372).
- Specific Plan Amendment 00-01 for a maximum of 1,150 dwelling units and 114.89 acres of commercial to include a maximum of 1,200,000 square feet of commercial and office use.
- Tentative Tract Maps 16198, 16199, 16200, 16201, 16202, 16203, 16204, 16205, 16206, 16207, and 16209 proposing 438 single-family residential units (51 proposed additional residential units – alternative school site plan).
- Site Plan 00-07 for 957,694 square feet of commercial uses (Planning Areas 17, 18, 19 – located south of the freeway).
- Open Space Plan (Site Plan for Planning Areas 16, 16A and 16B).
- Alternative School Site Plan (Tentative Tract Map 16209).

3.6.2 OUTSIDE AGENCIES

In addition to discretionary actions required by the City of Upland, several local and State agency approvals would be required, including the following:

- California Department of Fish and Game: 1603 Streambed Alteration Agreement.
- Metropolitan Water District: Encroachment Permit.
- San Bernardino County Flood Control District: Construction Permits.
- San Bernardino County Public Works: Construction Permits.
- Santa Ana Regional Water Quality Control Board: SWPPP Discharge Permit.
- Caltrans: Encroachment Permit.

4.0 Basis for Cumulative Analysis

4.0 BASIS FOR CUMULATIVE ANALYSIS

Section 15355 of the State California Environmental Quality Act (CEQA) Guidelines, as amended, provides the following definition of cumulative impacts: "Cumulative impacts refers to two or more individual effects which, when considered together, are considerable, or which compound or increase other environmental impacts." Pursuant to Section 15130(a) of the aforementioned Guidelines, "Cumulative impacts shall be discussed when they are significant." The Initial Study Checklist provided as part of Appendix 15.1 indicates that the proposed project may yield potentially significant cumulative effects. As a result, Section 5.0 of this EIR provides a cumulative impact assessment for each applicable environmental issue, and does so to a degree which reflects each impact's severity and likelihood of occurrence.

As indicated above, a cumulative impact involves two or more individual effects. Such effects can be internal to, and confined solely to, a proposed project itself, or also be attributable to other external projects, producing related or cumulative effects. Per State CEQA Guidelines Section 15130, the discussion shall be guided by the standards of practically and reasonableness. The following elements are necessary in an adequate discussion of cumulative Impacts:

1. Either:

   a. A list of relevant past, present and reasonably anticipated future projects producing related or cumulative impacts, including those projects outside the control of the Agency, or

   b. A summary of projections contained in an adopted General Plan or related planning document which is designed to evaluate regional or area-wide conditions;

2. A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available;

3. A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable options for mitigation or avoiding any significant cumulative effects of a proposed project; and

4. With some projects, the feasible mitigation for cumulative impacts may involve the adoption of ordinance or regulations rather than the imposition of conditions on a project-by-project basis.

Table 4-1, *Cumulative Projects List*, identifies related projects and other possible development in Upland determined as having the potential to interact with the proposed project to the extent that a significant cumulative effect may occur. The referenced projects include those within the City determined to be at least indirectly capable of interacting with the Colonies at San Antonio project. Table 4-1, *Cumulative Projects List,* summarizes the related projects according to location, type, and number of units realistically expected to develop on the site.

In addition, it is noted that the Traffic Analysis and corresponding Air Quality and Noise Assessments were prepared in accordance with the Congestion Management Program requirements for San Bernardino County. The study area was determination based on the contribution of project traffic to the surrounding street and freeway system. Thus, the study area generally extended no more than five miles from the project site (refer to Section 5.3, *Traffic and Circulation*, for additional information).

Table 4-1
Cumulative Projects List

Reference	Project/Location	Square Feet	Type of Use (Lots)	Status
SP-01-32	John Plount; Richland Street/Campus Avenue	9,000	RM-2.0 / 10 Apartments	Proposed
TT-16309	Don St. Ours; Arrow Highway/Grove Avenue	101,915	RS-4.3 / 55 Proposed	Proposed
SP-01-27	Alexander/Catania; 15th Street/Campus Avenue	108,000	RS-7.5 / 54 Proposed	Proposed
SP-01-25	168 Sultana	75,444	Industrial	Proposed
SP-01-26	"A" Street and 6th Avenue	16,755	Industrial	Proposed
NA	Foothill Boulevard and San Antonio	3,240	Commercial/FastFood	Proposed
NA	Foothill Boulevard and Monte Vista	3,240	Commercial/FastFood	Proposed
SP-01-30	Littman Industrial / 8th Street	72,409	Industrial	Proposed
SP-01-35	Wendy's Drive-thru Restaurant; NW/Mountain & 8th Street	3,240	Commercial	Approved*
SP-01-30	G&L Commercial; 1111 E. 8th Street	72,409	Industrial	Approved*
SP-01-19	Michael's Addition; W/Mountain N/7th Street	22,795	Commercial	Approved*
SP-01-06	Upland Gardens; 1260 E. Arrow	17,044	Institutional	Approved*
SP-01-05	Cherokee Wood Products; 1400 E. Arrow	75,840	Industrial	Approved*
SP-00-20	Starbucks; NW/Foothill & Mulberry	6,720	Commercial	Approved*
SP-00-18	Von's Store + Shops; NW/Foothill & Euclid	93,066	Commercial	Approved*
SP-00-05	Claremont McKenna; 500 N. Claremont	2,150	Institutional	Approved*
SP-00-04	Cable Business Park; N/Foothill Blvd. W/Airport Drive	270,000	Industrial	Approved*
SP-99-33	WF Construction; 289 McArthur Way	11,007	Industrial	Approved*
SP-99-29	Glenwood Development; NE/16th & Upland Hills Drive	20,960	Commercial	Approved*

* Project approved but not constructed.

5.0 Description of Environmental Setting, Impacts and Mitigation Measures

5.0 DESCRIPTION OF ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES

5.1 LAND USE AND RELEVANT PLANNING

The purpose of this Section is to identify the existing land use conditions, analyze Project compatibility with existing uses in the vicinity on the site and determine consistency with relevant planning policies. Information in this Section is based upon site surveys conducted by RBF Consulting in January and June 2001 and site photographs. RBF also utilized the City of Upland General Plan, as amended, and the City of Upland Municipal Code. This Section provides on-site and surrounding land use conditions and land use policy requirements set forth by the City of Upland and regional agencies.

EXISTING CONDITIONS

ON-SITE LAND USES

The proposed Project site encompasses approximately 448 acres located in the northeast portion of the City of Upland, California (refer to Exhibit 3-1, *Regional Vicinity*). The site is located in an undeveloped area of Upland, near the Upland-Rancho Cucamonga City boundary. This area is locally referred to as the Cucamonga Basin "spreading grounds," an alluvial fan configuration historically utilized by the San Bernardino County Flood Control District for flood control retention and by the San Antonio Water Company for water spreading (water conservation) (refer to Exhibit 3-2, *Site Vicinity*).

The Project site is bounded on the north by the City's Master Plan of Highways alignment of 20th Street, on the south by a planned residential community, on the east by the Cucamonga Creek Channel and on the west by the existing alignment of Campus Avenue. The subject property is bisected east to west by the existing alignment of 19th Street and the I-210 Freeway.

The subject site generally involves two geographical areas: the area north of 19th Street and the area south of 19th Street (refer to Exhibit 3-2, *Site Vicinity*).[1] Exhibit 5.1-1, *Existing Land Uses*, illustrates land uses existing on and surrounding the Project site.

That portion of the property situated north of 19th Street can be generally described as consisting of an undisturbed area covered with native grass and dense brush. Man-made features located on the northern portion of the property include the following:

- I-210 freeway, which is currently under construction.

[1] 19th Street is a heavily traveled collector that extends through the Cities of Upland and Rancho Cucamonga.

- The Holliday Rock Company sand and gravel operation, which includes an industrial asphalt facility and truck-loading area, is situated at the northwest corner of the Project site, at the intersection of Campus Avenue and the 20th Street extension (as shown on the City's General Plan).

- A 200-foot-wide Metropolitan Water District (MWD) right-of-way (ROW) traverses the Project site trending northeast-southwest. The 10-foot diameter MWD Foothill Feeder-Rialto Pipeline is contained within this right-of-way.

- Dirt roadways and trails associated primarily with the MWD right-of-way.

- An elevated east-west road serving as a flood control feature is located south of a sand and gravel pit. Service walkways extend from this roadway.

South of 19th Street, the Project area is largely disturbed due to sand and gravel mining activities. Although mining has been discontinued, the topography of the southern portion of the property remains irregular and includes several depressions varying in size, some of which are filled with water. A large basin is located in the south-central portion of the property. Vegetation existing in this area includes native grasses and dense brush. Additionally, a dense growth of bushes and small trees is present in the southern portion of this basin area. Man-made features situated within the southern portion of the Project site include the following:

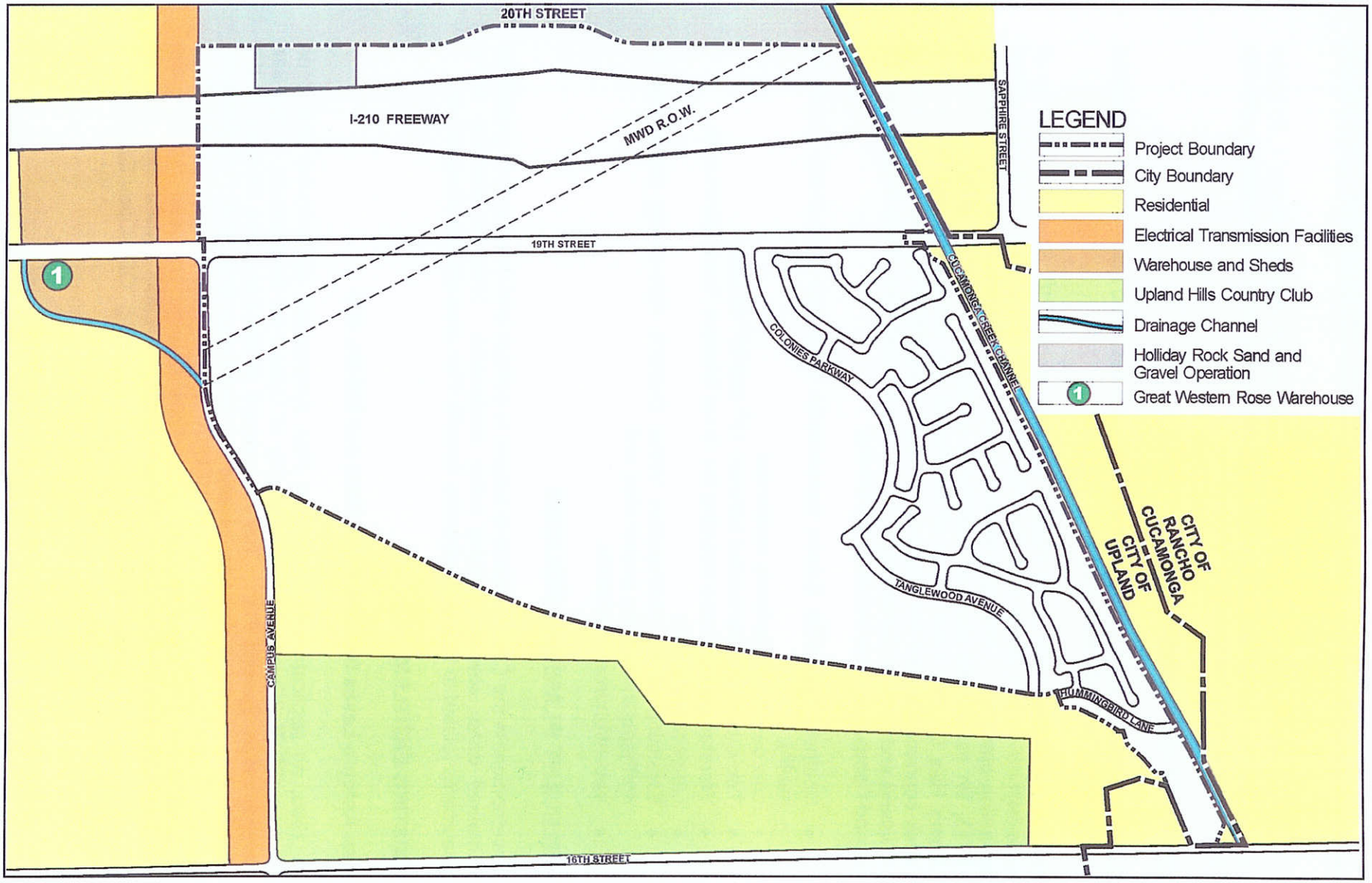
- An extensive, abandoned sand and gravel mining operation. Much of the area west of the Cucamonga Creek Channel has been excavated 40 to 60 feet below the original elevation, necessitating remedial grading to create stable slopes. In addition, mining debris and relict equipment remain in this portion of the property.

- San Bernardino County Flood Control District facilities. Some existing excavations in the southern portion of the site may be from flood control activities rather than mining. Surface waters from west of the site are diverted onto the site and into the existing sand and gravel pit by way of an improved channel that lies under Campus Avenue. The main area of ponding water is at the western end of the abandoned mining pit. A gunited rock fill levee is located about 300 feet west of the Cucamonga Creek Channel, at the eastern end of the pit. The levee base appears above the top of the channel.

- The recently constructed outlet of the City's 20th Street storm drain.

- An east-west levee is situated along the southern boundary of the site. A roadway extends along the top of this levee and a concrete box culvert-type outlet is located mid-way across. From this point south, the culvert is situated underground and connects with an open air, improved trapezoidal channel at the edge of the Upland Hills Country Club Golf Course.

- Isolated piles of artificial fill are widely scattered throughout this portion of the site. The largest piles are clean sand and gravel stockpiles. A concrete dump area is located approximately 600 feet northwest of the levee outlet.



Source: LSA Associates, Inc.

Not to Scale

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

06/02 JN 10-101248

Exhibit 5.1-1

CITY OF UPLAND
THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Existing Land Uses

In addition, the easterly portion of the site, consisting of Planning Areas 1, 2, 3 and 16C, is currently under construction for 305 residential units in accordance with the 1998 Specific Plan Amendment.

OFF-SITE LAND USES

Existing land uses surrounding the Project site are described below and illustrated on Exhibit 5.1-1, *Existing Land Uses.*

The area situated north of the Project site and beyond 20th Street is made up of undeveloped vacant lands and the Holliday Rock Company's sand and gravel extraction operation. Land uses situated south of the Project site include Tract No. 12613, an established planned community consisting of 160 dwellings,[2] and the Upland Hills Country Club. East of the Project site and beyond the Cucamonga Creek concrete channel are single-family residences (SFR) located within the cities of Upland and Rancho Cucamonga. Land uses situated west of the Project site and beyond Campus Avenue include the following:

- Southern California Edison transmission lines and right-of-way (north to south);
- Low density single-family residential;
- Two City reservoirs located between 19th and 20th Streets;
- Warehouse/shed uses including the Great Western Rose Warehouse;
- Landscape nursery;
- Extension of the Metropolitan Water District's right-of-way (southwest to northeast through the project site); and
- Vacant/undeveloped lands.

RELEVANT PLANNING POLICIES

Development in the City of Upland is subject to policies and development guidelines contained within several planning policy documents. Relevant planning policy documents related to land use within the Specific Plan area are described below.

EXISTING ENTITLEMENTS

San Antonio Lakes Specific Plan (1988) and EIR No. 800

In 1986, an application for a General Plan Amendment (GPA-86-04) and Zone Change (ZC-86-05) was filed with the City of Upland for development of the San Antonio Lakes Specific Plan. The Amendment to the Land Use Element of the General Plan proposed changing the land use designation from MDR 7-12 (Medium-Density Residential – 7 - dwelling units (DU)/Acre) and Flood Control/Open Space to PUD (Planned Unit Development). The Zone Change proposed replacing the existing "(RM-4.4)-S" (Residential Multiple-Family - 4,400 square foot (SF) lot area/dwelling – Supplemental Use) Zone and the existing "OS" (Open Space) Zone with San Antonio Lakes Specific Plan No. SPR-7.

[2] Tract No. 12613 is a medium density planned community consisting of 7 to 12 dwelling units per acre (du/ac).

Development of the San Antonio Lakes Specific Plan was intended to be implemented in six phases over an eight-year period and involved the following project components:[3]

> *"Development of the 440.5-acre San Antonio Lakes property will require an Amendment to the City General Plan and Zoning Map, to convert the existing "Open Space" designations to a "PUD" [Planned Unit Development] designation. The proposed Specific Plan is divided into 19 planning areas on the basis of land uses. These uses include low, medium-low and medium density residential neighborhoods, highway and community-oriented commercial use, a business park and specialty commercial site. Its extensive public facilities and open space include a central lake feature with greenbelts and trails, a flood control corridor and drainage basin along the southern boundary, a fire station, and a 16.8-acre combination elementary school/public park site. An extensive circulation network is proposed including access roads through the site and the proposed Route 30 Freeway right-of-way near the northern boundary."*

In September 1988, the City Council adopted GPA-86-04 and certified Final EIR No. 800. Shortly thereafter in October 1988, the City Council adopted ZC 86-05 and the San Antonio Lakes Specific Plan. More specifically, Section 12, *Planning and Zoning of Specific Plan No. SPR-7*, was adopted as an Amendment to Article IX of the Upland Municipal Code, *Planning and Zoning*. Chapter 9600, *San Antonio Lakes Development Regulations*, was added to Article IX. In addition, specific zoning districts were designated on the Zoning Map. The zoning districts established by the Specific Plan are detailed in Table 5.1-1, *San Antonio Lakes Specific Plan Zone Districts*.

Table 5.1-1
San Antonio Lakes Specific Plan Zone Districts

Zones	Description
Single-Family Residential Zones	
SFR – 10	Residential, Single-Family Zone - 10,000 SF lot area/dwelling
SFR – 7.5	Residential, Single-Family Zone - 7,500 SF lot area/dwelling
SFR – 6	Residential, Single-Family Zone - 6,000 SF lot area/dwelling
SFR – 5	Residential, Single-Family Zone - 5,000 SF lot area/dwelling
SFR – 4.5	Residential, Single-Family Zone - 4,500 SF lot area/dwelling
Multiple-Family Residential Zone	
MFR	Multi-Family Residential Zone
Commercial Zones	
BP	Business Park Zone[1]
CH-SAL	Commercial, Highway Zone - San Antonio Lakes
CS	Commercial, Specialty Zone
Special Purpose Zone	
OS-SAL	Open Space Zone - San Antonio Lakes

NOTE:
[1] For purposes of the San Antonio Lakes Specific Plan, the "AP" and "BP" zoning designations are interchangeable and synonymous. For the AP/BP Zone, the provisions, covenants and restrictions of Section 9626, Article IX, of the Upland Municipal code shall apply. Source: Figure 5, *San Antonio Lakes Specific Plan*, 1988.

[3] San Antonio Lakes Specific Plan/EIR, Turrini & Brink, September 1988, Page 11.

Tentative Tract Map No. 13766

Tentative Tract Map No. 13766 was approved by the City Council in December 1988. This Master Tentative Tract Map was approved to create 30 lots intended for future residential, commercial, and public facility development and to establish a circulation system in accordance with the San Antonio Lakes Specific Plan (SPR-7).

1996 Amendment to Land Use Element

In 1996, the General Plan Land Use Element was amended by the City of Upland creating new land use designations including designations regulated by a Specific Plan Overlay provision. As a result, the Project site's land use designation was changed from PUD to Residential/Commercial (SP).

The Colonies at San Antonio Specific Plan Amendment and Supplemental EIR (1998)

Nine years after adoption of the San Antonio Lakes Specific Plan, there was renewed interest in developing the site. However, to realistically proceed with site development required certain modifications to the 1988 San Antonio Lakes Specific Plan.

In 1998, an application for a Specific Plan Amendment was filed with the City for development of "The Colonies at San Antonio Specific Plan". The new owner of the property requested an Amendment to the adopted San Antonio Lakes Specific Plan to reflect economic realities of the 1990's. The Colonies at San Antonio Specific Plan (1998) proposed the following Amendments to the San Antonio Lakes Specific Plan (1988):

- Change the Project name from "San Antonio Lakes Specific Plan" to "The Colonies at San Antonio Specific Plan."

- Modify the Specific Plan's phasing to reverse the order of Phases 1 and 2. As a result, Planning Area 1 and portions of Planning Areas 18 and 19 would be developed in the first phase of development and Planning Areas 7, 16, 17 and 18 would be developed in the second phase of development. Generally, development of the Specific Plan would begin along its eastern boundary and proceed westerly. The Specific Plan Amendment also modifies the infrastructure development plan to correspond to the proposed modification of land development phasing.

- Reduce the minimum lot size in Planning Area 1 from 7,500 SF to 4,500 SF, 5,000 SF and 6,000 SF.

- Realign Tanglewood Avenue slightly to the west. The result of the reduction in minimum lot size I Planning Area 1 and the Tanglewood Avenue realignment would be an increase in allowable development within Planning Area 1 from 195 to 320 dwelling units.

- Revise the phasing plan permitting the development of parts of what was originally adopted as Phase 2 (Planning Area 1) to be developed as the first

increment of development, along with portions of Planning Areas 18 and 19 which are included as part of Phase I development in the 1989 adopted Specific Plan.

- Rename 18th Street to Colonies Parkway and realign the roadway from Campus Avenue to 19th Street. Tanglewood Avenue would "T" into Colonies Parkway at Planning Areas 1 and 3.

- Modify the configuration of Planning Areas 2, 5, and 6 to reflect the realignment of Tanglewood Avenue (Colonies Parkway) to the west.

- Change the Zone for Planning Area 1 from SFR 7.5 (7,500 SF lots) to SFR-4.5 (4,500 SF lots), SFR-5 (5,000 SF lots), and SR-6 (6,000 SF lots).

- Revise certain development standards in the zoning regulations portion of the Specific Plan.

The City of Upland approved the Specific Plan Amendment and certified the Supplemental EIR in October 1998.

Tentative Tract Map No. 14983

Along with the Specific Plan Amendment, the City of Upland approved Tentative Tract Map No. 14983 for 305 SFR units within Phase 1 in the eastern portion of the Specific Plan area. Construction of Phase I is presently underway.

CITY OF UPLAND GENERAL PLAN

The City of Upland General Plan was adopted in June 1982 and has been updated through 1996. The General Plan is comprised of all seven elements mandated by State law and two permissive elements. The State-mandated elements, which govern all development on private property within the City, including residential, commercial and industrial uses are the following: Land Use; Housing; Circulation; Safety; Open Space; Conservation; and Noise. The permissive elements contained in the General Plan include the Scenic Highways and Seismic Safety Elements. Each of the Elements provides the goals, policies, and plans for the future of Upland.

The nine elements contained in the General Plan and their respective major findings are described below. The General Plan goals and strategies relevant to the proposed development are detailed in Table 5.1-2, *General Plan Consistency Analysis*.

Land Use Element

This Element designates the general distribution, location, and extent (including standards for population density and building intensity) of the uses of land for housing, business, industry, open space, education, public buildings and grounds, solid and liquid waste disposal facilities, and other categories of public and private uses. Additionally, this Element describes the proposed land use pattern for the

community. According to the Land Use Element, "residential land uses are expected to continue as a predominant land use in Upland."[4]

The Land Use Element has identified assumptions about the future of the City. These assumptions were the basis for identifying the General Plan policies that would direct the future development pattern and mix of the City's land uses. Assumptions underlying the General Plan policies include the following[5]:

- Upland will be a predominantly low-density residential community;
- Community and neighborhood values will not be compromised by new development;
- Upland is not likely to become a major regional retailing or employment center;
- Additional economic development in Upland can take place in selected parts of the City;
- California is changing, and these changes will affect Upland and its neighborhoods; and
- Transportation and air quality concerns will increasingly affect land use planning and lifestyles of Upland residents.

The Project site's and surrounding area's land use designations pursuant to the City of Upland General Plan Land Use Map are illustrated on Exhibit 5.1-2, *Existing General Plan Designations and Zoning Districts*.

On-Site Land Use Designations

With the exception of the I-210 Freeway[6], the Project site is entirely designated Residential/Commercial (SP). The Land Use Element describes the Residential/ Commercial (SP) land use category as follows:

> "*This designation is applied to the San Antonio Lakes Specific Plan area and is intended to facilitate the development of high quality residential, commercial, and open space uses.*"[7]

Off-Site Land Use Designations

Land use designations in the areas surrounding the Project site include the following:

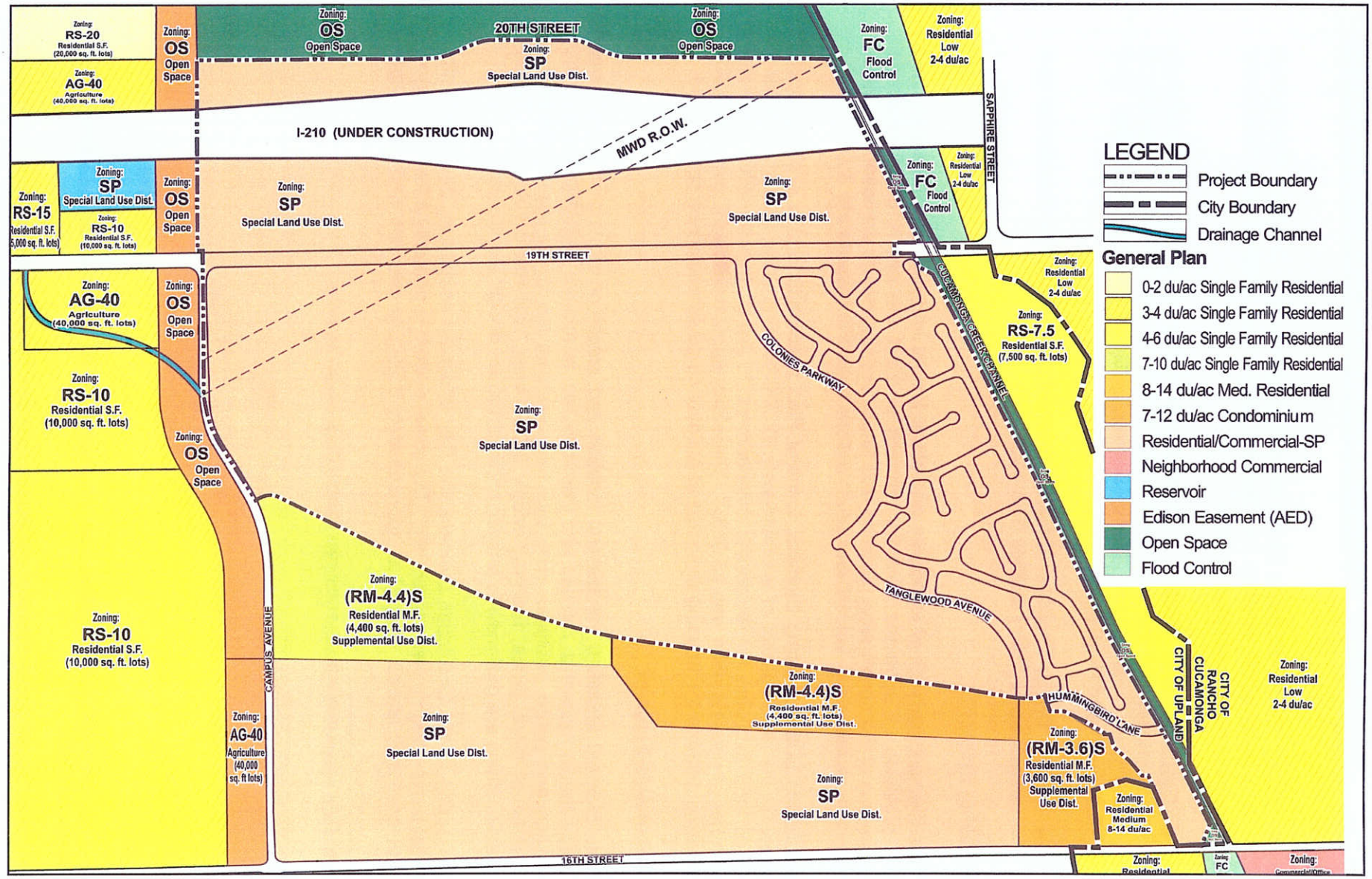
- North & Beyond 20th Street: Open Space (OS).

[4] City of Upland General Plan Executive Summary, June 1982, Page 2.3.

[5] General Plan Land Use Element, April 8, 1996, Page IV-59.

[6] The I-210 Freeway has not been designated within a land use category.

[7] City of Upland General Plan Land Use Element, April 1996, Page IV-36.



Source: LSA Associates, Inc.

Not to Scale

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

06/02

JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Existing General Plan Designations and Zoning Districts

Exhibit 5.1-2

- South: SFR 7-10 du/ac; Multi-Family Condominium (7-12 du/ac); Residential/ Commercial-SP; Medium Residential (8-14 du/ac)[8], Single-Family Residential (3-4 du/ac)[9], and Flood Control[10];

- East: Public Facilities (Cucamonga Creek Channel); Single-Family Residential (4-6 du/ac within the City of Upland and 2-4 du/ac in the City of Rancho Cucamonga); Flood Control,[11] Single-Family Residential (3-4 du/ac)[12] and Neighborhood Commercial[13].

- West: Public Facilities (Edison Easement); Single-Family Residential (3-4 du/ac); and Public Facilities (Reservoir).

Housing Element

This Element consists of standards and plans for the improvement of housing and the provision of adequate sites for housing to meet the needs of all economic segments of the community. Existing and future housing needs are identified in this Element. Additionally, current and future actions to address needs are described.

According to the Housing Element, General Plan residential land use policy would allow for the development of approximately 32,000 housing units, assuming buildout of all land available for residential development.[14] As of January 2001, the total number of housing units was 25,603.[15] Therefore, approximately 20 percent (6,397 housing units) of the housing projected at buildout could potentially be constructed.

Circulation Element

This Element identifies the general location and extent of existing and proposed major roads, highways, railroad and transit routes, terminals, and other local public utilities and public facilities. The City has classified the street system based on number of travel lanes, roadway width, right-of-way, and traffic volumes. These classifications are designed to provide minimum street design standards.

According to the Circulation Element, the City is almost completely developed with most traffic patterns well established. The street system is primarily a traditional grid, with east-west streets spaced at approximately 0.25-mile intervals and north-south

[8] This land use designation is located within the Rancho Cucamonga City limits.

[9] Ibid.

[10] Ibid.

[11] Ibid.

[12] Ibid.

[13] Ibid.

[14] City of Upland Consolidated Plan Update Draft, The Planning Center, Section III, *Housing and Community Development Needs*, April 2000.

[15] Report E-5, *City and County Population and Housing Estimates*, California State Department of Finance, January 2001.

streets at approximately 0.5-mile intervals. Roadways potentially affected by the Project and their respective classifications include the following:

- 19th Street. This roadway is identified as a collector street from Mountain Avenue to the eastern City limits. A collector street distributes vehicular trips from the arterials to and within residential neighborhoods, commercial, and industrial areas. Nineteenth Street (SR-30) extends east-west through the northern portion of the Specific Plan area. As part of the future I-210 freeway project, 19th Street will relinquish its designation as SR-30 and will be realigned in order to form the new Campus Avenue interchange.

- 20th Street. This roadway is identified as a collector street.

- Campus Avenue. This roadway is identified as a Secondary Arterial.[16] The secondary (or minor) arterial street system interconnects with and augments the major street system. It provides service for trips of moderate length at a lower level of mobility than the major arterials.

Street aesthetics, non-motorized circulation, and public transportation are also addressed in this Element. The I-210 Freeway that traverses the northern portion of the subject property is identified as an important link in the regional circulation plan. Additional information regarding the City's street classification system is detailed in Section 5.3, *Traffic and Circulation*.

Scenic Highways Element

This Element prescribes the development establishment, and protection of scenic highway corridors. There are presently no officially designated State or County Scenic Highways in the City. However, there are routes of scenic and historical interest that warrant consideration for such designation. There are no routes of scenic or historical value located in the Project area.

Seismic/Safety Element

The Seismic/Safety Element identifies and appraises seismic and geologic hazards. The City is located in a region that has historically been affected by considerable seismic activity.[17] This Element identifies several fault systems that should be considered as potentially hazardous. This Element identifies ground shaking as the primary seismic threat facing Upland. Also, potential community hazards have been identified including wildland fires, urban fires, hazardous materials, flood hazards, and airport safety operations.

[16] This roadway is designated as a two-lane collector street between 20th Street and 23rd Street (north of the Project site).

[17] Ibid., Page 2.4.

Open Space/Conservation Element

The Open Space/Conservation Element details plans and measures for the preservation of open space for natural resources, for the managed production of resources, for outdoor recreation, and for public health and safety. In addition, this Element provides for the conservation, development, and use of natural resources, including water, forests, soils, rivers, lakes, harbors, fisheries, wildlife, minerals, and other natural resources. With respect to recreation, existing and planned park acreage fall short of total needs.[18]

CITY OF UPLAND MUNICIPAL CODE/ZONING ORDINANCE

Part IV of the Upland Municipal Code, *Zoning*, discusses the provisions of the Zoning Ordinance of the City of Upland. According to Section 9401.010, the Ordinance is intended to accomplish the following:

- To encourage, classify, designate, regulate, restrict and segregate the highest and best location and use of buildings, structures, and land for agriculture, residence, commerce, trade, industry, water conservation, or other purposes in appropriate places
- To regulate and limit the height, number of stories, and size of buildings and other structures designed, erected, or altered;
- To regulate and determine the size of yards and other open spaces; and
- To regulate the limit of density of population, and for said purposes to divide the city into districts of such number, shape and areas as may be deemed best suited to carry out these regulations and provide for their enforcement.

The districts into which the City is divided are illustrated on the Zoning Map. The Zoning Map is a regulatory mechanism that dictates specific and immediate control of land uses and identifies distinct uses permitted within each zone. The Map depicts a specific location for each classification of land use and establishes space requirements and development standards applicable to each zone. The zoning districts on the Project site and surrounding areas are illustrated on Exhibit 5.1-2, *Existing General Plan Designations and Zoning Districts*.

On-Site Zoning Districts

As illustrated on Exhibit 5.1-2, the Project site is entirely within the San Antonio Lakes Specific Plan (No. SPR-7) Zone, with the exception of the I-210 Freeway.[19] Chapter 9600 of the Zoning Ordinance, *San Antonio Lakes Development Regulations*, notes the following with respect to this Zone:

> *"Intent and purpose. For the purpose of promoting and protecting the public health, safety and welfare of the people of the City of Upland, and to provide for the social, physical and economic advantages resulting from*

[18] Ibid.

[19] The I-210 Freeway has not been designated within a zoning district.

comprehensive and orderly planned use of land resources, a planning ordinance establishing objectives and policies of the San Antonio Lakes Specific Plan; authorization . . . committees; dividing the San Antonio Lakes Specific Plan area into zones; adopting a map of said land use zones; governing the use of said land use zones; governing the use of land for residential and nonresidential purposes in the San Antonio Lakes project area; establishing standards of design and improvement of land subdivision."

The zoning districts established by the Specific Plan and their description and purpose are provided below.

Single-Family Residential Zones

- SFR-10. The "SFR-10" single-family residential zone is intended as a zone for lots with a minimum area of 10,000 SF, with not more than one (1) single-family dwelling and its customary accessory buildings upon any one (1) lot.

- SFR-7.5. The "SFR-7.5" single-family residential zone is intended as a zone for lots with a minimum area of 7,500 SF, with not more than one (1) single-family dwelling and its customary accessory buildings upon any one (1) lot. The "SFR-7.5" zone is intended for application in low-density areas.

- SFR-6. The "SFR-6" single-family residential zone is intended as a zone for lots with a minimum net area of 6,000 SF, with not more than one (1) single-family dwelling and its customary accessory buildings upon any one (1) lot. The "SFR-6" zone is intended for application in Planning Areas 2 and 3 of the San Antonio Lakes Specific Land Use Plan.

- SFR-5. The "SFR-5" single-family residential zone is intended as a zone for lots with a minimum area of 5,000 SF, with not more than one (1) single-family dwelling and its customary accessory buildings upon any one (1) lot. The "SFR-5" zone is intended for application in Planning Areas 4 and 5 of the San Antonio Lakes Specific Land Use Plan.

- SFR-4.5. The "SFR-4.5" single-family residential zone is intended as a zone for lots with a minimum net area of 4,500 SF, with not more than one (1) single-family dwelling and its customary accessory buildings upon any one (1) lot. The "SFR-4.5" Zone is intended for attached and detached single-family dwelling units. The provisions of the "SFR-4.5" Zone shall apply to Planning Areas 6 and 8 of the San Antonio Lakes Specific Land Use Plan.

Multiple-Family Residential Zone

- MFR. The "MFR" multi-family zone is intended as a zone for multi-family residences and apartments with common open space and recreation areas. The "MFR" zone shall apply to Planning Areas 9 and 11 of the San Antonio Lakes Specific Land Use Plan. The "MFR" multi-family residential zone is established to encourage and promote a desirable environment for family life by providing a zone for apartments using modern site planning techniques.

Commercial Zones

- AP. The "AP" administrative and professional office Zone is intended to provide for the development of an integrated administrative and professional office zone wherein all of the related types of uses and facilities may be located. The "AP" zone is intended for application to Planning Area 14 of the San Antonio Lakes Specific Land Use Plan.

- CH-SAL. Uses in the commercial classification generally do not belong in either the specialty commercial center or the business park. They are related to the use of the highway and to other types of drop-in trade. These uses are provided for in the "CH-SAL" highway commercial zone. The "CH-SAL" zone is intended for application to Planning Areas 12, 13, 15, and 16 of the San Antonio Lakes Specific Land Use Plan. This zone may serve many purposes, including neighborhood shops, the commercial center, and such other uses as may properly belong in a city's commercial center.

- CS. The "CS" zone is intended to create, preserve, and enhance areas for businesses that serve the local community and take full advantage of proximity to recreation and open space areas. The stores are intended to fit into the surrounding residential pattern of development and not create either architectural or traffic conflicts. The "CS" zone is intended for application to Planning Area 16 of the San Antonio Lakes Specific Land Use Plan.

Special Purpose Zone

- OS-SAL. The "OS-SAL" open space zone is intended to provide for permanent open spaces in the community and to safeguard the health, safety and welfare of the people by limiting development in areas where police and fire protection, protection against flooding by storm water and dangers from excessive erosion are not possible without excessive costs to the community.

  The requirements that apply to each of the zones noted above are outlined in the Code and include, but are not limited to, the following:

  - Permitted primary uses and structures;
  - Permitted accessory uses and structures;
  - Conditional uses and structures
  - Prohibited uses and structures;
  - Site development standards;
  - Building site requirements (i.e., minimum lot dimensions, maximum lot coverage, and minimum floor area per dwelling);
  - Structural setbacks and yards (i.e., front, side and rear yards); and
  - Structural height limitations.

Off-Site Zoning Districts

Zoning districts in the areas surrounding the Project site include the following:

- North & Beyond 20th Street: "OS" (Open Space Zone);

Regional Transportation Plan (2001 RTP). The 2001 RTP represents an assessment of the overall growth and economic trends in the SCAG Region for the years 2001 through 2025 and provides strategic direction for investments during this time period. The Plan is intended to serve as a catalyst for linking the various transportation agency investments within the SCAG Region to provide a cohesive, balanced and multi-modal transportation system that addresses regional goals and is consistent with federal and state requirements.

Regional Transportation Improvement Program (2001 RTIP). The 2001 RTIP was developed in compliance with state and federal requirements. The RTIP is a capital listing of all transportation projects proposed over a six-year period for the SCAG region. The projects include highway improvements, transit, rail and bus facilities, high occupancy vehicle lanes, signal synchronization, etc. The 2001 RTIP was prepared to implement projects and programs listed in the 2001 RTP.

South Coast Air Quality Management Plan (1997 AQMP). The South Coast Air Quality Management District (SCAQMD) has prepared multiple AQMPs to accomplish the five- percent annual reduction goal. The most recent AQMP was published in 1997. The 1997 AQMP was prepared and adopted by the SCAQMD in November 1996. The 1997 Plan contains two tiers of control measures: short- and intermediate-term, and long-term. Short- and intermediate-term measures are scheduled to be adopted between 1997 and the year 2005. These measures rely on known technologies and other actions to be taken by several agencies that currently have the statutory authority to implement the measures.

SIGNIFICANCE CRITERIA

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist form which includes questions relating to land use and relevant planning. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Physically divides an established community (refer to Section X, *Effects Fount Not To Be Significant*);
- Conflicts with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect (refer to Impact Statement 5.1-1); and/or
- Conflicts with any applicable habitat conservation plan or natural community conservation plan (refer to Section 5.6, *Biological Resources*).

Generally, the intermixing of land uses may result in land use incompatibilities. Land use compatibility impacts associated with land development are a factor of quality of life issues, including, but not limited to traffic, noise, risk, and aesthetics (views/physical scale). While these may generally be perceived as subjective

issues, the significance criteria detailed in each of the respective issues sections provides a basis for assessing land use compatibility impacts.

IMPACTS

SUMMARY OF PREVIOUS ENVIRONMENTAL DOCUMENTATION FOR THE COLONIES AT SAN ANTONIO

In 1998, EIR No. 800 concluded that the development of the original San Antonio Lakes project as a Specific Plan was considered to be an advantage, and many of the provisions of the Specific Plan were intended to mitigate potential land use impacts. The Specific Plan provides for coordinated infrastructure planning over a phased development plan. This reduces the level of impacts which could occur at any given time, which would not be possible to achieve through a series of separate subdivisions. The EIR also determined that the proposed residential densities were compatible with existing and proposed surrounding neighborhoods. All applicable land use restrictions and criteria identified in EIR No. 800 would also apply to the 1998 Amendment, as stated in the 1998 Supplemental EIR.

The 1998 Amendment modified the Specific Plan to decrease the minimum lot size in Planning Area 1 from 7,500 to 4,500, 5,500 and 6,500 square-foot lots. In addition, the amended Specific Plan partitioned Planning Area 1 into three smaller units, each with a different zones designation. From north to south, the designation and location of these zones are as follows:

- Planning Area 1A, immediately south of 19th Street consists of 19.2 acres which can accommodate lots sized as small as 4,500 square feet;
- The 23.2 acres which comprise Planning Area 1B, located south of Planning Area 1A, allows lots sized from 5,000 square feet; and
- The lots located on the 29.0 acres of Planning Area 1C, situated north of Hummingbird Lane have a minimum lot size of 6,000 square feet.

Potential land use impacts associated with the development intensity of the 1998 Amendment were previously identified and mitigated to a less than significant level through previous environmental documentation (EIR No. 800).

OVERVIEW OF SPECIFIC PLAN AMENDMENT

A comprehensive Amendment to the existing Colonies at San Antonio Specific Plan is proposed. The amended Specific Plan provides a comprehensive approach to land use planning for development of the Colonies at San Antonio.

The Specific Pan serves as both a City's policy statement regarding the development of a proposed project, as well as a tool to implement the provisions of the City's General Plan as it applies to the specific project area. The emphasis in the specific plan is on standards and development criteria for use in the review of subsequent residential subdivisions and commercial site plans. Per California Government Code, Specific Plans are permitted to regulate site development including permitted

- South: "(RM-4.4)-S" (Residential, Multiple-Family Zone - 4,400 SF lot area/dwelling – Supplemental Use Zone); "(RM-3.6)-S" (Residential, Multiple-Family Zone - 3,600 SF lot area/dwelling - Supplemental Use Zone); "SP" (Special Land Use Zone); Residential Medium (8-14 du/ac)[20]; Residential Low (2-4 du/ac)[21]; and Flood Control[22].

- East: "OS" (Cucamonga Creek Channel); "RS-7.5" (Residential, Single-Family Zone – 7,500 SF lot area/dwelling within the City of Upland and 2-4 du/ac in the City of Rancho Cucamonga); Flood Control[23]; Residential Low (2-4 du/ac)[24]; and Commercial/Office Neighborhood Commercial[25].

- West: "OS" (Edison Easement); "SP"; "RS-10" (Residential, Single-Family Zone - 10,000 SF lot area/dwelling); and "AG-40" (Agricultural Zone - 40,000 SF lot area/dwelling).

APPLICABLE PLANS, POLICIES, AND REGULATIONS

Federal Plans and Policies

Clean Air Act. The Federal Clean Air Act was enacted to protect and enhance air quality and promote the health and welfare of the public. The U.S. Environmental Protection agency (USEPA) has established ambient air quality standards for certain criteria pollutants, which are generally implemented by state and local agencies.

Clean Water Act (Section 404). Section 404(b) of the Federal Clean Water Act was established to preserve water quality, and discourages the alteration or destruction of wetlands. This act requires that the U.S. Army Corps of Engineers evaluate the impacts of discharge of dredged or fill materials into any water of the U.S. The Army Corps Wetlands Policy requires the implementation of mitigation measures for any impacts to designated wetland areas.

National Pollutant Discharge Elimination System Permit Program. This program requires industrial and municipal dischargers to obtain permits from the appropriate Regional Water Quality Control Board (i.e., the Regional Water Quality Control Board). Point source dischargers of pollutants into surface waters are required to obtain a National Pollutant Discharge Elimination System (NPDES) permit. Other dischargers, such as those affecting groundwater or from nonpoint sources are required to file a Report of Waste Discharge. For specified situations, some permits may be waived and some discharge activities may be handled through enrollment in an existing general permit. The existing NPDES (Phase I) storm water program requires municipalities serving greater than 100,000 persons to obtain a NPDES

[20] This Zoning District is located within the Rancho Cucamonga City limits.

[21] Ibid.

[22] Ibid.

[23] Ibid.

[24] Ibid.

[25] Ibid.

storm water permit for construction projects greater than five acres in size. Proposed NPDES storm water regulations (Phase II) expand this existing national program to smaller municipalities with populations of 10,000 persons or more and to construction sites that disturb greater than one acre.

Federal Endangered Species Act. The Federal Endangered Species Act (ESA) was passed in 1973 to provide a process for listing species as endangered or threatened, and establishes requirements for the protection of all listed species. The ESA also identifies candidate species, which may qualify for listing bur are not formally incorporated. The ESA is administered by the U.S. Fish and Wildlife Service.

State Plans and Policies

California Wetlands Policy. The State Wetlands Policy protects marshlands and other designated wetland areas, and requires mitigation for disturbance of wetland areas. The California Department of Fish and Game (CDFG) under Sections 1601 to 1606 administers the wetlands policy.

California Endangered Species Act. The California Endangered Species Act (CESA) was enacted in 1984 to protect rare, threatened, and endangered species in California. The CESA is administered by the CDFG.

Regional Plans/Policies

In addition to locally adopted plans, ordinances, and regulations, a number of regional plans also influence land use planning in the City of Upland. Regional planning agencies such as the Southern California Association of Governments (SCAG) recognize that planning issues extend beyond the boundaries of individual cities. Efforts to address regional planning issues such as affordable housing, transportation, and air pollution have resulted in the adoption of regional plans that affect the City of Upland and the County of San Bernardino. A discussion of regional plans follows.

SCAG has evolved as the largest council of governments in the United States, functioning as the Metropolitan Planning Organization for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura and Imperial, and including 184 cities. The region encompasses a population exceeding 15 million persons in an area of more than 38,000 square miles.

As the designated Metropolitan Planning Organization, SCAG is mandated by the federal government to research and draw up plans for transportation, growth management, hazardous waste management, and air quality. These mandates led SCAG to prepare comprehensive regional plans to address these concerns.

SCAG is responsible for the maintenance of a continuous, comprehensive, and coordinated planning process resulting in a Regional Transportation Plan and a Regional Transportation Improvement Program. SCAG is responsible for the development of demographic projections, as well as the integrated land use, housing, employment, transportation programs, measures, and strategies portions of the South Coast Air Quality Management Plan. The following regional plans affect planning in the City of Upland.

uses, densities, community design, and building size and placement. Specific plans also govern the type and extent of open space, landscaping, roadways, and the provision of infrastructure and utilities. Since the development guidelines established in a Specific Plan focus on the unique needs of a specific area, Specific Plans allows for greater flexibility than is possible with conventional zoning.

The Colonies at San Antonio Specific Plan is a comprehensive document that provides the project area with specific limits on the number and type of residential dwelling units, architectural and landscaping guidelines, development standards and controls, environmental performance standards, clearly defined land uses, and essential development and infrastructure phasing.

CITY OF UPLAND GENERAL PLAN

5.1-1 *The proposed Project has the potential to conflict with the land use plan, goals and strategies of the City of Upland General Plan. Analysis has concluded that a less than significant impact would occur with approval of a General Plan Circulation Element Amendment modifying the 19th Street alignment.*

The General Plan identifies issues that are relevant to development of the proposed Project (as described earlier in the *Existing Conditions* discussion). The following analysis evaluates the Project's potential impacts with respect to these issues.

Land Use Element

According to this Element, residential land uses are expected to continue as a predominant land use in Upland. The proposed Project has been designed to accommodate up to 1,150 new dwelling units of various sizes and types (refer to Table 3-2, *Colonies at San Antonio Specific Plan Land Use Data*). Project implementation would be consistent with this development projection. No impact is anticipated in this regard.

The Project site is designated Residential/Commercial (SP). The General Plan takes into consideration the 1998 Specific Plan since the Land Use Element applies this land use designation to the Colonies at San Antonio Specific Plan area. Further, this land use designation is intended to facilitate the development of residential, commercial, and open space uses. The Project proposes the development of up to 1,150 new dwelling units and a maximum of 1.2 million square feet of commercial land uses. Additionally, the Project proposes a 59-acre centrally located open space area providing passive recreational opportunities (i.e., picnicking, jogging, strolling, and wildlife viewing). The Project does not propose an Amendment to the Land Use Map and is considered consistent with the Residential/Commercial (SP) designation. A less than significant impact is anticipated in this regard. (Refer to the *Zoning Ordinance* section below for a discussion of the Project's proposed Amendments to the Specific Plan).

Housing Element

As previously noted, approximately 20 percent (6,397 housing units) of the housing projected at community buildout could potentially be constructed. The proposed

Project has been designed to accommodate up to 1,150 new dwelling units. Project implementation would not exceed housing buildout projections. A less than significant impact is anticipated in this regard.

Circulation Element

The Project proposes the development of an estimated 80.12 acres of roadways including approximately 34.76 acres of backbone surface roadways throughout the Project area and local roadways within individual residential Planning areas, as well as 45.36 acres within the I-210 right-of-way.

Roadways potentially impacted by Project implementation include 19th Street, 20th Street, and Campus Avenue.

- 19th Street. The Project proposes a General Plan Circulation Element Amendment modifying the 19th Street alignment as an east-west through route. Historically, 19th Street served as a major east-west regional arterial, connecting foothill communities in San Bernardino County. Residents within the residential neighborhoods west of the Project site have expressed concern with respect to traffic speeds and noise created by this roadway. With construction of the I-210 Freeway, 19th Street is no longer needed as a regional arterial. Additionally, as a part of planning and design for the proposed freeway interchange at Campus Avenue (within Project limits), the Project Applicant and the City have sought to reduce traffic speeds along 19th Street and redirect regional through traffic onto the I-210 Freeway, which is currently under construction. This objective would be accomplished by offsetting the roadway segments of 19th Street at Campus Avenue as illustrated on Table 3-2, *Colonies at San Antonio Specific Plan Land Use Data*.

  Nineteenth Street is defined in the Circulation Element as an east-west collector street. The Project does not involve changes to this existing classification or minimum design standards. However, the Project's proposed alignment of this roadway would not be consistent with the east-west alignment identified in the Circulation Element. This inconsistency is considered a potentially significant impact. As a result, an Amendment to the Circulation Element would be required to reflect the proposed alignment. With approval of the General Plan Circulation Element Amendment, this impact would be considered less than significant.

- 20th Street. Trips generated by the proposed Project (i.e., commercial uses) would be distributed onto this roadway. The Project proposes improvements to this collector street.

- Campus Avenue. The Circulation Element identifies this roadway as a Secondary Arterial. As illustrated on Exhibit 3-3, *Land Use Plan*, the Project proposes to modify the alignment of this roadway. The Project's proposed alignment would be generally consistent with the north-south alignment identified in the Circulation Element. The Project does not involve changes to the existing classification or minimum design standards for this roadway. A less than significant impact is anticipated in this regard.

Refer to Section 5.3, *Traffic and Circulation*, for a discussion of potential Project impacts with respect to traffic and circulation issues.

Scenic Highways Element

Refer to Section 5.2, *Aesthetics/Light and Glare*, for a discussion of potential impacts to scenic highways.

Seismic/Safety Element

Refer to Section 5.7, *Geology and Soils,* for a discussion of impacts associated with potential seismic and geologic hazards. Refer to Section 5.9, *Public Services and Utilities,* for a discussion of impacts associated with potential urban and wildland fires. Refer to Section 5.8, *Hydrology and Drainage,* for a discussion of impacts associated with potential flood hazards.

Open Space/Conservation Element

Refer to Section 5.6, *Biological Resources,* for a discussion of potential impacts to biological resources. Refer to Section 5.9, *Public Services and Utilities,* for a discussion of potential impacts to parks and recreational facilities.

General Plan Assumptions

The Land Use Element identifies assumptions underlying the General Plan policies that are relevant to future development in the City (refer to the *Existing Conditions* discussion). The following analysis evaluates the Project's consistency with these assumptions:

- Predominantly Low-Density Residential. The Specific Plan Amendment proposes development of as many as 800 low-density residential dwelling units, constituting a majority (80 percent) of all dwelling units proposed. The type of residential development proposed is predominantly low-density.

- Compromise Community/Neighborhood Values. The Specific Plan has identified design guidelines intended to establish planning and design parameters allowing design controls for future development. These guidelines provide design criteria for site planning, design influence, architecture, parking/circulation, etc. In addition, all future development would be subject to design review by the City pursuant to Chapter 9103 of the Municipal Code. Design review would ensure future development is consistent with the expectations and character for the community.

- Limited Availability for Regional Retail Development. This assumption was in response to the economic climate that existed at the time the Land Use Element was prepared. The Project proposes amendments to the Specific Plan that would reflect economic interests of the present day. Further, as discussed in Table 5.1-2, *General Plan Consistency Analysis*, the Land Use Element has identified various goals and strategies that indicate certain desires of the City to provide for regional commercial development. The Specific Plan proposes approximately 103 acres of Commercial-Highway

development along the I-210 Freeway (PA's 18 through 21) intended to serve regional users. These portions of the Project site are best suited for regional commercial uses due to the areas' visibility and accessibility.

- Employment Center and Additional Economic Development. The Commercial-Highway and Neighborhood Commercial uses proposed by the Project would create residential employment opportunities and enhance the City's tax base. These assumptions for development have also been identified as strategies in the Land Use Element.

- California's A Changing Market. The proposed amendments to the Specific Plan are intended to be responsive to the present day housing market. The Specific Plan proposes the development of diverse types of housing including "SFR-4.0", "SFR-4.5", "SFR-5.0", "SFR-6.0" and "LAH" which provide for low- and medium-density housing opportunities. According to the Specific Plan, "the purpose of these single family zoning classifications is to provide opportunities for a variety of quality housing products to meet a range of lifestyle and housing needs". Also, the Project proposes amenities/facilities including neighborhood commercial uses, recreational open space, a school and a fire station.

- Transportation/Air Quality Concerns Affect Planning. The Project has been designed such that commercial uses are segregated from residential uses. However, the Project proposes an interconnected community-accessible trail system that would also serve as a link between residential areas and the commercial areas proposed along/north of 19th Street. The Project proposes two trailheads (east and west of PA-4) that would link the residential areas with 19th Street. The proposed trail system provides future residents with an alternative use of their cars. Also, the availability of trails as a transportation alternative could result in benefits including reduced traffic volumes and air quality emissions.

The consistency of the proposed Project with the applicable goals, strategies, and policies of the Land Use and Housing Elements are provided in Table 5.1-2, *General Plan Consistency Analysis*. As is detailed in Table 5.1-2 the proposed Project is considered consistent with all of the applicable goals, strategies, and policies of the General Plan.

CITY OF UPLAND MUNICIPAL CODE/ZONING ORDINANCE

5.1-2 *The proposed Project could conflict with the land use plan, policies and regulations of the City of Upland Municipal Code/Zoning Ordinance. Analysis has concluded that a less than significant impact would occur with approval of a Specific Plan Amendment.*

The following is a discussion of the Project's proposed Amendments to the Specific Plan and a consistency analysis of each.

Table 5.1-2
General Plan Consistency Analysis

Applicable General Plan Goal/Objective	Project Consistency Discussion
LAND USE ELEMENT	
G* #1A: Preserve and maintain the predominantly low-density residential character of the community.	Consistent: The Specific Plan (SP) proposes the development of as many as 800 low-density residential dwelling units (DU), constituting a majority (80 percent) of all DU's proposed. The type of residential development proposed is predominantly low-density.
STR #1A.1: Designate land currently developed with a stable, low-density residential use for continued low-density residential uses, unless conversion to another use is provided for by the strategies of this plan.	Consistent: The existing entitlement permits the development of as many as 751 low-density DU's (approximately 51 percent). The SP proposes the development of approximately 80 percent low-density DU, consistent with the entitled low-density uses.
STR #1A.2: Ensure that the type and quality of housing adjacent to existing low-density residential development is compatible and provides reasonable continuity with the existing uses through the establishment of land use designations.	Consistent: Low and medium density residential areas exist south, east and west of the Project site. The SP proposes primarily "SFR" (Single-family Residential) and "OS" (Open Space) uses adjacent to these existing uses. The proposed SFR and OS uses would be compatible with existing residential uses. The Project also proposes "NC" (Neighborhood Commercial) uses in Planning Areas (PA) 18 and 20, and a "CF" (Community Facility) (Fire Station) use in PA-14. The proposed NC and CF uses would be compatible with the existing low-density residential uses situated to the west since the existing Edison Easement would serve as a buffer between the two uses.
STR #1A.3: Permit the development of single-family residential units designated for a minimum of 3,727.68 acres within the City.	Consistent: The SP proposes the development of approximately 162 acres of single-family residential units.
STR #1A.4: Develop "neighborhood plans" to establish improvement programs and to control the development of land uses which may adversely impact the character of low-density residential neighborhoods. (Refer to Goal 1.D.)	Consistent: The SP would not adversely impact the character of low-density residential neighborhoods. Also, refer to Discussion STR #1A.1 and STR #1A.2.
STR #1A.6: Restrict single-family uses from non-residential zoning districts.	Consistent: The SP does not propose SFR uses in non-residential zoning districts.
G #1C: Create cohesive neighborhoods with compatible land use patterns.	Consistent: The SP proposes cohesive neighborhoods in the planning areas with various densities in a compatible land use pattern.
STR #1C.1: Allocate medium-density land use designations to areas currently characterized by predominantly multi-family housing.	Consistent: The SP proposes "LAH" (Luxury Attached Housing) in PA-4. The proposed LAH uses would be surrounded primarily by OS uses. A small portion of PA-5 (SFR) is proposed adjacent to PA-4, however, an open space buffer area would separate the two uses.

* G = Goal

Table 5.1-2 - Continued
General Plan Consistency Analysis

Applicable General Plan Goal/Objective	Project Consistency Discussion
STR #1C.3: Revise low- and medium-density land use designations to clarify the manner in which they are to be interpreted in mixed-use areas.	Consistent: The Project does not propose an Amendment to the Land Use Map and is considered consistent with the Residential/Commercial (SP) designation.
STR #1C.4: Establish guidelines for low and medium-density development in selected mixed-use neighborhoods.	Consistent: Section 7.0 of the SP, Development Regulations, establishes residential zoning districts and permitted uses, and defines specific development regulations within the SP area. In addition, the SP includes a Section (Section 8.0) detailing design guidelines for both residential and commercial uses.
STR #1C.7: Revise development standards to minimize adverse impacts on adjacent single-family uses in zoning districts consistent with medium-density land use designations.	Consistent: Refer to Discussion STR #1A.2 and STR #1C.4..
STR #1C.8: Designate appropriate areas to meet the demand for diverse types of housing, with properly related amenities and facilities.	Consistent: The SP proposes the development of diverse types of housing including "SFR-4.0", "SFR-4.5", "SFR-5.0", "SFR-6.0" and "LAH" which provide for low- and medium-density housing opportunities. According to the SP, "the purpose of these single family zoning classifications is to provide opportunities for a variety of quality housing products to meet a range of lifestyle and housing needs". Also, the Project proposes amenities/facilities including neighborhood commercial uses, recreational open space, a school and a fire station.
STR #1C.9: Establish an ongoing design review process with specific design criteria to guide compatible development within mixed density residential areas	Consistent: To ensure implementation of the SP design guidelines and landscaping requirements, the proposed development would be subject to design review by the City pursuant to Chapter 9103 of the Municipal Code. Also, refer to Discussion STR #1C.4.
STR #1C.10: Multi-family residential projects should, through the application of state-of-the-art site planning techniques, provide an efficient, desirable residential environment for inhabitants of the project and enrich the visual quality of the City.	Consistent: The SP proposes multi-family residential uses (LAH) in PA-4. Development of PA-4 would be subject to design review to ensure implementation of the SP design guidelines and landscaping requirements. Also, refer to Discussion STR #1C.4.
G #2A: Provide a healthy, affordable, and desirable living environment through the application of space and occupancy standards and acceptable planning and development principles.	Consistent: The proposed SP provides for a range of residential uses. Also, refer to Discussions STR #1C.4 and STR #1C.9.

Table 5.1-2 - Continued
General Plan Consistency Analysis

Applicable General Plan Goal/Objective	Project Consistency Discussion
STR #2A.3: Permit a range of residential unit types and densities to establish low-density areas to be preserved, mixed-use areas to be protected, low- and medium-density housing opportunities, areas needing stabilization, and areas which could benefit from recycling. Such a range includes: Single-family Residential (0-4 du/ac.); Single-family Residential (4-6 du/ac.); Single-family (7-10 du/ac.); Single-family Mobile Home Park (8-14 du/ac.); Multi-family Condominium (7-12 du/ac.); Multi-family Condominium (12/20 du/ac.); Multi-family (7-12 du/ac.) Multi-family (12-20 du/ac.)	Consistent: The SP proposes the development of diverse types of housing including "SFR-4.0", "SFR-4.5", "SFR-5.0", "SFR-6.0" and "LAH" which include low- and medium-density housing opportunities.
STR #2A.4: Accommodate land use changes in accordance with the Land Use Map for the City.	Consistent: The SP does not propose amendments to the City's Land Use Map.
STR #2A.5: Rezone areas where there is an inconsistency between the Zoning Code and the Land Use Element Map. Require that all development in each General Plan land use classification adhere to the revised requirements and standards.	Consistent: The Project proposes SP amendments including the deletion and creation of certain zoning districts. These amendments would be in compliance with the Land Use Map.
G. #4A: Provide for the continuation and development of sufficient land uses to serve the commercial, education, recreational, industrial and social needs of existing residents and projected population growth.	Consistent: The SP proposes approximately 115 acres of commercial uses, an approximately 10-acre school site, and approximately 59 acres of open space (including passive open space and trails). These uses are intended to accommodate the needs of existing and future residents.
STR #4A.1: Formulate nonresidential development policies for target land use types within retail, office and light industrial uses.	Consistent: The SP proposes a maximum of 1.2 million SF of commercial land uses encompassing approximately 115 acres. The SP has identified commercial design guidelines intended to establish planning and design parameters allowing design controls for future development of non-residential uses. These guidelines provide design criteria for site planning, design influence, architecture, parking/circulation, etc.
STR #4A.2: Designate a minimum of 544.74 acres of land to accommodate regional commercial, office commercial and other commercial uses which provide for the needs of residents and projected growth, designating these areas as: Highway Commercial; Regional Commercial; Commercial/ Professional; Office Only; Transit Commercial; Neighborhood Commercial and Central Trading.	Consistent: The SP proposes a maximum of 1.2 million SF of commercial land uses on approximately 115 acres that would provide for the needs of the residents and projected growth.
STR #4A.3: Redesign industrial/commercial sites, or allow for adaptive reuse of industrial areas through re-designation of land use to regional commercial or industrial/commercial mixed use designation.	Consistent: The Project site is currently vacant, however, the SP proposes approximately 103 acres of CH (Highway Commercial) development intended to serve regional users.

Table 5.1-2 - Continued
General Plan Consistency Analysis

Applicable General Plan Goal/Objective	Project Consistency Discussion
G #4B: Provide locations for development of integrated and attractive regional commercial centers with good access, adequate parking, and landscaping, which will efficiently and conveniently complement the business and service needs of the residents of the City.	Consistent: The SP proposes approximately 103 acres of regional commercial uses adjacent to the 210 Freeway (presently under construction). These commercial uses would be subject to compliance with the design guidelines, development standards, and landscaping guidelines specified in the SP. These regulations/standards would be subject to review by the City to ensure efficiency and convenience. Further, the SP proposes approximately 12 acres of NC uses intended "to serve local and neighborhood retail an service needs by providing for uses that are conveniently located and easy to access" (SP, Pg. 7-2).
STR #4B.1: Re-designate 268.33 acres to industrial uses and 255.08 to mixed use Commercial/industrial uses throughout the City and the unincorporated sphere of influence area.	Consistent: The SP proposes approximately 115 acres of commercial uses.
STR #4B.2: Ensure that proposed buildings, structures, landscaping, lighting, and signage are developed consistent with City guidelines that contribute to the image of the as a place of high quality and positive value.	Consistent: Refer to Discussions STR #4A.1 and G #4B.
G #4C: Ensure that nonresidential types of land use developed in the City complement and do not adversely affect the quality of life and health of Upland's residents and businesses.	Consistent: Quality of life issues (i.e., traffic, air quality and noise) are discussed in Sections 5.3, 5.4, and 5.5 of this EIR, respectively. Analysis has concluded that Project implementation would not result in significant impacts with respect to quality of life issues.
STR #4C.1: Control the development of industrial/commercial uses and related activities through land use designations.	Consistent: Refer to Discussion G #4B.
STR #4C.2: Apply special standards for infrastructure provision and location, site planning and land use compatibility where tracts of land are subdivided specifically for industrial/commercial uses.	Consistent: The SP (Page 8-2) requires that the proposed non-residential land uses comply with specified guidelines including compatibility through appropriate location and orientation of buildings and the placement of buildings giving consideration to the commercial area, location of nearby residential uses, location of major traffic generators, and circulation routes. Additionally, the SP (Page 10-3) proposes that the infrastructure associated with each phase of development be constructed in multiple increments prior to completion of that phase.
STR #4C.3: Segregate and/or buffer land uses having the potential for creation of substantial adverse environmental effects from land uses sensitive to such impacts.	Consistent: The Project proposes to segregate commercial uses from residential uses. Roadways (i.e., Campus Avenue and 19th Street) and OS areas would serve as buffers between commercial and residential uses.

Table 5.1-2 - Continued
General Plan Consistency Analysis

Applicable General Plan Goal/Objective	Project Consistency Discussion
STR #4C.4: Maintain suitable and adequate standards for landscaping, sign control, site and building design, parking and provision of appropriate utilities and public infrastructure.	Consistent: Refer to Discussions STR #4A.1, STR #4C.2 and STR #4C.3.
STR #4C.5: Require that appropriate landscaped buffer space be provided when a project abuts a freeway. This requirement is applicable to both residential and non-residential land uses.	Consistent: The Project proposes a "freeway edge" (i.e., informal shrubs/groundcover drifts) along the I-210 Freeway.
G #5A: Preserve and strengthen areas in the City committed to commercial uses.	Consistent: Refer to Discussions STR #4A.2 and G #4B.
STR #5A.2: Promote coordinated assemblage of several uses within a commercial complex to ensure dynamic Town Centers.	Consistent: The SP proposes approximately 103 acres of CH uses and approximately 12 acres of NC uses. Refer to Discussion STR #4A.1.
STR #5A.4: Identify opportunities for new infill structures: ♦ Encourage recycling in areas of extreme deterioration; ♦ Promote specific sites best suited for theme development.	Consistent: The SP proposes approximately 103 acres of CH uses along the I-210 Freeway (PA's 18 - 21). These areas are best suited for the proposed regional commercial uses.
G #7: Promote an economic development strategy that includes approaches for broadening the City's economic base, creating residential employment opportunities and enhancing the City's tax base.	Consistent: The proposed CH and NC uses would create residential employment opportunities and enhance the City's tax base.
STR #7.1: Revitalize, recycle, and maintain existing uses and buildings and encourage new development, which maintains the scale of the City's commercial corridors and industrial districts.	Consistent: The proposed CH uses would be in scale with the regional commercial corridor opportunity created by the I-210 Freeway.
STR #7.2: Deliver unique messages which define the character of the community as a quality experience; focus on the City as a desirable business locations and select consistent, quality new development and re-use projects.	Consistent: The proposed CH and NC uses would be subject to design review by the City to ensure that they are consistent with the expectations and character for the community, and consistent with Section 8.0, *Design Guidelines in the Specific Plan.*
STR #7.3: Increase the urban design quality in new developments and revitalization projects, which achieve a higher visibility for the City and induce new economic activity.	Consistent: Refer to Discussions STR #7.1 and STR #7.2.
IP*: Economic Development: Attract new job and revenue generating uses.	Consistent: Refer to Discussions G#7 and STR #7.1
IP: Urban Design Improvements: The City shall provide for formulation of Urban Design Guidelines for key activity areas and entry points to the City. Locations for which plans should be prepared and improvements implemented include major commercial corridors.	Consistent: Refer to Discussions G #4B, STR #5A.4, and STR #7.2.

* IP = Implementation Program

Table 5.1-2 – Continued
General Plan Consistency Analysis

Applicable General Plan Goal/Objective	Project Consistency Discussion
IP.1: Provide a mechanism for large-scale multiple-parcel development projects within the densities and heights prescribed by land use policy, whose objective is to achieve a special purpose or character.	Consistent: The proposed Specific Plan and the design review of future development projects permitted by the Plan would provide the mechanism for implementing this program. Also, refer to Discussions STR #4A.1 and STR #5A.4.
IP.2: Provide a mechanism for the consideration of variation from the baseline permitted uses, densities/intensities, and development standards for "significant" regional or community uses.	Consistent: Table 7.B of the SP, Permitted Uses identifies uses that are permitted, conditionally permitted, and prohibited for each land use type within the SP's zoning classifications. Land uses identified as "conditionally permitted" would be subject to the approval of a Conditional Use Permit (CUP) in compliance with Code Chapter 9403.
IP.3: Provide a mechanism for the consolidation of adjoining commercially- and residentially-designated parcels into a single site wherein commercial and residential buildings are located in a unified development project, without regard for the designated commercial-residential boundary (similar to a "planned development") in locations specified by land use policy.	Consistent: The Specific Plan in and of itself is an implementation program. In addition, the Project's design segregates commercial uses from residential uses. However, the Project proposes an interconnected community-accessible trail system intended to link the residential areas with the natural environment. This trail system would serve also as a link between residential areas and the commercial areas proposed along/north of 19th Street. The Project proposes two trailheads (east and west of PA-4) that would link the residential areas with 19th Street.
HOUSING ELEMENT	
G #1: To assist in the development of adequate housing to meet the needs of low- and moderate-income households.	Consistent: Refer to Discussion STR #1C.8.
P* #1.1: Provide assistance to the private sector and public agencies capable of producing or assisting the production of housing, particularly lower-and moderate-income housing and housing for special-needs households.	Consistent: Refer to Discussion STR #1C.8.
P #1.2: Promote the provision of an adequate number of rental units affordable to low- and moderate-income households within the City.	Consistent: Refer to Discussion STR #1C.8.
P #1.3: Assist the private sector and public agencies capable of producing or assisting in producing housing, particularly lower- and moderate-income housing and housing for special-needs households.	Consistent: Refer to Discussion STR #1C.8.
G #5: Continue to provide housing opportunities for all economic segments of the population.	Consistent: Refer to Discussion STR #1C.8.
P #5.1: Maintain consistency between zoning and land use designations. To stay informed of specific housing needs of various sub-populations and special need groups and try to address those needs.	Consistent: Refer to Discussions STR #1C.4, STR #1C.8, and STR #2A.5.

* P = Policy

Table 5.1-2 – Continued
General Plan Consistency Analysis

Applicable General Plan Goal/Objective	Project Consistency Discussion
G #6: To address and, where appropriate and legally possible, remove governmental constraints on the maintenance, improvement, and development of housing.	Consistent: Refer to Discussions STR #1C.4, STR #1C.8, and STR #1C.9.
P #6.1: To continue the functioning of the City's development review and advisory bodies as an effective means of curtailing the time and costs for review and processing of project applications.	Consistent: Refer to Discussion STR #1C.9.
P #6.2: To continue the use of specific plans as a means of enhancing housing diversity and choice.	Consistent: Refer to Discussions STR #1C.4 and STR #1C.8.
G #7: To promote housing opportunities for all persons; regardless of race, age, religion, sex. Marital status, ancestry, national origin, or color.	Consistent: Refer to Discussion STR #1C.8.
P #7.1: To work toward equal housing opportunity for all citizens; regardless of age, sex, race, marital status, ethic background, income, or other arbitrary factors.	Consistent: Refer to Discussion STR #1C.8.
P #7.2: To consider factors of proximity to shopping, transportation, and other desirable facilities in planning and constructing housing for senior citizens and handicapped persons.	Consistent: Refer to Discussion IP.3 (Specific Plans).
P #7.3: To assist in assuring open housing for all seeking to rent or buy housing in the City.	Consistent: Refer to Discussion STR #1C.8.

Increase the Amount of Commercial Development

The 1998 Specific Plan proposed a total of 51.9 acres of commercial development (approximately 12 percent of Project area) including the following:

- "CH-SAL" (Commercial, Highway Zone) 44.7 acres;
- "CS" (Commercial, Specialty Zone) 4.2 acres; and
- "BP" (Business Park Zone) 3.0 acres. The 1998 Plan did not specify maximum square footage of commercial and business park uses; however, it is estimated that buildout of the existing approved Specific Plan would yield 530,000 square feet of commercial development and 52,000 square feet of business park use.

The Project proposes a total of 114.92 acres of commercial development (approximately 26 percent of Project area) including 102.52 acres of "CH-SAL" and 12.4 acres of "NC" (Neighborhood Commercial). The Project's proposed Amendments to commercial uses are as follows:

- 44.7 acres of "CH-SAL" increased to 102.52 acres of "CH-SAL";
- 4.2 acres of "CS" replaced/increased to 12.4 acres of "NC"; and
- 3.0 acres of "BP" deleted.

The Project proposes to delete "BP" uses in favor of "CH-SAL" uses. The proposed Specific Plan Amendment would devote the freeway frontage portion of the Specific Plan area to commercial uses such as big box retail, in line shops, restaurants and fast food outlets, office uses, a theater complex, and automobile sales dealerships. A maximum of 1.2 million square feet of commercial development is proposed. This Amendment would represent a net increase of 670,000 square feet in commercial development, over double (226 percent) the amount under the existing approved Specific Plan.

While it is acknowledged that the Amendment proposes more than double the commercial development proposed with the 1998 Specific Plan, the increase is not considered a significant impact since the 1998 Plan did not specify maximum square footage of commercial and business park uses. The approximately 530,000 square feet of commercial development and 52,000 square feet of business park uses estimated at buildout of the existing approved Specific Plan were intended to be responsive to the retail market at the time of approval. Further, the Land Use Element identifies as an implementation program the provision for a "mechanism for the consideration of variation from the baseline permitted uses, densities/intensities, and development standards for "significant" regional or community uses." The proposed Specific Plan Amendment would be such a "mechanism" and would be subject to review by the City pursuant to Chapter 9103 of the Municipal Code. Implementation of the proposed Amendment would result in a less than significant impact in this regard.

The Project also proposes to replace/increase the 4.2 acres of "CS" with 12.4 acres of "NC". According to Code Section 9632, the "CS" zone is intended to create, preserve, and enhance areas for businesses that serve the local community and take full advantage of proximity to recreation and open space areas. The proposed Specific Plan states that the purpose of the "NC" zone is "to serve local and

neighborhood retail and service needs by providing for uses that are conveniently located and easy to access." The purpose/intent of the "NC" zone is essentially consistent with that of the "CS" zone since both zones are intended to serve the local/neighborhood community. The "NC" zone and corresponding zoning regulations would be added to the Zoning Ordinance to reflect proposed commercial development, since the "NC" zone classification is not reflected in the existing Ordinance. Project implementation would result in a less than significant impact in this regard with approval of the Specific Plan Amendment.

Reduce the Residential Development Yield

The 1998 Specific Plan permits development of up to 1,479 dwelling units, up to 728 could be attached products. Currently, 305 residential units are under construction within Phase 1 in accordance with the 1998 Amendment. The allowable dwelling units permitted in each residential zone designated in the existing Specific Plan are as follows:

- SFR-10: 90 DU;
- SFR-7.5: none in this Zone;
- SFR-6: 188 DU + 130 DU (PA 1C)
- SFR-5: 79 DU + 104 DU (PA 1B)
- SFR-4.5: 236 DU + 86 DU (PA 1A); and
- MFR: 566 DU.

The proposed Specific Plan Amendment would permit a maximum of 1,150 dwelling units, up to 350 of which could be luxury attached dwelling units. The allowable dwelling units permitted in each residential zone and their purpose as defined in the proposed Specific Plan Amendment is as follows:

- SFR-4.0: (4,000 SF minimum lot size) - 45 DU;
- SFR-4.5: (4,500 SF minimum lot size) - 105 DU;
- SFR-5.0: (5,000 SF minimum lot size) - 475 DU
- SFR-6.0: (6,000 SF minimum lot size) - 175 DU
- LAH: (Luxury Attached Housing) - 350 DU.

The purpose of the single-family zoning classifications is to "provide opportunities for a variety of quality housing products to meet a range of lifestyle and housing needs."[26] The purpose of the attached-dwelling residential designation is to "provide a high quality, higher density housing product to appeal to those who prefer this style of living."[27]

The Specific Plan Amendment proposes 329 fewer dwelling units and approximately 22 percent reduction from the 1,479 units that are proposed in the currently approved Specific Plan. The Amendment proposes the following revisions to the Specific Plan:

- SFR-10: This zoning class is deleted, 90 DU decrease;

[26] The Colonies at San Antonio Specific Plan, LSA Associates, Inc., January 24, 2002, Table 7.A, *Colonies at San Antonio Zoning Classifications.*

[27] Ibid.

- SFR-7.5: This zoning class is deleted;[28]
- SFR-6: 143 DU decrease;
- SFR-5: 292 DU increase;
- SFR-4.5: 217 DU increase;
- SFR-4.0: 45 DU increase, new zoning class;
- MFR: 216 DU decrease and new zoning class "LAH".

In summary, the proposed Amendment decreases the minimum lot size in certain Planning Areas and introduces new residential zones. The "SFR-4.0" zone and "LAH" zone classifications are not reflected in the existing Ordinance. Therefore, the "SFR-4.0" zone, the "LAH" zone, and corresponding zoning regulations would be added to the Zoning Ordinance to reflect the proposed residential development. A less than significant impact would occur with approval of a Specific Plan Amendment reflective of the proposed modifications.

Modify the Purpose of the Originally Proposed Flood Control Lake

At the time of the 1998 Specific Plan approval, the abandoned sand and gravel pits within the Project site were barren of vegetation. The Plan proposed the development of 40-acre flood control/recreational lake and greenbelt area in the center of the site.

Over the years and subsequent to the Specific Plan approval, stormwater flowing onto the Project site resulted in the establishment of wetland and open water areas. In response to this change in the existing environment, the Specific Plan Amendment proposes to increase the size and modify the purpose of the open space area proposed at the center of the Project. The open space area is proposed to encompass approximately 60-acres. It would serve multiple purposes including as a flood control detention facility, a wetland mitigation area, and a major open space amenity. The open space area is proposed to accommodate stormwater flows that currently run through the site, thereby ensuring that the capacity of the adjacent Cucamonga Creek channel would not be exceeded. Within this area, acreage would be devoted to restore wetlands and the balance devoted to passive open space and trails.

The Specific Plan Amendment proposes a net increase of approximately 20 acres of centrally located open space, representing an approximate 50 percent increase over the existing approved Specific Plan. Additionally, the Specific Plan Amendment would change the purpose of the open space area from a flood control and recreational lake to a flood control detention facility that would serve as a wetland mitigation area and major open space amenity. The changes are considered a benefit of the proposed Project since they would serve to mitigate impacts to wetlands and would provide greater recreational opportunities. A less than significant impact is anticipated in this regard.

[28] No DU were proposed in this Zoning class under the existing Specific Plan. Therefore, no change in allowable DU.

Update Implementation Provisions (Riparian Mitigation)

The Amendment proposes to update implementation provisions of the Specific Plan in relation to the development and timing of the riparian mitigation and central open space area. The amended Specific Plan would include development and environmental management regulations to ensure preservation and protection of restored riparian areas. The landscape restoration of the central open space area ("Basin A") is proposed to create an environmental resource that would establish a link between the natural environment and the community. The restoration process is proposed to include re-vegetation, utilizing both native and non-native plant materials, rock outcroppings that would give the appearance of a natural landscape, and the creation of a riparian habitat that would be sustained by storm drain runoff within the basin. According to Table 10-A of the proposed Specific Plan, *Backbone Infrastructure Phasing Matrix*, development of the central open space area would commence at the beginning of Phase 2 and with the development of Planning Areas 4 through 6 and 8 through 15.

The Specific Plan Amendment's proposed modifications with respect to the development and timing of riparian mitigation are in response to an existing condition since wetlands were not present at the time the 1998 Specific Plan was approved. Additionally, this amendment is considered a benefit of the proposed Project since it is intended to ensure the preservation and protection of restored riparian areas. A less than significant impact is anticipated in this regard.

Update Maintenance Provisions

The 1998 Specific Plan included provisions that were reflective of the open space area that was proposed at the time of the Plan's approval.

The Amendment proposes to update the maintenance provisions for ensuring ongoing maintenance of the Project's open space and landscaped area. The amended Specific Plan includes provisions to ensure the success of riparian restoration and mitigation within the central open space area. The Amendment proposes that maintenance of the central open space area and basins (Planning Areas 16, 16A, 16B) be provided by a landscape maintenance district. Trails, parkways, and lettered lots would be the maintenance responsibility of a master homeowners' association. A less than significant impact is anticipated in this regard.

Modify Statistical Summary

The 1998 Specific Plan identified a Project area of 440.5 acres. This estimate was based on the most current data available at the time the Plan was approved.

The amended Specific Plan proposes to update the statistical summary for the overall Project area from 440.5 acres to 447.8 acres. This revision reflects updated survey data, thus, increases the accuracy of the Project's statistical summary. A less than significant impact is anticipated in this regard.

Modify Project Objectives

The 1998 Specific Plan identified objectives that responded to existing conditions at the time the Plan was approved and the proposed Project components.

The Specific Plan Amendment proposes revisions to the Project objectives that would better reflect the present day conditions and the proposed concepts underlying the current Project. A less than significant impact is anticipated in this regard.

Update Design and Development Standards

Proposed modifications include:

- An update of design guidelines text and graphics, including separating commercial and residential guidelines from each other. Thus, the updated Specific Plan provides separate sections for single-family residential, multiple family residential and commercial land uses.

- An update of landscape plans to describe the modified open space area and wetland mitigation, as well as to describe proposed edge conditions along the open space area; clarify entry designs and locations.

- A revised discussion of roadways based on an updated traffic study. A focus of this revision is to ensure adequate access for the proposed expansion of commercial uses, and to minimize through traffic on Colonies Parkway.

- A revised trails plan, consistent with the central open space area and proposed wetlands mitigation.

- Revisions to the drainage plan, reflecting modifications to the previous lake concept.

- Updated water and sewer plans.

- Updated grading program, including a description of how grading will be used to recreate/maintain wetland areas.

- Modifications to the infrastructure-phasing program to ensure that adequate infrastructure is available to support development of individual portions of the Specific Plan area.

- Updated discussion of infrastructure financing and project maintenance funding.

- Modifications to parking standards to ensure adequate parking for all proposed uses, while minimizing the amount of land which needs to be paved over for parking.

- Addition of development and environmental performance standards to minimize the potential environmental effects of specific plan buildout.

- Identification of a development review and entitlement processes for subsequent development of individual planning areas within the Specific Plan area.

The proposed modifications to the Specific Plan involving updates to the design and development standards would result in a less than significant impact since they would be responsive to the design features and components of the proposed Land Use Plan.

Other Specific Plan Revisions

- The current Specific Plan allocates 2.4 acres to a fire station site. The proposed Amendment allocates 1.72 acres to this use and introduces the "CF" (Community Facility) zoning classification. The purpose of this new designation is to provide for a fire station site. A less than significant impact is anticipated in this regard.

- The current Specific Plan allocates 16.8 acres to a school/park (10 acres school, 6.8 acres park) site. The proposed Amendment allocates 10.2 acres to this use and introduces the "SS" (School Site) zoning classification. The purpose of this designation is provide the opportunity for the Upland Unified School District to purchase a school site to accommodate projected increases in student enrollment. A less than significant impact is anticipated in this regard. This designation is also intended to provide for development of the site pursuant to the standards of the "SFR-5.0" Zoning designation should the School District choose not to purchase this site.[29] Section 7.0, *Alternatives to the Proposed Project*, discusses the potential impacts of developing PA-15 with residential uses.

APPLICABLE PLANS, POLICIES, AND REGULATIONS

5.1-3 *The proposed Project may conflict with the policies and regulations of relevant federal and state plans. Analysis has concluded that a less than significant impact would occur in this regard.*

Federal Plans and Policies

Clean Air Act. The Specific Plan has identified the following performance standard with respect to air quality:

> *"Any operation or activity which might cause the emission of any smoke, fly ash, dust, fumes, vapors, gases, or other forms of air pollution, which can cause damage to human health, vegetation, or other forms of property, or can cause excessive soiling on any other parcel shall conform to the requirements of the SCAQMD."*

The proposed Specific Plan Amendment would be in compliance with the Clean Air Act and a less than significant impact is anticipated in this regard. Refer to Section 5.4, *Air Quality*, for an evaluation of the Project's impacts with respect to air quality.

[29] The Colonies at San Antonio Specific Plan, LSA Associates, Inc., January 2002, Page 7-2.

Clean Water Act (Section 404): The Specific Plan Amendment contains design concepts intended to protect water resources (including wetlands) and enhance water quality. The proposed Specific Plan Amendment would be in compliance with the Clean Water Act and a less than significant impact is anticipated in this regard. Refer to Section 5.8, *Hydrology and Drainage*, for an evaluation of the Project's impacts with respect to water resources.

National Pollutant Discharge Elimination System Permit Program. The Specific Plan Amendment provides design concepts intended to protect water quality. Additionally, the Specific Plan has identified the following performance standard with respect to water quality:

> *"All runoff from repair areas, fueling islands, and outdoor storage areas shall be drained on-site in a controlled manner so as to prevent groundwater and surface water contamination by fuel, oils, and solvents."*

Development allowed through implementation of the proposed Amendment would be required to implement storm water management practices during and after construction in accordance with the NPDES permit. The proposed Specific Plan Amendment would be required to be in compliance with the NPDES Program, thus a less than significant impact is anticipated in this regard. Refer to Section 5.8, *Hydrology and Drainage*, for an evaluation of the Project's impacts with respect to water quality.

Federal Endangered Species Act. The Specific Plan Amendment would be subject to compliance with the Federal Endangered Species Act. A less than significant impact is anticipated in this regard. Refer to Section 5.6, *Biological Resources*, for an evaluation of the Project's impacts with respect to endangered species.

State Plans and Policies

California Wetlands Policy. Development pursuant to the Specific Plan Amendment would be subject to the requirements of the California Department of Fish and Game streambed alteration agreements. These agreements require the avoidance of wetlands and implementation of mitigation measures for any related wetlands impacts. The Specific Plan Amendment would be subject to compliance with the California Wetlands Policy and a less than significant impact is anticipated in this regard. Refer to Section 5.6, *Biological Resources*, for an evaluation of the Project's impacts with respect to wetlands.

California Endangered Species Act. The Specific Plan Amendment would be subject to compliance with the California Endangered Species Act and a less than significant impact is anticipated in this regard. Refer to Section 5.6, *Biological Resources*, for an evaluation of the Project's impacts with respect to endangered species.

Regional Plans/Policies

Regional Transportation Plan (2001 RTP) and Regional Transportation Improvement Program (2001 RTIP). These documents are both long-range policy documents that address transportation issues and propose mitigation programs to meet the multi- and inter-modal transportation objectives of the SCAG region. Refer to Section 5.3,

Traffic and Circulation for Project features relative to compliance with regional traffic plans. The Specific Plan Amendment is in compliance with the RTP and RTIP.

South Coast Air Quality Management Plan (1997 AQMP). Refer to Section 5.4, *Air Quality*, for a discussion of the Specific Plan Amendment's consistency with the Air Quality Attainment Plan and an outline of the Project design features relative to air quality.

CUMULATIVE IMPACTS

5.1-4 *The proposed Project, combined with other future development, may increase the intensity of land uses in the area. Analysis has concluded that impacts are less than significant and no mitigation is required. Projects are evaluated on a project-by-project basis in accordance with the City of Upland General Plan, Development Code and Zoning requirements.*

Development of the site as proposed would not result in any cumulative land use impacts as other projects are implemented citywide. Each new project would undergo the same project review process as the proposed Project in order to preclude potential land use compatibility issues and planning policy conflicts. It is assumed that cumulative development would progress in accordance with the City's General Plan, Development Code and Zoning requirements. Each project would be analyzed independent of other land uses, as well as within the context of existing and planned developments to ensure that the goals, objectives and policies of the General Plan and Zoning requirements are consistently upheld.

MITIGATION MEASURES

This section directly corresponds to the identified Impact Statements in the *Impacts* subsection.

CITY OF UPLAND GENERAL PLAN

5.1-1 No mitigation measures are recommended.

CITY OF UPLAND MUNICIPAL CODE/ZONING ORDINANCE

5.1-2 No mitigation measures are recommended.

APPLICABLE PLANS, POLICIES, AND REGULATIONS

5.1-3 No mitigation measures are recommended. Refer also to Section 5.4, *Air Quality*, Section 5.6, *Biological Resources*, and Section 5.8, *Hydrology and Drainage*.

CUMULATIVE IMPACTS

5.1-4 No mitigation measures are recommended.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the Specific Plan Amendment would not result in any significant and unavoidable land use impacts.

5.2 AESTHETICS/LIGHT AND GLARE

Visual resource information for this Section was compiled from site photographs and site surveys conducted by RBF Consulting in the summer of 2001 through April 2002. This analysis is based upon reference data from the City of Upland General Plan (various dates), San Antonio Lakes Specific Plan EIR (November 1989), the Colonies at San Antonio Supplemental Draft Environmental Impact Report (August 1998) and the Draft Colonies at San Antonio Specific Plan Amendment (January 2002). The purpose of this Section is to describe the existing aesthetic environment on-site and in the site vicinity, and to analyze potential project impacts to the aesthetic character of the site. Consideration of public scenic vistas and views, impacts to scenic resources and the introduction of new sources of light and glare are also included in this Section. Mitigation measures are recommended as necessary to reduce the significance of impacts.

EXISTING CONDITIONS

ON-SITE

The topographical setting of the project area creates a wide variety of views to the north and east of the San Bernardino and San Gabriel Mountains. Elevations on-site range greatly due to past mining activity. Elevations range from approximately 1,680 feet near the northwestern corner of the project site at 20th Street, to 1,440 feet near the southeastern extension of 16th Street. Several areas within the project site have been excavated more than 60 feet below surface. Numerous rock piles and abandoned quarry pits further alters the site topography.

Areas to the southeast and southwest have lower elevations than the project site. Due to nature of these surrounding elevations, distant views of the Santa Ana River Valley, and the Santa Ana and Jurupa Mountains to the south and east of the site are available on-site.

On-site features north of 19th Street include disturbed and undisturbed areas and areas of dense brush cover. Man-made features on-site include the I-210 freeway (under construction), the Cucamonga Creek Channel along the eastern margin, the Holliday Rock Company sand and gravel operations, and dirt roadways and trails associated with the MWD right-of-way.

On-site features south of 19th Street include areas that have been altered due to sand and gravel mining activities. Vegetation consists of native plants and dense brush. Although mining has discontinued, the land surface remains irregular and there are several mining pits varying in size. A large basin is located in the south central portion of the property. The eastern portion of the project site is currently under construction in accordance with the 1998 Specific Plan Amendment (Phase 1). The area also contains numerous San Bernardino County Flood Control District facilities. Additionally, debris consisting of concrete rebar, insulation, lumber, containers, large sections of corrugated steel, landscaping, and household debris are found in some areas of the site. Exhibit 5.2-1, *On-Site Photographs*, depicts existing conditions on-site.

This page left intentionally blank.

1. View across the central area of the property.

2. View across the site towards the northerly foothills.

3. Example of varying topography on-site.

4. Example of typical water feature on-site.

The City of Upland General Plan does not identify the project area within a designated scenic vista, and there are no rock outcroppings, scenic highways, or historic buildings on-site or in the immediate vicinity of the property. Euclid Avenue, which is located approximately 0.5 miles west of the site, has been considered by the City to be designated as a Scenic Highway but no official designation has been adopted. The site cannot be viewed from Euclid Avenue.

OFF-SITE

NORTH

Immediately north of the site, the area is mostly undeveloped with the exception of the Holliday Rock Company Sand and Gravel Operation. Large rock debris piles and equipment occur on the property. The views to the north are dominated by the San Gabriel and San Bernardino Mountains and there is only partial obstruction of views due to the Holliday Rock operation (refer to Photo No. 1, on Exhibit 5.2-2, *Views From Project Site*).

SOUTH

Upland Viewpoint, a planned community of 160 two-story Mediterranean style single-family homes, and the Upland Country Club golf course are located to the south of the project site. A cinder block wall along with a berm are situated along the southern portion of the project site, obstructing most views from the ground level to and from this residential area. Ornamental trees and terra cotta rooftops dominate this view looking south from the project site (refer to Photo No. 2, on Exhibit 5.2-2, *Views From Project Site*). From the central and northern portion of the site, distant views of the valley to the south are available.

EAST

Residential neighborhoods occur to the east and northeast of the project site, beyond the concrete lined Cucamonga Creek. The residential areas consist of two-story, single-family homes in the cities of Upland and Rancho Cucamonga. Residences directly east of the site are at a lower elevation than the project site and a six-foot high cinder block wall obscures most of the views to and from this area. From the site, views are similar to views to the south and distant views of the San Bernardino Mountains are available to the east (refer to Photo No. 3, on Exhibit 5.2-2, *Views From Project Site*).

WEST

West of the project site, beyond Campus Avenue, is the Southern California Edison north/south transmission lines and right-of-way, single-family residences and two City reservoirs between 19th and 20th streets. A landscape warehouse and nursery (Great Western Rose) with associated landscaping materials and sheds, and an area of vacant land are also present in this area. Views for residents in this area are obscured by the lush vegetation associated with the plant nursery. Distant views of the San Gabriel Mountains to the west are available from the site (refer to Photo No. 4, on Exhibit 5.2-2, *Views From Project Site*).

This page intentionally left blank.

1. View to the north.

2. View to the south.

3. View to the east.

4. View to the west.

LIGHT AND GLARE

There are two typical types of light intrusion. First, light emanates from the interior of structures and passes through windows. Second, light projects from exterior sources such as street lighting, building illumination, security lighting, and landscape lighting. Glare mainly results from sunlight reflection off flat building surfaces, with glass typically contributing the highest degree of reflectivity. Light introduction can be a nuisance to adjacent residential areas and diminish the view of the clear night sky.

Residential exterior lighting occurs to the south and east of the project area. Also, existing lighting sources include the Holliday Rock Facility and the Great Western Rose nursery located north and west, respectively, of the project site. Additionally, light and glare caused by car headlights and streetlights associated with Campus Avenue and 19th Street affect the area. Currently, no light is generated from the project site.

SIGNIFICANCE CRITERIA

Appendix G, *Initial Study Checklist*, of the California Environmental Quality Act (CEQA) Guidelines includes checklist questions relating to aesthetics. The City of Upland has further augmented the CEQA Guidelines Checklist questions to include a question with regard to change in visual character. A project would potentially create a significant aesthetic impact if it caused one or more of the following to occur:

- Have a substantial adverse effect on a scenic vista (refer to Impact Statement 5.2-2);
- Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway (refer to Impact Statement 5.2-2);
- Substantially degrade the existing visual character or quality of the site and its surroundings (refer to Impact Statement 5.2-3);
- Result in a substantial change to the visual character of a project area (refer to Impact Statement 5.2-3); and/ or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area (refer to Impact Statement 5.2-4).

The evaluation of aesthetic impacts can be termed a subjective exercise due to widely varying personal perceptions. Nevertheless, replacement of undeveloped land with residential and commercial uses would permanently alter the appearance of the project area. Potential impacts are categorized below according to topic. Mitigation measures at the end of this Section directly correspond to the numbered impact statements.

IMPACTS

SUMMARY OF PREVIOUS ENVIRONMENTAL DOCUMENTATION FOR THE COLONIES AT SAN ANTONIO

According to the EIR No. 800, prepared in 1988, project implementation would affect the appearance of the site by removing native vegetation and replacing it with development areas and nonnative landscaping. EIR No. 800 concluded that the loss of the chaparral would not be significant due to the abundance of associated plant species within the region. It was also concluded that the loss of the native chaparral did not violate any General Plan policies relating to protection of specimens or trees that possess "outstanding scenic value." EIR No. 800 further stated that states that all utility lines should be placed underground wherever possible.

As stated in EIR No. 800, the future I-210 corridor was identified as a potential Scenic Highway. However, since Specific Plan implementation would involve a detailed landscaping plan along the freeway's edges, impacts associated with development were determined to not adversely affect the scenic qualities of the project area or the future I-210 corridor. The EIR states that the project landscape plan would mitigate the visual impacts of development of the area around the future realignment of I-210. Thus, EIR No. 800 identified no significant aesthetic impacts after implementation of the stated mitigation measure.

The Colonies at San Antonio Draft Supplemental EIR, prepared in 1998, concluded that the proposed project would have similar aesthetic effects as the project analyzed in EIR No. 800 and that no further mitigation was required.

OVERVIEW OF THE COLONIES AT SAN ANTONIO DRAFT SPECIFIC PLAN AMENDMENT (2002)

The following sections are excerpts from the Colonies at San Antonio Specific Plan. These sections highlight how the Specific Plan addresses aesthetic issues, such as grading, lighting and signage.

GRADING PROGRAM

The proposed grading program (Section 6.0) for the project would result in reclamation of past mining activities, and return the site to a productive state. Balanced grading of cut and fill would be achieved by using fill from the construction of the I-210, which is currently underway, within and adjacent to the project site.

DEVELOPMENT REGULATIONS

The Colonies at San Antonio Specific Plan Amendment provides for the development of a wide range of uses within numerous Planning Areas. The Specific Plan provides development regulations and established zoning districts, permitted uses for residential, commercial, community facility, and open space uses, sets forth development standards applicable to all buildings, structures and uses and defines regulations for specific uses within the Specific plan area. The Specific Plan also establishes parking and signage regulations.

Building Elevations and Setbacks. The Specific Plan (Sections 7.5.2 and 7.5.3) includes maximum height elevations and setback areas for all development within the Specific Plan area. Since the site contains varying degrees of slope, development criteria is established for determining maximum building heights on slope areas. These regulations would help to ensure that views are not obstructed.

Signs. The Specific Plan (Section 7.7) sets forth sign development standards, sign guidelines and conceptual placement locations to maximize identification of the project as a distinct planned community, and to maximize the visibility of individual commercial tenants in a manner that compliments the overall image of the project. All signs within the Specific Plan would require approval by the Community Development Director, unless otherwise specified in the Specific Plan. Additionally, each of the commercial centers intended for Planning Areas 17, 18 and 19 would be required to have a comprehensive Sign Program approved by the City. Individual development sites within Planning Areas 20 and 21 may have individual Sign Programs. A single, comprehensive sign program would be prepared for project identification signage, and a single sign program would be prepared for Planning Area 16 open space signage.

Specific Uses. Section 7.8 of the Specific Plan Amendment addresses specific uses, which possess distinctive characteristics that require special development standards in order to prevent impacts on nearby uses. Examples of specific uses include alcohol sales, amusements centers and arcades, animal care facilities, automotive facilities and day care facilities. By meeting the development standards for the specific uses in the Specific Plan, the development approval process can also be streamlined by incorporated detailed regulations into the standard development and operations requirements, thereby eliminating the need for conditional use permits. The developments standards do not replace or reduce any minimum standard established by local, state or other authority; however, where the specific development standards are more restrictive, they would take precedent.

SPECIFIC PLAN DESIGN GUIDELINES

Certain design elements would contribute significantly to the visual order and consistency of the entire Specific Plan area. These common features – site planning, landscape architecture, signage, lighting and other details are provided in the Design Guidelines subsection (Section 8.0). The Design Guidelines are intended to allow design latitude and flexibility, while ensuring that the value of property within and adjacent to the project would be enhanced through careful design control. Variation within the context of the guidelines are encouraged in order to achieve attractive commercial centers and individually distinctive neighborhoods. Projects in which nearly identical buildings occur without variation in placement and form would not be encouraged or approved. Design would clearly reflect the "place making" techniques described in Chapter 8.0, *Design Guidelines*, of the Specific Plan Amendment.

Commercial Design Guidelines

The purpose of the Commercial Design Guidelines (Section 8.2) is to broadly establish planning and design parameters that would allow both design controls and design flexibility for the future development of non-residential Planning Areas,

specifically Planning areas 17, 18, 19, 10 and 21. Design criteria are provided for site planning, design influence, architecture, parking and circulation, screen walls and fences, retaining walls, service facilities, mechanical equipment, trash enclosures, outdoor storage, outdoor lighting, pedestrian areas, pedestrian oriented development, and special uses including car washes/gas stations, drive-thru facilities, large volume buildings, and vehicle dealerships.

Site Planning. The draft Specific Plan Amendment states that site design first addresses the nature and function of use, building, or feature being considered. Architectural design and details are then, as a rule, expected to be oriented to areas within public view. Landscaping, including entry features, are to be provided to highlight positive visual features, and to provide a pleasant outdoor environment. Design within the Specific Plan area is to meld function and form, not one to the exclusion of the other. Consequently, each development plan would be reviewed for its overall design, with allowances for individuality and special functional needs.

Design Influences. Visual stimulation would be created in the commercial centers within the Specific Plan area by utilizing a variety of lighting, signage, public artwork, and a rich palette of colors and materials. The architecture would incorporate bold geometric forms organized within a backdrop of color, stone accents and landscape. Enhanced paving and water features would enhance the pedestrian experience throughout the area. Artwork would be considered, such as wall graphics on the buildings. Theater uses would include a plaza with patios, seating areas, and terraces for dining. Designers would consider incorporating building details and site furniture influenced by the City of Upland's heritage. These may include finishes, textures, materials, and colors that evoke the City's inventory of public and private spaces.

Architecture. Architecture within the Specific Plan area would give specific attention to the following design components:

- *Articulation:* Buildings would be articulated to provide architectural interest and variety, and to reduce large massing elements. Articulation of horizontal and vertical surfaces, along with fenestration and openings, color. Texture and use of varied materials, would be used to reduce the appearance of undifferentiated massing. Large smooth, unarticulated surfaces would be avoided, although design simply for the "sake of decoration" would be avoided as well.

- *Scale:* The scale of building components would remain consistent with the proportion of the building.

- *Proportion:* The proportion of the major elements of a building would be complementary to the overall proportion of the building. These elements include roof type, roof height and overhang, store entrance and fascia design, storefront, wall openings, arcades, and other architectural features.

- *Emphasis:* Architectural focal points would be encouraged.

- *Materials and Colors:* Buildings would use a variety of compatible materials and colors to create visual interest.

Lighting. Lighting levels would be sufficient for the safety and security of vehicular and pedestrian traffic, but would not spill onto other properties.

RESIDENTIAL DESIGN GUIDELINES

The goal of the Residential Design Guidelines (Section 8.3) is to create a community that is unique within the Inland Empire, and yet reminiscent of Upland's heritage. The residential guidelines are intended to promote visual compatibility and individuality for the neighborhood and home. The residential guidelines do not promote rigid adherence to style descriptions, but assist in the design direction and quality of the end product. Neighborhood architecture would have variety and diversity, but would also embrace compatible architectural styles. Each style has a historical precedence in southern California, and is capable of contemporary interpretation and variation in a modern merchant-built house. The intent is to avoid "stage-front" architecture, but instead to encourage the application of detail and material authentic to the spirit and character of the style.

Each single-family detached neighborhood would utilize a minimum of three architectural styles selected from group I, II or III, described below. A fourth style may be chosen from any one group. A maximum of 40 percent and a minimum of 20 percent of any one style shall be used. Adjacent neighborhoods not separated by Colonies Parkway or Tanglewood Avenue would have nor more than two matching styles.

Group I	Group II	Group III
♦ Spanish Colonial	♦ Colonial	♦ American Cottage
♦ Italianate	♦ Monterey	♦ Craftsman

Residential projects with lots less than 4,500 square feet may be designed as "themed" projects, using a single style from Group I, II or III. Luxury attached housing may be designed as a themed project using a style from Group I.

Colors and Materials. The colors and materials with the Specific Plan area would reflect a general theme of environmental harmony with the surrounding community, topography, and neighborhood character. The use of elements such as terra-cotta color roof tile, white washed plaster, painted siding, and black wrought iron provides variety and contrast. Color palettes that reflect traditional architectural themes are the basis for successful modern interpretations. New interpretations of these classic combinations of materials and inherent colors are encouraged as they relate to a general feeling of neighborhood unity.

A variety of natural materials and earth tone-based colors provide the diversity required for visual interest while unifying the buildings with their settings. The primary purpose of architectural style palette selection is to avoid monotony, provide a variety of colorful schemes, and promote visual diversity.

Massing and Plotting. Creating a street scene that functions well and has visual variety is a key community objective. The Specific Plan encourages variable massing and plotting techniques to create a sense of variety within a street scene. Variable setbacks are encouraged to create vertical and horizontal massing breaks. Another design guideline involves reducing the scale and size of each neighborhood

by creating "sub-neighborhoods" through the use of eyebrow clusters, short street segments, short cul-de-sac streets, grade separations between housing clusters, and other clustering concepts.

Attached Residential Concepts. In the case of multi-family buildings, there is a tendency to "build out" to the maximum building envelope without utilizing articulated massing or treatment on wall planes. This results in a multi-story box, without any vertical or horizontal relief. The Specific Plan attached residential design concepts are aimed at preventing such structures. A variety of stacked massing arrangements in keeping with the selected architectural style would be used to vary buildings. Stepped down elements would be provided at entries and building corners to provide a transition to ground level and adjacent buildings and to enhance the pedestrian scale of those spaces. Furthermore, design guidelines pertaining to entries, windows, balconies, secondary elements, and garages are specified in the Specific plan to enhance the aesthetic qualities of attached residential structures.

OVERALL LANDSCAPE CONCEPT

The landscape concept for the Specific Plan area (Section 9.0) would provide the project with a distinct community identity that also would allow it to respond to surrounding existing and proposed developments (refer to Exhibit 5.2-3, *Landscape Concept Plan)*. The objectives of the Colonies at San Antonio landscape concept include the following:

- In residential areas, create an "early California" landscape that utilizes both native and non-native species, and in the commercial areas, create a landscape that addresses specific retail needs while providing a pleasant shopping experience.

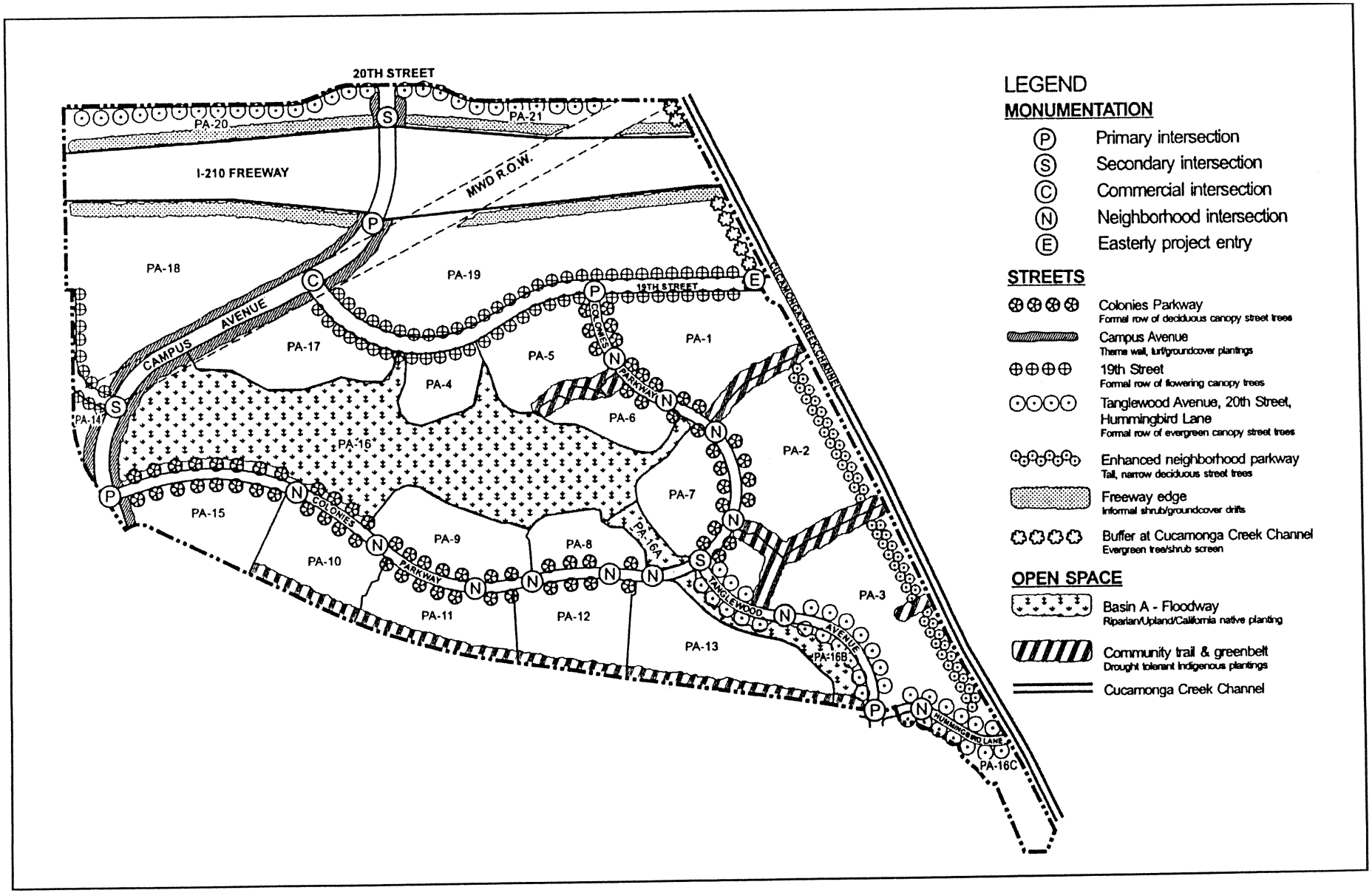
- Establish a community identity and character with a complimentary streetscape, including a hierarchy of intersection monumentation, and employing materials that are consistent with the character of the area.

- Provide passive recreational facilities for picnicking, jogging, strolling, and viewing wildlife habitat, including educational opportunities related to the site's habitat conservation areas.

- Provide a system of community trails for convenient access between neighborhoods, commercial centers and open space, with connections to the regional trail system along Cucamonga Creek Channel.

- Create a natural riparian habitat in portion of Planning Area 16 for passive recreational usage.

Each landscape area within the Specific Plan area would have its own identity and character, based on the specified land use (commercial, residential, or open space). This character would be created through consistent use of specific building materials in each of the land use areas, as well as distinctive plant palettes. Continuity in form, color and texture of site elements within each planning area would enhance the community image while blending in with the local foothill character and backdrop of the local mountains. Granite river cobble, which is prevalent in the area and



Source: RJM Design Group.

Exhibit 5.2-3

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

06/02

JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Landscape Concept Plan

surrounding foothill communities, would be used as an accent material for the project monumentation and walls adjacent to the residential areas, and provide a transitional element to the open space/trails system. Specific plant types for each of the planning areas would provide continuity, identity, and organization for the streets, parking areas, monumentation, trails and open space areas. All detailed landscaping programs for planning areas and roadways would be prepared by a qualified landscape architect for review by the Community Development Director.

OPEN SPACE CONCEPT

The Project's central landscape feature would be approximately 59 acres of restored natural open space. The open space areas would provide passive recreation and function as a riparian habitat area. Hiking trails within the open space area would provide interpretive opportunities and access to the basin during non-storm periods. Overlooks and rest areas would be located along the top of the basin at key vista points. Three distinct plant communities would define the natural habitat of the central open space area: riparian channel, grasslands transition, and upland Southern California natives.

Trails. The central open space area would be accessed by an interconnected community-accessible trail system, linking the natural environment to the surrounding developed areas and the Cucamonga Creek Channel regional trail. Each neighborhood would have direct links to the community trail and greenbelt system. Entries to the trail system would occur at key locations, primarily at the ends of street cul-de-sacs. Each entry would be identified by a specimen tree, which would serve as a focal point. The landscape would provide a buffer between the trail and the adjacent residential lots. The Specific Plan provides list of recommended trees for the community trail and greenbelt areas. The suggested trees would provide continuity and identity between neighborhoods.

STREETSCAPES

Streetscape design would contribute to the establishment of visual continuity throughout the project. Streetscape design standards would be reminiscent of the historic character and rural quality of Upland's heritage. Citrus accent trees would be installed at the primary intersections/monument signs to reflect the past significance of the citrus industry in the foothill region. Street right-of-way, pavement, parkway, and median conditions are design factors that would be integrated into the development of streetscape design guidelines. Specific design guidelines are also provided for entries and intersections throughout the Specific Plan area. Designated street cover and groundcover planting throughout the Specific Plan area would work together with the entry monumentation to define circulation patterns and create individual street identity.

EDGE TREATMENTS

Landscape edge treatments would be employed to provide a transition between differing adjacent uses, such as commercial planning areas adjacent to the Caltrans right-of-way of I-210, and the commercial areas adjacent to the Cucamonga Creek Channel. These edge treatments would respond to grading and slope requirements, and provide a buffer between adjacent uses.

The specific requirements for each planning area would dictate the extent, type and manner of edge treatment. For example, edge treatments between commercial areas adjacent to I-210 would require the installation of landscaping which enhances the appearance and visibility of commercial uses, while edge treatments between commercial and public uses would emphasize landscaping with screens, and limits access.

ENVIRONMENTAL PERFORMANCE STANDARDS

Light and Glare. Except for on-site lighting and project identification signage, no operation, activity or lighting fixture shall create illumination exceeding 0.5-foot candles outside any commercial area, whether the illumination is direct or indirect from the source.

SHORT-TERM IMPACTS

5.2-1 *Grading and construction activities associated with project implementation would temporarily impact the existing visual character of the project site and affect surrounding areas. Impacts would be reduced to a less than significant level with implementation of mitigation measures and compliance with City of Upland standard requirements for construction.*

Project construction activities would result in the exposure of graded surfaces, construction debris, the presence of construction equipment and vehicles on the project site. Construction of the proposed project would expand the current earthwork activities in the eastern (Phase 1 of the Specific Plan currently under construction for 305 residential units) and northern (I-210 freeway) portions of the project site. Equipment for grading activities would be staged at various locations throughout the project site and earthwork activities would continue throughout the project area. The project applicant would be required to coordinate these locations with the grading contractor and the City of Upland Department of Building and Safety during construction of the project. Buffering along the perimeter of the project site during construction in the form of construction fencing and tarpaulins would reduce visual disruptions. Although construction related impacts are not considered significant as they are anticipated to be short-term and would cease upon project completion, mitigation measures are recommended to ensure that impacts remain at a less than significant level.

LONG-TERM IMPACTS

SCENIC RESOURCES

5.2-2 *Analysis has concluded that the project would not have an adverse effect on scenic resources, including but not limited to trees, rock outcroppings, and historic resources within a state scenic highway. Although Euclid Avenue has been considered for designation as a scenic highway, the project would not impact the Euclid Avenue corridor due to the distance from the site.*

According to the City's General Plan, there are no designated State scenic highways that extend through Upland. However, according to the Upland General Plan Scenic Highways Element, Euclid Avenue, located approximately 0.5 miles west of the project site, is a route of scenic and historic interest that may warrant consideration for such a designation. Implementation of the proposed project would not obstruct views along Euclid Avenue. Additionally proposed on-site structures would not substantially degrade scenic resources (i.e., trees, rock outcroppings, historic buildings) along a State designated scenic highway, since no such resources exist within the project vicinity. Thus, less than significant impacts are anticipated in this regard.

VISUAL CHARACTER AND VIEWSHED

5.2-3 *Project implementation would permanently alter the existing visual character and viewshed from surrounding locations. Analysis has concluded that a significant and unavoidable impact to the visual characteristics and viewshed from surrounding locations would occur which cannot be mitigated to a level less than significant.*

With development of the proposed project, the viewshed and visual characteristics of the area would be permanently modified. Currently, the area consists primarily of residential neighborhoods and vacant land. With the introduction of the large-scale commercial uses and associated structures, current viewshed characteristics would be modified and the uses would in some cases dominate the visual features of the area. Distant views of the mountain ranges to the north and valley to the south would be affected by the proposed uses. As previously stated, aesthetic impacts can have a certain amount of subjectivity and without adopted viewshed thresholds by a lead agency, such as the City of Upland, the determination can be subject to discussion. It is noted that EIR No. 800, prepared for the original Specific Plan in ~~1998~~ 1988, did not conclude a significant impact resulting from the change in use. Nevertheless, based upon the proposed Specific Plan specifications involving a higher intensity for commercial uses and current view simulation data, such as depicted in Exhibit 5.2-4, *Transect A – View from South*, and Exhibit 5.2-5, *Transect B – View from South*, it is concluded that viewshed characteristic impacts are significant and unavoidable, given the current characteristics of the area. The alteration of appearance would be permanent and would continue throughout the life of the project. The following sections describe the views of and across the project site with implementation of the Specific Plan Amendment.[1]

Views from South

Currently, an approximately 12-foot tall dirt berm, with sporadic vegetation, traverses the southern border of the project site adjacent to residents Upland Viewpoint residential community. This berm obstructs ground level views across the project site for residents of the Upland Viewpoint Community. The berm substantially obstructs views of the San Gabriel Mountains to the north. Through project related grading, the berm would be removed.

[1] View analysis based on Colonies at San Antonio Specific Plan Visual Analysis, prepared by LSA Associates, Inc. May 7, 2002.

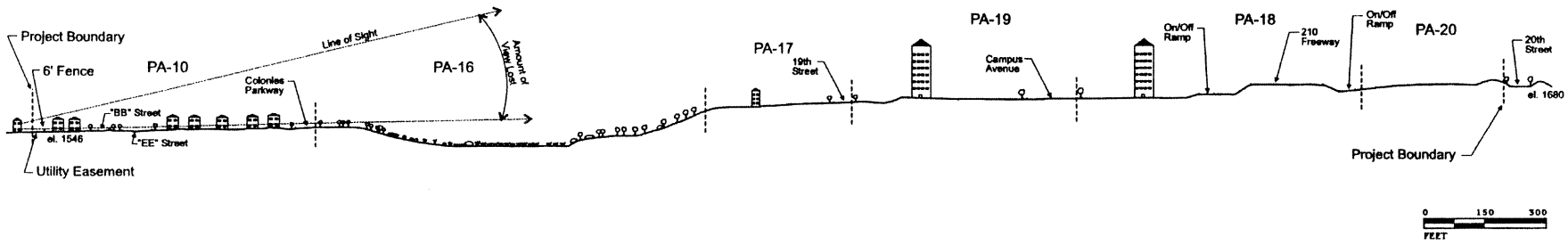
As shown in Exhibit 5.2-4, *Transect A - View from South*, views from the south towards the project site would be altered with implementation of the Specific Plan Amendment. Transect A shows the view from a single-family residence that borders the southern portion of the project site, which begins in Planning Area 10 and continues to Planning Area 20. Taking into account a 28-foot utility easement and a typical backyard of an existing residence in this area, proposed residential development associated with Planning Area 10 would obstruct views to the north.

The line of sight from the second story window of the existing residence is projected at approximately 20 degrees. Because the mountains to the north are visible at an approximately 60-degree line of sight, most of the existing view of the mountains (40 degrees of sight) would be preserved after buildout of the proposed project.

Exhibit 5.2-5, *Transect B – View from South*, also depicts that views from south of the project site, look to the north, would be altered with implementation of the Specific Plan Amendment. One and two-story single-family residences border the end of this transect, which begins at Planning Area 15 and ends at Planning Area 20. Similar to Planning Area 10, an approximately 12-foot tall berm extends south of Planning Area 15, obstructing northerly ground level views of the mountains.

Planning Area 15 is designated for a school site; however, no lot lines for the school have been developed. The assumed height of a school structure is approximately 45 feet. Taking into account the size of Planning Area 15, the location of Colonies Parkway, a 28-foot utility easement, a typical backyard of an existing residence in this area, and a reasonable assumption that the school would be located near the mid-section of the Planning Area, it is assumed that the school would be approximately 150 feet from the nearest residence at the southern end of this transect. The proposed school would completely obstruct views of the north area of the project site from a second-story window of an existing residence, as indicted by cross-section "B." The line of sight from the second-story window of the existing residence is projected at approximately 18 degrees. Because the mountains to the north are visible at an approximately 60-degree line of sight, most of the existing view of the mountains (40+ degrees of sight) would be preserved.

Currently, elevations on the southerly portion on the south of the project site are higher than adjacent properties to the south. However, the project would involve modified grades to the same level or slightly below the grades of adjacent properties. Nevertheless, there would be an alteration in viewshed characteristics for those immediately adjacent to the project site. Implementation of the proposed project would modify between 30 to 50 percent of existing views of the San Gabriel Mountains from second-story windows of residences to the south side of Planning Area's 10, 12 and 15. It is important to also note that Planning Area's 11 and 13 have been designed with north-south trending cul-de-sacs, which are anticipated to maintain view corridors to the north. Since these views to the north of the San Gabriel Mountains from residences south of the project area would be altered and viewshed characteristics would be permanently changed, impacts are considered to be significant and cannot be mitigated.



Source: LSA Associates.

Exhibit 5.2-4

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

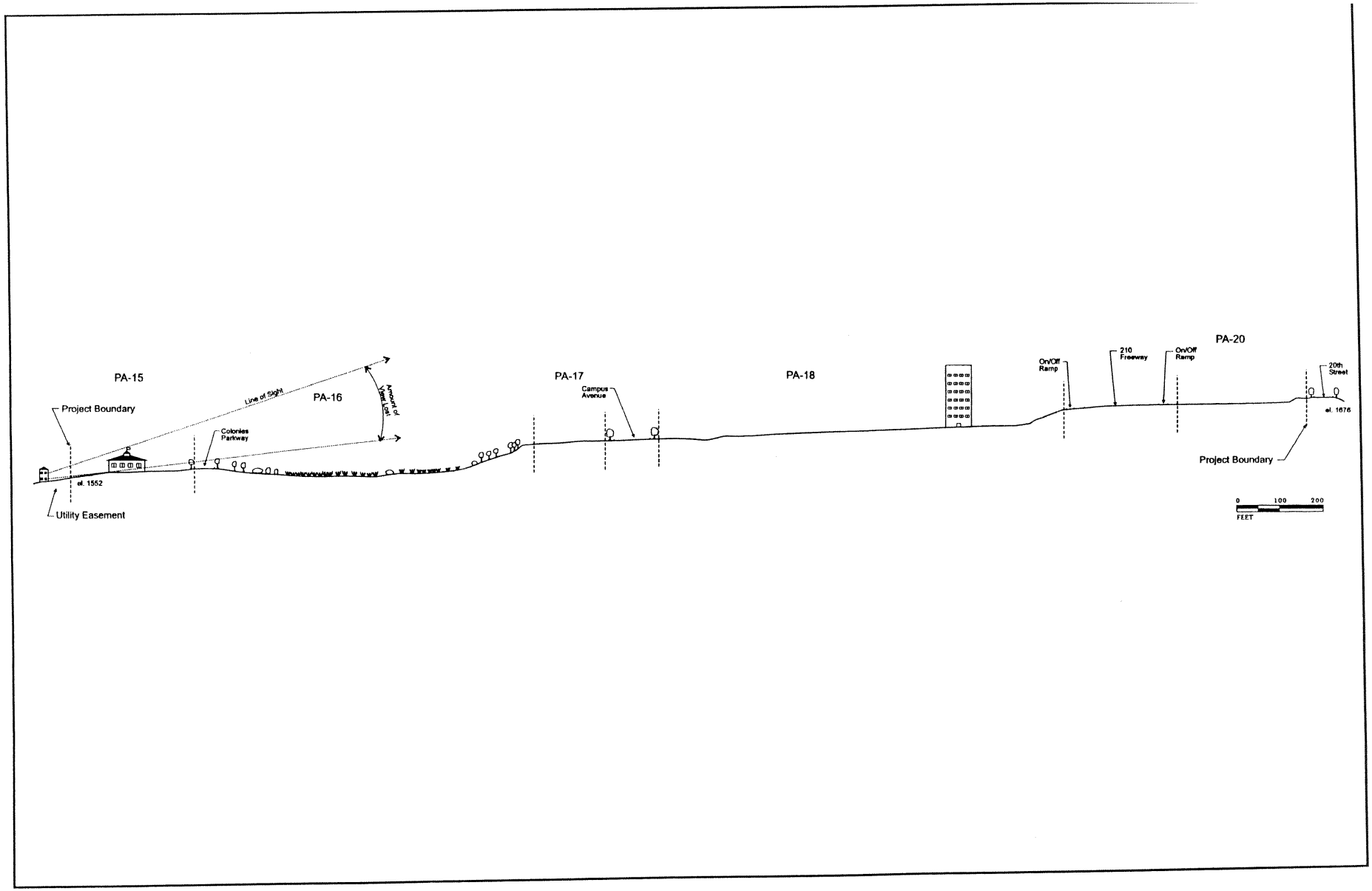
06/02

JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Transect A - View from South



Source: LSA Associates.

Exhibit 5.2-5

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

06/02

JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Transect B - View from South

Views from East

Within Planning Areas 19 and 21, a landscaped buffer is proposed along the eastern edge of the Planning Areas, adjacent to the Cucamonga Creek Channel, which would screen the commercial development from residents. The landscaped buffer would be approximately 25 feet wide and extend along the entire eastern boundary of Planning Areas 19 and 21. Evergreen trees and shrubs would be placed within the landscaped buffer to form, upon plant maturity, a continuous screen of commercial development as viewed east of the Cucamonga Creek Channel. Existing views to the mountains to the north would not be obstructed with implementation of the proposed Project. Although landscape screening is proposed for areas of commercial structures, existing views for residents situated northeast of the site and looking in a southerly direction towards the Valley would have views altered due to commercial structures of up to 145-feet in height. Thus, it is concluded a significant impact to viewshed characteristics to the south from existing residents to the northeast would occur and cannot be mitigated.

Existing residents to the east of the project site and south of 19th Street are situated adjacent to the existing Cucamonga Creek Channel. As part of the existing entitlement for the Specific Plan area, residential units are to be located immediately west of the Channel. Currently, this portion of the site is under construction as part of Phase 1 of the Specific Plan. Since, a six-foot wall separates existing residents from the Channel, residents have limited views across the project site. The Specific Plan Development Regulations limit residential structures to a maximum height of 35-feet tall. The Channel itself and design criteria, involving landscaping and setback requirements, provide a sizeable distance between existing and future residents. The distance, coupled with maximum building heights restrictions, result in limited obstructed views for residents to the east and/or views of the surrounding mountain ranges. Thus, less than significant impacts are anticipated to residents located south of 19th Street and east of the project site. Furthermore, previous environmental documentation (EIR No. 800) did not conclude that significant aesthetic impacts would result from implementation of Phase 1 of the Specific Plan.

Views from West

Single-family residences are situated west of the project site, beyond Campus Avenue and the Southern California Edison north/south transmission lines right-of-way. The views to and from the project site are obscured by the lush vegetation associated with the plant nursery. Implementation of the Specific Plan would not alter views of the mountain ranges to the west and north of the project site due to the proximity of these residences to the project site. Thus, impacts are considered less than significant to residences west of the project site.

Views from North

Immediately north of the site, the area is primarily undeveloped and consists of the Holliday Rock Company Sand and Gravel operation. Large rock debris piles and equipment surround this facility. The view to the north from the project site is dominated by the San Gabriel and San Bernardino Mountains which are only partially obstructed due to the sand and gravel operations. Approximately two miles north of the site, residences of San Antonio Heights, Rancho Cucamonga, Alta

Loma, and Upland currently have views to the south of the Valley. Since these residences are at a slightly higher elevation than the project site, there are unobstructed views across the site to the Valley. Implementation of the Specific Plan Amendment would involve commercial structures that would alter the visual character of the site, thus changing the distant views for these residences. Modification to the viewshed and visual character for residents to the north is concluded to be significant and cannot be mitigated. The altered viewshed involving several commercial structures would be permanently changed.

It as acknowledged that the current condition of the site does not include aesthetic attributes that can be considered worthy of great value. The aesthetic value can be subject to interpretation and can be debated to a certain extent. Nevertheless, based upon the defined threshold of change in visual character, this section has concluded a significant impact that cannot be mitigated for view areas located to the north, south and northeast.

LIGHT AND GLARE

5.2-4 *Development of the proposed Project would create a new source of light/glare which would affect day or nighttime views in the area. Compliance with the Specific Plan Development Regulations and Design Guidelines, and with applicable City codes would reduce potential impacts to less than significant levels.*

The proposed Project would create light/glare impacts to off-site uses and introduce new sources of lighting into the project area. These sources include lighting for street lights, entryway lights and interior building lighting. On-site light sources could also create spillover light impacts on surrounding land uses.

Light sources from on-site commercial sites have the potential to have a significant impact on adjacent residential areas. Street light illumination from the proposed project would be comparable to existing nearby residential developments to the east and south of the project site. Compliance with the City's Municipal Code pertaining to lighting, adherence to the development regulations and design guidelines proposed in the Specific Plan Amendment, and the use of directional lighting techniques would reduce potential impacts to less than significant levels. Furthermore, compliance with the Specific Plan environmental performance standards pertaining to light and glare (Section 7.9.5), which states that " Except for on-site lighting and project identification signage, no operation, activity, or lighting fixture shall create illumination exceeding 0.5-foot candles outside any commercial are, whether the illumination is direct or indirect light form the source," would ensure that impacts are reduced to less than significant levels.

CUMULATIVE IMPACTS

5.2-5 *Project development, together with cumulative projects may result in greater aesthetic/light and glare in the Project area. Compliance with applicable City codes can reduce the significance potential impacts.*

As development occurs throughout the City, residents and visitors in the area would notice the visual effects of development projects. However, the significance of these

visual/aesthetic changes is difficult to determine, since aesthetic value is subjectively determined and potential impacts are site-specific. Construction of currently approved and pending projects in the vicinity would permanently alter the nature and appearance of the area through the loss of undeveloped areas. Security and street lighting would introduce light and glare potential to the area. Impacts are typically mitigated separately on a project by project basis. Cumulative impacts can be mitigated to less than significant levels with use of building materials that are consistent with the general character of the area, landscaping design, and proper lighting techniques to direct light on-site and away from adjacent properties.

MITIGATION MEASURES

This section directly corresponds to the identified Impact Statements in the impacts subsection.

SHORT-TERM IMPACTS

5.2-1 Construction equipment staging areas shall be located away from existing residential uses and appropriate screening (i.e., temporary fencing with opaque material), shall be utilized to buffer views of construction equipment and material, when feasible. Staging locations shall be identified on project Final Development Plans and Grading Plans and subject to review and approval of the City. Compliance with this measure is subject to periodic field inspections by City staff.

LONG-TERM IMPACTS

SCENIC RESOURCES

5.2-2 No mitigation measures are recommended.

VISUAL CHARACTER

5.2-3 No mitigation measures are recommended.

LIGHT AND GLARE

5.2-4 No mitigation measures are recommended.

CUMULATIVE IMPACTS

5.2-5 No mitigation measures are recommended.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Significant and unavoidable impacts have been identified for viewshed alterations involving existing residents to the north, south and northeast of the project site. If the City of Upland approves the project, the City shall be required to cite their findings in accordance with section 15091 of CEQA and prepare a Statement of Overriding Considerations in accordance with section 15093 of CEQA.

No additional significant impacts related to Aesthetics/Light and Glare have been identified following implementation of mitigation measures and/or compliance with applicable standards and policies set forth in the proposed Specific Plan Amendment and requirements set forth by the City of Upland.

5.3 TRAFFIC AND CIRCULATION

Information in this Section is based on *The Colonies at San Antonio Traffic Impact Study*, May 2002, prepared by Kimley-Horn and Associates, Inc. (refer to Appendix 15.2). The Study was prepared in accordance with the Congestion Management Program requirements for San Bernardino County. The purpose of this Section is to identify the existing circulation system in the project vicinity, analyze the project's impact upon the system, and recommend mitigation measures to reduce the significance of potential impacts.

EXISTING CONDITIONS

STUDY AREA STREET SYSTEM

The study area for the project was determined based on the contribution of project traffic to the surrounding street and freeway system. The Congestion Management Program (CMP) for the County of San Bernardino (Year 2001 update) requires that the study area for the traffic impact analysis utilize all freeway segments where the proposed project would add 100 or more two-way peak hour trips and other CMP roadways where the project would add 80 or more two-way peak hour trips. Within the defined study area, all key intersections, as listed in the most current CMP, were analyzed. Additionally, selected local intersections were included due to their proximity to the project site. The study area general extended no more than five miles from the proposed project site.

The existing number of through travel lanes and intersection controls on the area roadways are shown on Exhibit 5.3-1, *Study Intersections*. A brief description of each roadway is provided below.

Site Access. Regional access to the site would be provided by Interstate 10 (I-10 or the San Bernardino Freeway) to the south of the site, and by the future approved Interstate 210 (I-210) which, when completed, would extend through the northern portion of the project site. Local access would be provided by 16th Street, 19th Street, 20th Street, Euclid Avenue, Campus Avenue, and Carnelian Avenue.

Direct access to areas south of I-210 would be provided from the realigned Campus Avenue and 19th Street, the extension of Tanglewood Avenue, which connects to 16th Street, and from the proposed primary project loop road, Colonies Parkway. Direct access to areas north of I-210 would be provided from the future extension of 20th Street.

Interstate 210. Interstate 210 is currently being constructed as an extension of the existing State Route (SR) 30 Freeway in La Verne, generally along the SR-30 surface street alignment. Upon completion, SR-30/I-210 will extend from Route 66 in La Verne to the I-215 in the City of San Bernardino. The I-210 would have interchanges at Mountain Avenue, Campus Avenue and Carnelian Street within vicinity of the City of Upland. The I-210 would provide six general purpose lanes and two carpool lanes.

Euclid Avenue. Euclid Avenue extends northerly from its southern terminus at the SR-71 in the County of San Bernardino through the Cities of Chino, Ontario, and Upland to the northern terminus in the San Antonio Heights area. Euclid Avenue is designated as SR-83 and is currently a four-lane divided Major Arterial, with a 32-foot wide landscaped center median. Within the City of Upland, this roadway includes portions for street parking and residential frontage with direct access and on-street parking. Euclid Avenue has a flow of 14,500 average daily trips (ADT) along the segment that exists west of the site, between 16th Street and 19th Street.

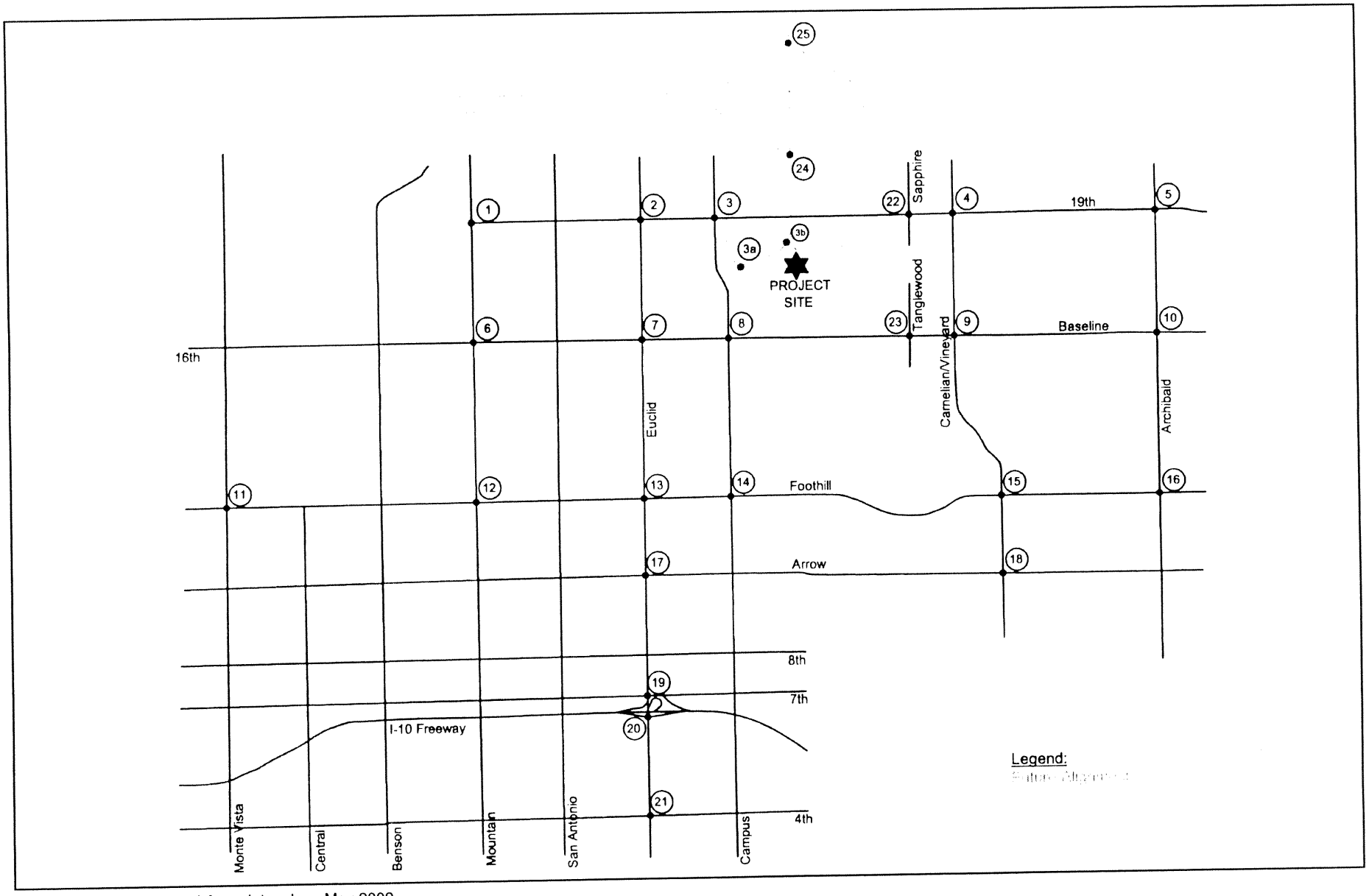
Campus Avenue. Campus Avenue extends from its southern terminus point at Chino Avenue, south of the City of Ontario limits, to its northern terminus at 24th Street in the City of Upland. Campus Avenue currently intersects 19th Street approximately one-half mile east of Euclid Avenue. As part of the I-210 Freeway project, Campus Avenue will be realigned to the east by approximately one-half mile and feature a full interchange with the future I-210 Freeway. The newly realigned segment of Campus Avenue would extend through the project site and terminate at the future 20th Street. As part of the project, Campus Avenue would be improved within the project boundary to provide two lanes in each direction, with a raised median. Campus Avenue is classified as a Secondary Arterial (four-lane undivided) in the City of Upland's Master Plan. This roadway has an existing 8,400 ADT on the roadway segment immediately west of the project site between 16th Street and 19th Street.

Carnelian Street. Carnelian Street is a four-lane divided street in the City of Rancho Cucamonga, immediately east of the City of Upland. South of Foothill Boulevard, Carnelian Street becomes Vineyard Avenue and has an interchange at the I-10 Freeway. Carnelian Street currently experiences 25,600 ADT along the segment between 19th Street and Baseline Road.

20th Street. Currently, 20th Street does not exist east of Campus Avenue. West of Campus Avenue, 20th Street extends from its western terminus at Mountain Avenue easterly through the City of Upland to just west of Campus Avenue. As part of the proposed project, 20th Street would extend approximately one mile east of Campus Avenue to provide direct access to the project land uses that would be located between 20th Street and I-210.

19th Street. Designated as SR-30, 19th Street is an east-west trending street, extending through the northern portion of the City of Upland. Nineteenth Street extends from its western terminus just west of Mountain Avenue easterly through the City of Upland into the City of Rancho Cucamonga, where it turns northward and merges into Highland Avenue (SR-30). Designated as a two-lane undivided Collector on the City's Master Plan for Streets and Highways, 19th Street currently experiences 18,500 ADT between Campus Avenue and Sapphire Avenue.

16th Street. Configured as a four-lane east-west street, 16th Street extends from the western edge of the City of Upland where it becomes Baseline Street in the City of Claremont in Los Angeles County. Between the City of Upland boundary and Mountain Avenue, 16th Street is designated as SR-30. Sixteenth Street extends through the City of Upland into the City of Rancho Cucamonga where it becomes Baseline Road again. Designated as a Secondary Arterial, 16th Street currently experiences 33,400 ADT between Campus Avenue and Tanglewood Avenue.



Source: Kimley-Horn and Associates, Inc. May 2002.

Exhibit 5.3-1

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

06/02

JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Study Intersection

Tanglewood Avenue. Tanglewood Avenue extends from its southern terminus at 16th Street in the City of Upland northerly to Colonies Parkway. The segment of Tanglewood Avenue from Hummingbird Lane to Colonies Parkway has been constructed as a part of the Phase 1 construction. Tanglewood Avenue is designated as a Collector and has an ADT of 2,600.

EXISTING AVERAGE DAILY TRAFFIC (ADT)

Average daily traffic (ADT) volumes for existing conditions are based on data collected by the City of Upland and recent traffic studies. Daily traffic volumes for State highways were obtained from the *2000 Traffic Volumes on California State Highways*, available from Caltrans. Existing ADT flows on principal roadways throughout the site study area are shown per segment on Exhibit 5.3-2, *Existing Average Daily Traffic Volumes.*

EXISTING PEAK HOUR TRAFFIC VOLUMES

Existing weekday morning and afternoon peak hour traffic volumes were collected during June 2001, and are illustrated on Exhibit 5.3-3, *Existing Peak Hour Traffic Volumes.* All study intersections are signalized. Existing lane configurations and intersection controls at the study intersections are shown on Exhibit 5.3-4, *Existing Intersection Configurations.*

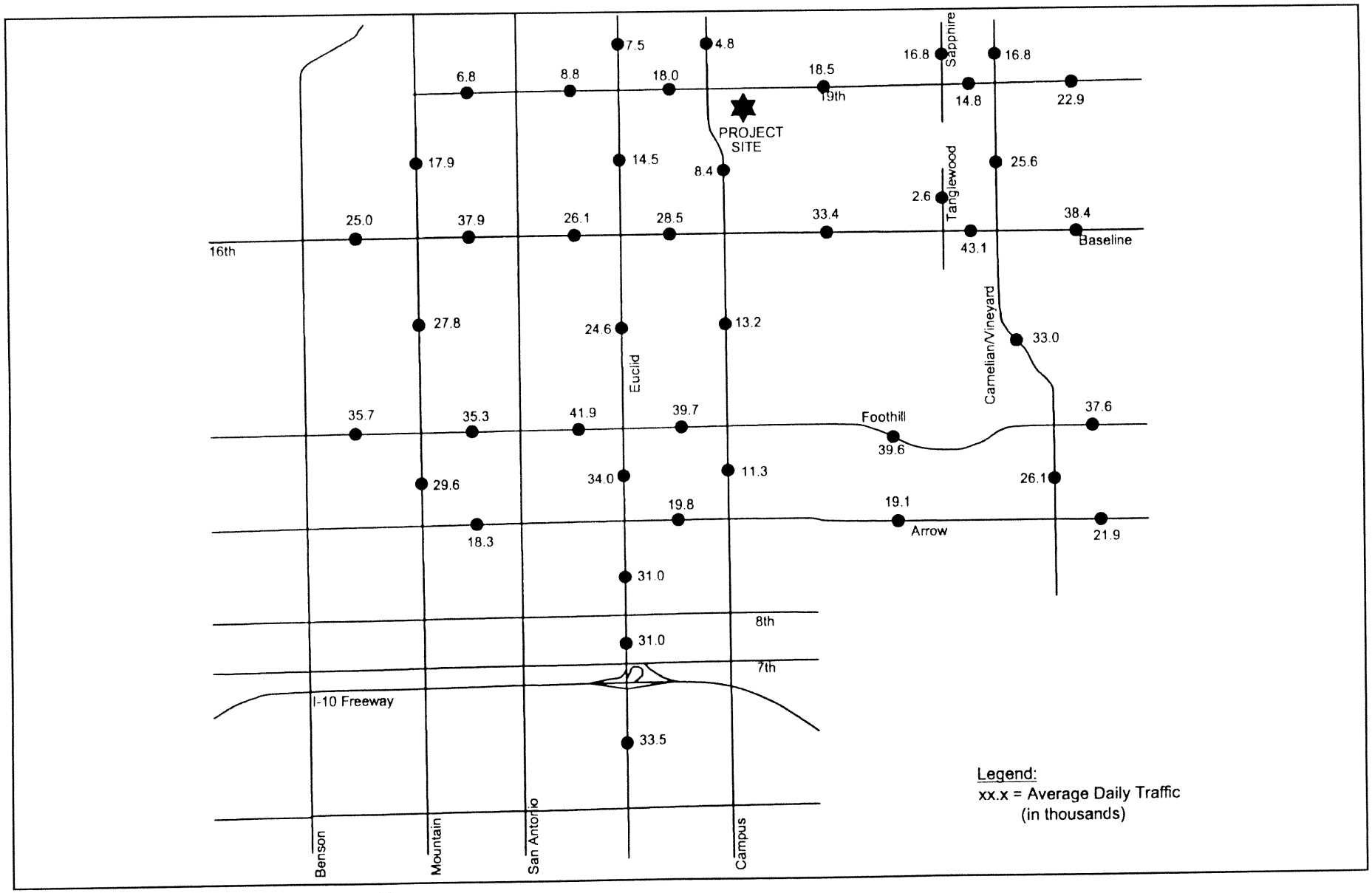
Existing peak hourly freeway volumes were obtained from the Caltrans website and represent Year 2000 traffic conditions. An annual growth rate of four percent per year reflects existing conditions which was applied according to the San Bernardino CMP methodologies. In accordance with CMP Guidelines, the Caltrans peak hour volume is assumed to reflect evening peak hour conditions and the morning peak hour is assumed to be 90 percent of the evening peak hour. Because the Caltrans volumes are bi-directional, the CMP assumes a 55/45 split, with 55 percent heading westbound and 45 percent eastbound in the morning peak hour, and a reverse in the evening peak hour. Existing freeway volumes are shown on Table 5.3-1, *Existing Conditions – Summary of Freeway Operation.* Table 5.3-1 shows that all freeway study segments are currently operating at LOS "E" or better in the morning peak hour, and two eastbound segments are operating at LOS "F" in the evening peak hour.

EXISTING INTERSECTION ANALYSIS

Intersection analysis has been conducted for the morning and evening peak hours using the analysis and procedures specified in the CMP. The results of the existing conditions intersection analysis are shown on Table 5.3-2, *Existing Conditions - Summary of Intersection Operation.* Table 5.3-2 indicates that three intersections are currently operating at Level of Service (LOS) "F" in one or both peak hours:

- 16th Street at Mountain Avenue (PM peak);
- Baseline Street at Carnelian Street (AM and PM peaks); and
- Baseline Street at Archibald Avenue (PM peak).

The intersections of Baseline Street/Carnelian Street and Baseline Street/Archibald Street are in the City of Rancho Cucamonga.



Source: Kimley-Horn and Associates, Inc., May 2002.

Exhibit 5.3-2

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

06/02

JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Existing Average Daily Traffic Volumes

Table 5.3-1
Existing Conditions - Summary of Freeway Operation

AM Peak Hour										
Freeway Segment		AM Peak Volume	Peak Hour Factor	Total Capacity	Number of Lanes (Main/HOV)	Lane Width Adjstmt	Heavy Vehicle Adjstmt	Driver Population	V/C	LOS
Interstate 10										
Monte Vista to Central	EB	6,399	0.95	9,200	4 / 0	1.00	0.967	1.00	0.76	C
	WB	7,821	0.95	9,200	4 / 0	1.00	0.967	1.00	0.93	E
Central to Mountain	EB	6,197	0.95	9,200	4 / 0	1.00	0.967	1.00	0.73	C
	WB	7,574	0.95	9,200	4 / 0	1.00	0.967	1.00	0.90	D
Mountain to Euclid	EB	6,359	0.95	9,200	4 / 0	1.00	0.967	1.00	0.75	C
	WB	7,772	0.95	9,200	4 / 0	1.00	0.967	1.00	0.92	E
Euclid to Fourth	EB	6,156	0.95	9,200	4 / 0	1.00	0.967	1.00	0.73	C
	WB	7,524	0.95	9,200	4 / 0	1.00	0.967	1.00	0.89	D
PM Peak Hour										
Freeway Segment		PM Peak Volume	Peak Hour Factor	Total Capacity	Number of Lanes (Main/HOV)	Lane Width Adjstmt	Heavy Vehicle Adjstmt	Driver Population	V/C	LOS
Interstate 10										
Monte Vista to Central	EB	8,690	0.95	9,200	4 / 0	1.00	0.967	1.00	1.03	F
	WB	7,110	0.95	9,200	4 / 0	1.00	0.967	1.00	0.84	D
Central to Mountain	EB	8,415	0.95	9,200	4 / 0	1.00	0.967	1.00	1.00	E
	WB	6,885	0.95	9,200	4 / 0	1.00	0.967	1.00	0.81	D
Mountain to Euclid	EB	8,635	0.95	9,200	4 / 0	1.00	0.967	1.00	1.02	F
	WB	7,065	0.95	9,200	4 / 0	1.00	0.967	1.00	0.84	D
Euclid to Fourth	EB	8,360	0.95	9,200	4 / 0	1.00	0.967	1.00	0.99	E
	WB	6,840	0.95	9,200	4 / 0	1.00	0.967	1.00	0.81	D

V/C calculations are based on the 1985 Highway Capacity Manual, Chapter 3.

V/C = Volume/(Capacity per lane x Number of lanes x Lane Width Adjustment Factor x Heavy Vehicle Factor X Driver Population Factor

Capacity per lane is based on 3 to 6 mainline freeway lanes with 2300 vehicles/hour capacity plus one HOV lane with 1600 vehicles/hour capacity.

Source: Traffic Impact Study for The Colonies at San Antonio, prepared by Kimley-Horn & Associates, May, 2002.

Table 5.3-2
Existing Conditions - Summary of Intersection Operation

Intersection Number	Intersection	Existing Condition			
		AM Peak		PM Peak	
		Delay	LOS	Delay	LOS
1	19th/Mountain	21.1	C	12.9	B
2	19th/Euclid	17.3	B	13.9	B
3	19th/Campus	28.4	C	20.5	C
4	19th/Carnelian	12.8	B	18.2	B
5	19th/Archibald	18.5	B	20.6	C
6	16th/Mountain	48.2	D	89.3	F
7	16th/Euclid	15.7	B	22.0	C
8	16th/Campus	17.9	B	20.6	C
9	Baseline/Carnelian	115.9	F	154.5	F
10	Baseline/Archibald	19.0	B	121.6	F
11	Foothill/Monte Vista	18.0	B	22.5	C
12	Foothill/Mountain	12.7	B	14.0	B
13	Foothill/Euclid	15.1	B	26.7	C
14	Foothill/Campus	15.2	B	31.4	C
15	Foothill/Carnelian	27.6	C	36.3	D
16	Foothill/Archibald	14.1	B	22.7	C
17	Arrow/Euclid	13.5	B	14.5	B
18	Arrow/Vineyard	15.0	B	16.2	B
19	Euclid/7th	13.1	B	14.7	B
20	Euclide/I-10 EB ramps	22.0	C	22.3	C
21	Euclid/4th	11.2	B	19.7	B
22	19th/Sapphire	19.5	B	11.7	B
23	16th/Tanglewood	9.3	A	8.3	A
24	Campus/210 EB	N/A	N/A	N/A	N/A
25	Campus/210 WB	N/A	N/A	N/A	N/A

Existing intersection LOS calculations are based upon AM and PM peak hour turning movement counts conducted by Kimley-Horn and Associates (see Exhibit 5.3-3, *Existing Peak Hour Traffic Volumes*). Intersection analysis worksheets are included in Appendix C of the project Traffic Report.

SIGNIFICANCE CRITERIA

The traffic issues related to the proposed land use and development have been evaluated in the context of CEQA, the City of Upland General Plan and the County of San Bernardino Congestion Management Program (CMP). The City of Upland is the lead agency responsible for preparation of the traffic impact analysis, in accordance with both CEQA and CMP authorizing legislation.

Environmental impact thresholds as indicated in Appendix G, Initial Study Checklist, of the CEQA Guidelines were also used as significance thresholds in this analysis. As such, a project would create a significant impact if it would cause one or more of the following to occur:

- Caused an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., resulting in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections) (refer to Impact Statements 5.3-1 through 5.3-5);

- Exceeded, either individually or cumulatively, a LOS standard established by the City and County Congestion Management Program Agency for designated roads or highways (refer to Impact Statements 5.3-1 through 5.3-5);

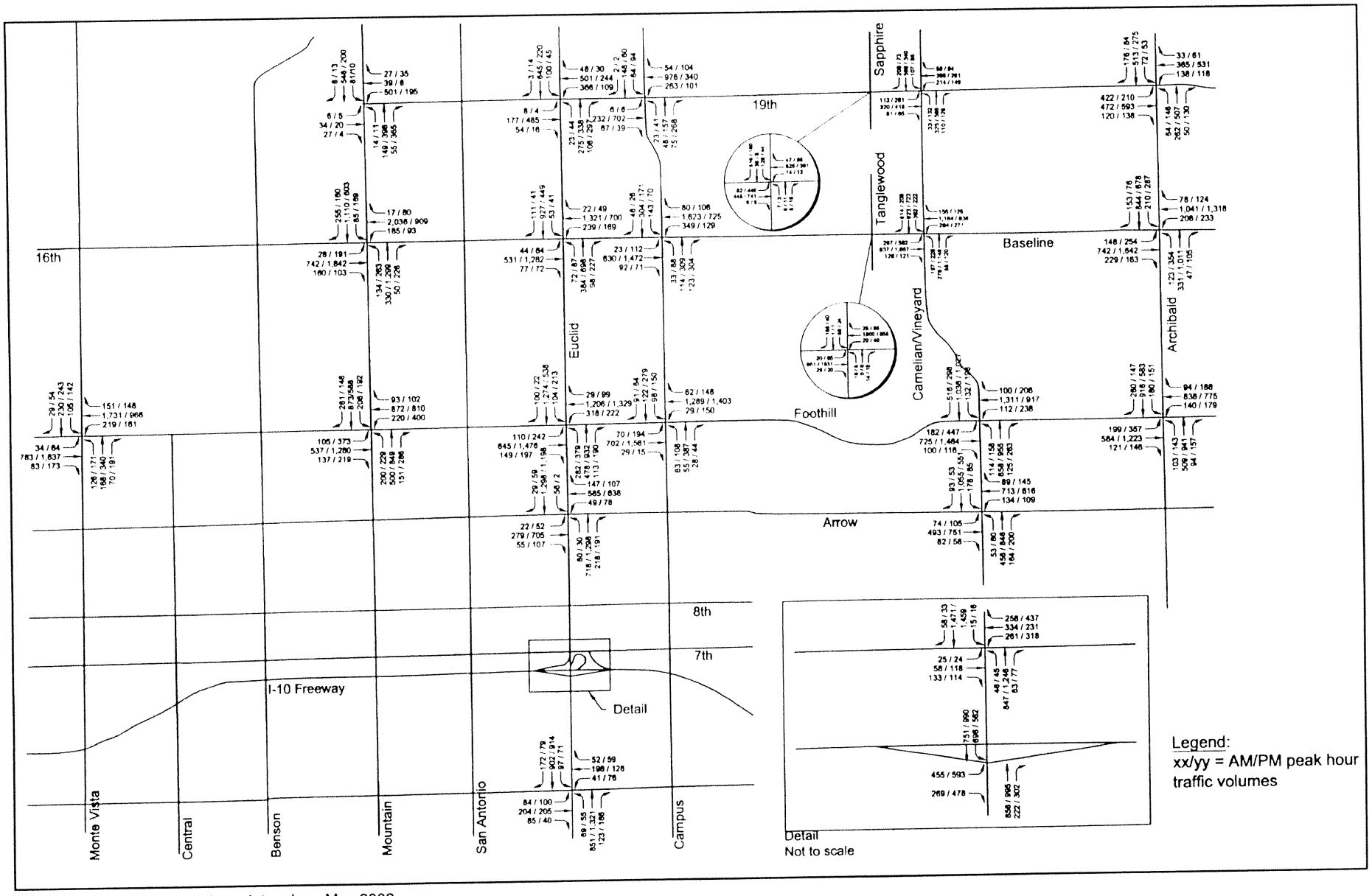
- Substantially increased hazards due to a design feature (i.e., sharp curves or dangerous intersections) or incompatible uses (i.e., farm equipment) (refer to Section 10.0, *Effects Found Not To Be Significant*);

- Resulted in inadequate emergency access (refer to Section 10.0, *Effects Found Not To Be Significant*);

- Resulted in inadequate parking capacity (refer to Section 10.0, *Effects Found Not To Be Significant*); and/or

- Conflicted with adopted policies, plans or programs supporting alternative transportation (i.e., bus turnouts, bicycle racks) (refer to Section 10.0, *Effects Found Not To Be Significant*).

Impacts to Traffic and Circulation are analyzed below according to topic. Mitigation measures at the end of this Section directly correspond with the identified impact.



Source: Kimley-Horn and Associates, Inc., May 2002.

Exhibit 5.3-3

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

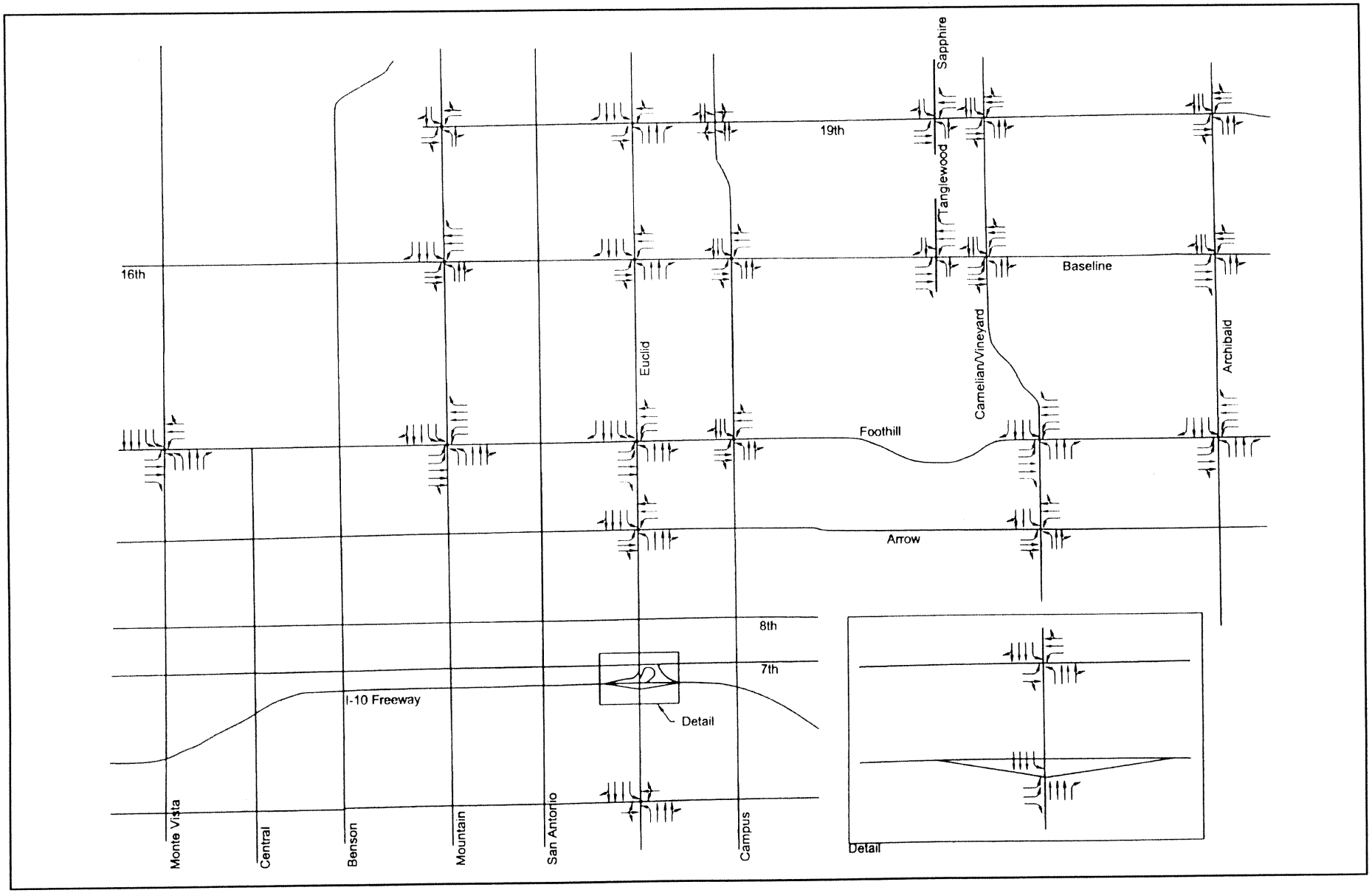
06/02

JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Existing Peak Hour Traffic Volumes



Source: Kimley-Horn and Associates, Inc., May 2002.

Exhibit 5.3

RBF PLANNING ■ DESIGN ■ CONSTRUCTION

06/02

JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Existing Intersection Configurations

LEVEL OF SERVICE STANDARDS

According to the San Bernardino CMP, LOS "E" is the minimum threshold at all CMP intersections. According to the CMP, any intersection with a volume-to-capacity (V/C) ratio of 1.00 or greater, regardless of the delay value, is to be designated LOS "F". The CMP LOS standard for all freeway segments and intersections is "LOS E or the current level, whichever is farthest from LOS A".

For freeway facilities, the CMP definition of deficiency specifies the goal of maintaining LOS "E" operations or better, unless an existing LOS "F" condition is identified in the San Bernardino CMP. By CMP definition, therefore, a freeway segment is deficient if it is found to be operating, or is projected to operate at LOS "F", unless the segment is already identified as LOS "F" in the CMP document.

A CMP deficiency will require further analysis in order to satisfy CMP requirements, including:

- Identify mitigation measures required to achieve acceptable LOS operations;
- Calculate the project's fair share portion of the growth traffic at each impacted intersection; and
- Estimate the cost required to implement the improvements required to achieve acceptable LOS.

The City of Upland has a target LOS "D" for peak hour intersection operation.

CITY AND CMP THRESHOLDS

The City of Upland and the CMP do not specify criteria for identification of significant traffic impacts beyond stating that the CMP LOS standard needs to be maintained. For purposes of this EIR, project traffic would be considered to contribute a significant impact if the project either: 1) causes a study intersection to worsen to an unacceptable LOS, or 2) contributes measurable delay to an intersection already operating at an unacceptable LOS.

SUMMARY OF PREVIOUS ENVIRONMENTAL DOCUMENTATION FOR THE COLONIES AT SAN ANTONIO

The EIR prepared for the 1988 Specific Plan concluded that the project would generate 38,660 vehicle trips per day, 34,340 of which would be external to the project. Project traffic plus future traffic (existing plus a 4% annual growth rate) would ultimately cause some intersections to operate at LOS E or worse. This condition was concluded to worsen if Route 30 (I-210) was not constructed. Traffic signals were warranted at a number of off-site locations.

When intersections deteriorate from LOS D to LOS E, improvements to the following intersections were determined to be required (w/o Route 30 Freeway): Campus Avenue/16th Street; Baseline Road/Carnelian Street; campus Avenue/14th Street; and Campus Avenue/Foothill Boulevard. With Route 30 Freeway: Baseline Road/Carnelian Street; Campus Avenue/14th Street; Campus Avenue/Foothill Boulevard. Also, traffic signals would be installed when warranted. All streets

internal to the project would be constructed to full ultimate buildout as development occurs.

The 1998 Supplemental EIR states that the proposed changes to Planning Area 1, in conjunction with the realignment of Tanglewood Avenue (Colonies Parkway and 18th Street) would result in a redistribution of development intensities within Planning Areas 1, 2, 5 and 6. Despite this redistribution, the total number of units would not change.

The 1998 Amendment results in an increase of daily trips that may affect operations of four intersections in the project area (Campus Avenue/19th Street, Euclid Avenue/19th Street, 19th Street/Sapphire Street, Colonies Parkway/19th Street, and Tanglewood Avenue/16th Street). With the implementation of recommended intersection improvements, the CMP LOS E standard is maintained at the study area key intersections and significant traffic impacts are reduced to less than significant levels for buildout of the project. Similarly, with implementation of the Phase 1 improvements, the CMP LOS E standard is maintained at the study area key intersections and significant traffic impacts are reduced to less than significant levels.

ANALYSIS METHODOLOGIES

The traffic issues related to the proposed Project have been analyzed following the traffic impact guidelines stipulated in the Congestion Management Program (CMP) for San Bernardino County (2000 Update). CMP Guidelines require that any development project estimated to generate 250 (or 1,000 for retail uses) two-way peak hour trips must be evaluated in accordance with the requirements of the CMP. The Colonies development is estimated to generate 3,233 two-way morning peak hour trips and 6,539 two-way afternoon peak hour trips. This level of traffic is in excess of the CMP thresholds and thus, the project is subject to CMP analysis requirements.

TRAFFIC VOLUME FORECAST DEVELOPMENT

Traffic conditions are analyzed in this Section for existing conditions along with three future scenarios. For existing conditions at the study area intersections, traffic volume data was collected in the field. For existing conditions on the study area freeway segments, traffic volume data was collected from the Caltrans website.

For the three future year scenarios, peak hourly directional link volumes and the peak hourly turning movement intersections volumes were developed using the Southern California Association of Governments (SCAG) 1994 and 2020 Base Comprehensive Transportation Program (CTP) traffic models. Peak period directional link data was extracted from the model, and future peak hour turning movement volumes for each study year were derived using a post-processing methodology (known as "B-Turns") developed by SCAG. For each roadway link within the study area, the 26-year growth increment between Years 1994 and 2020 model-generated peak period traffic volumes was determined and converted to peak hourly traffic volumes. Because growth between the Years 1994 and 2001 (7 years) has already occurred, the growth increment for each study area roadway link was reduced to reflect only growth between Years 2001 and 2020 (19 years), using a factor of 0.73. This amount of growth was added to the Year 2001 ground counts

conducted in the study area, resulting in adjusted Year 2020 traffic volumes on the study area roadway links.

For the Year 2011 and 2015 study scenarios, the growth increment per year was calculated based on the model volume comparisons and the appropriate level of growth for each study scenario year was added to the Year 2001 ground counts, resulting in Year 2011 and Year 2015 traffic volumes on the study area roadway links. For the Year 2011 study scenario, ten years of growth was added to existing (Year 2001) counts, and for the Year 2015 study scenario, fourteen years of growth was added. Roadway link post-processing spreadsheets are included in Appendix A of the project Traffic Report.

The future forecast peak hourly turning movements at each of the study area intersections were developed using SCAG's B-Turns program, which was developed to be consistent with the methodologies in the National Cooperative Highway Research Program (NCHRP) Report 255. The post-processed peak hourly roadway link directional volumes were input into the B-Turns program for each intersection along with the existing turning movements counted at each intersection. The program estimates future intersection turning movements by allocating the directional link volumes to separate movements based on the percentage split of existing turns at each intersection. An example of this procedure is also included in Appendix A of the Traffic Report.

TRAFFIC OPERATIONS ANALYSES

The San Bernardino CMP requires analysis of traffic operations to be based on the current methodologies of the Highway Capacity Manual (HCM), (Transportation Research Board Special Report 209). The CMP does not define the specific software to be used in the analysis, but allows the use of several software packages that are consistent with the HCM methodologies. The intersection analysis for the proposed project has been accomplished using the Highway Capacity Software (HCS) software program using the specific input data as outlined in Appendices A and C of the CMP. For signalized intersections, the LOS is determined by calculating the average total delay in seconds per vehicle for all vehicles traveling through the intersection. Table 5.3-3 defines LOS in terms of level of delay per Table 9-1 of the Highway Capacity Manual.

Table 5.3-3
Level of Service Criteria for Signalized Intersections

Level of Service	Seconds of delay per vehicle
A	0.00 – 10.00
B	10.01 – 20.00
C	20.01 – 35.00
D	35.01 – 55.00
E	55.01 – 80.00
F	> 80.00

The CMP considers signalized intersections to be operating at LOS "F" if the overall intersection volume-to-capacity (V/C) ratio equals or exceeds 1.0, regardless of the delay value. The V/C ratio is defined as the sum of the critical volumes divided by the intersection capacity.

The analysis of freeway segments was conducted as outlined in Appendix A of the CMP, which involves application of the HCM methodologies.

IMPACTS

TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT

5.3-1 *The proposed project would generate additional average daily trips (ADT) onto the local street network and freeway system beyond existing conditions. Analysis has concluded that with implementation of recommended mitigation measures, impacts are reduced to a less than significant level.*

Trip generation projections for the proposed project are based on daily and peak hourly trip generation rates obtained from the Institute of Transportation Engineers (ITE) Trip Generation Manual (Sixth Edition). Since the Trip Generation manual does not contain trip generation rates for health club facilities, the San Diego Association of Governments (SANDAG) Trip Generation rates were used. Trip generation estimates were developed for each phase. Definition of the project study area, however, is based on the trip generation for the entire project.

The following analysis is based upon three Phase scenario's utilized to conduct the Traffic Study. The following summarizes the assumptions for the three phases. The phasing assumptions are utilized for the purposes of the analysis. The project phasing is provided in further detail in Section 3.5 of this EIR.

Trip Generation

Phase 1. The first phase of development consists of 305 single-family homes along the eastern edge of the project site and is currently under construction. Since it is part of the overall project, however, traffic from Phase 1 is included in the Phase 2 and Phase 3 future traffic analysis. Trip generation rates and resulting trip generation estimates for Phase 1 are summarized on Table 5.3-4, *Phase 1 Trip Generation.* Phase 1 of The Colonies at San Antonio would generate 2,892 trips on a daily basis, with 223 trips in the morning peak hour, and 293 in the evening peak hour.

Table 5.3-4
Phase 1 Trip Generation

Planning Area	Land Use	Intensity	Units	Daily Total	AM Peak			PM Peak		
					In	Out	Total	In	Out	Total
1, 2, 3	Single-Family Detached Housing	305	DU	2,892	56	167	223	188	105	293
TOTAL				**2,892**	**56**	**167**	**223**	**188**	**105**	**293**
Source: Traffic Impact Study for The Colonies at San Antonio, prepared by Kimley-Horn & Associates, May, 2002.										
DU = dwelling unit										

Phase 2. Phase 2 would consist of development of the remaining project area south of the future I-210 Freeway. This would entail 350 condominium/townhomes, 495 single-family residences, an elementary school, a total of 786,000 square feet of regional and local shopping center uses, a 3,800-seat theater, and 80,000 square feet of office space. A detailed summary of the proposed site uses within each Planning Area is included in Appendix B of the Project Traffic Study. Trip generation estimates for Phase 2 are summarized on Table 5.3-5, *Phase 2, Trip Generation*. Phase 2 is estimated to generate 49,378 daily trips, with 1,812 trips in the morning peak hour, and 5,045 in the evening peak hour. These total trip estimates do not take into account on-site interaction between the complementary uses within the project (i.e., trip attractions between residential and shopping, residential and employment, etc.) or pass-by traffic. With pass-by assumptions, Phase 2 is estimated to generate 35,833 new daily trips, with 1,506 new trips in the morning hour, and 3,781 in the evening hour. The CTP model accounts for internal such trip interactions in the trip assignment process. The actual number of trips added to the surrounding street system, after site attractions and pass-by trips are taken into account, would be less than the raw trip generation estimates shown on Table 5.3-5. The combined, unadjusted trip generation for Phases 1 and 2 would be 52,270 daily trips.

Table 5.3-5
Phase 2 Trip Generation

Planning Area	Land Use	Intensity	Units	Daily Total	AM Peak			PM Peak		
					In	Out	Total	In	Out	Total
4	Residential Condominium/Townhouse	350	DU	1,888	23	115	138	116	57	173
5-13	Single-Family Detached Housing	495	DU	4,515	89	267	356	291	163	454
15	Elementary School	900	Student	918	153	108	261	0	0	0
17	Shopping Center	108	1,000 sf	7,162	102	65	167	317	344	661
18	Shopping Center	410	1,000 sf	16,889	226	144	370	765	828	1,593
19A	Shopping Center	210	1,000 sf	10,984	152	97	249	492	533	1,025
19B	Shopping Center	58	1,000 sf	4,802	70	45	115	210	228	438
19B	Movie Theater with Matinee	3,800	Seats	1,102	N/A	N/A	N/A	282	250	532
19B	General Office Building	80	1,000 sf	1,118	137	19	156	29	140	169
Subtotal Phase 2				**49,378**	**952**	**860**	**1,812**	**2,501**	**2,544**	**5,045**
Shopping Center – 34%				**13,545**	**187**	**119**	**306**	**607**	**657**	**1,264**
Total Phase 2 New Trips				**35,833**	**765**	**740**	**1,506**	**1,895**	**1,887**	**3,781**
Phase 1				**2,892**	**56**	**167**	**223**	**188**	**105**	**293**
TOTAL PHASES 1 AND 2 NEW TRIPS				**38,725**	**821**	**907**	**1,729**	**2,082**	**1,992**	**4,074**

Source: Traffic Impact Study for The Colonies at San Antonio, prepared by Kimley-Horn & Associates, May 2002.

DU = dwelling unit SF = square feet

Phase 3. Phase 3 would complete the proposed project and comprise the project area located along the north side of the future I-210 Freeway. It would consist of a 150-room hotel, a 40,000-square-foot health club, a day-care center, two service/gasoline stations, restaurants, and auto sales lots. Trip generation estimates for Phase 3 are summarized on Table 5.4-6, *Phase 3 and Total Project Trip*

Generation. Phase 3 is estimated to generate 15,049 daily trips, with 1,198 trips in the morning peak hour, and 1,201 trips in the evening peak hour. Again, these trip generation estimates do not reflect on-site interaction or pass-by trips. With pass-by assumptions, Phase 3 is estimated to generate 10,067 new daily trips, with 755 in the morning peak hour, and 3,781 in the evening peak hour. The combined, unadjusted trips for the entire project are estimated to be 67,319 daily trips, with 3,233 trips in the morning peak hour, and 6,539 trips in the evening peak hour.

Trip Distribution and Assignment

Trip distribution patterns for the project were developed using the SCAG CTP modeling process. The CTP model assigns trips from each zone in the network to appropriate land uses in other zones, taking into account complementary trip productions and attractions, such as residential to employment, residential to commercial, etc. The project site was split into separate zones representing seven major planning areas, and seven select zone runs were conducted for the morning and evening peak periods.

Table 5.3-6
Phase 3 and Total Project Trip Generation

Planning Area	Land Use	Intensity	Units	Daily Total	AM Peak			PM Peak		
					In	Out	Total	In	Out	Total
20	Hotel	150	Rooms	974	41	27	68	39	35	74
20	Health Club	40	1,000 SF	1,200	6	6	12	105	67	172
20	Day Care Center	4	1,000 SF	317	27	24	51	24	28	52
20	High-Turnover (Sit-Down) Restaurant	6	1,000 SF	782	29	27	56	39	26	65
21	Gasoline/Service Station with Convenience Market and Car Wash	12	VFP	1,834	65	63	128	79	79	158
21	Specialty Retail Center	28	1,000 SF	1,139	86	93	179	31	42	73
21	Fast Food Restaurant with Drive-Thru Window	8	1,000 SF	3,969	203	196	399	139	129	268
21	New Car Sales	80	1,000 SF	3,000	129	48	177	72	109	181
21	Gasoline/Service Station with Convenience Market and Car Wash	12	VFP	1,834	65	63	128	79	79	158
Subtotal Phase 3				**15,049**	**652**	**546**	**1,198**	**609**	**592**	**1,201**
	Commercial Pass-by			**4,982**	**224**	**219**	**443**	**195**	**188**	**383**
Total Phase 3 New Trips				**10,067**	**428**	**327**	**755**	**414**	**405**	**818**
Phase 1				**2,892**	**56**	**167**	**223**	**188**	**105**	**293**
Phase 2				**35,833**	**765**	**740**	**1,506**	**1,895**	**1,887**	**3,781**
TOTAL PHASES 1, 2 AND 3 NEW TRIPS				**48,792**	**1,249**	**1,234**	**2,484**	**2,496**	**2,397**	**4,893**

Source: Traffic Impact Study for The Colonies at San Antonio, prepared by Kimley-Horn & Associates, May 2002.

SF = square feet VFP = vehicle fueling positions

After the assignment process has taken place, the select zone runs isolate project traffic on each roadway link. These peak period directional approach volumes at the study intersections were then processed to develop peak hour project-related turning movement volumes. Copies of the CTP select zone model output plots, and accompanying spreadsheets which were used to develop peak hour turning movements for each study intersection, are included in Appendix C of the project Traffic Study. As stated earlier, the "raw" trip generation estimates shown in Tables 5.3-4 through 5.3-6, do not reflect internal interaction between land uses or pass-by or diverted trips. Pass-by factors were derived from the ITE Trip Generation Handbook. The CTP model takes internal interactions between complementary land uses into account, and they are reflected in the resulting project traffic at the study intersection. Overall project traffic distribution percentages for the project (total project), as derived from the Select Zone runs, are shown on Exhibit 5.3-5, *Project Traffic Distribution*. As shown in this Exhibit 5.3-5, the model distribution assumed that the majority of project traffic would be concentrated on 16th Street/Baseline Road, Euclid Avenue, and the I-210 Freeway.

Peak hour project traffic volumes for Phases 1 and 2, as derived directly from the Select Zone runs are shown on Exhibit 5.3-6, *Peak Hour Traffic Volumes – Phases 1 and 2*, and peak hour traffic for the Total Project are shown on Exhibit 5.3-7, *Peak Hour Traffic Volumes – Total Project*.

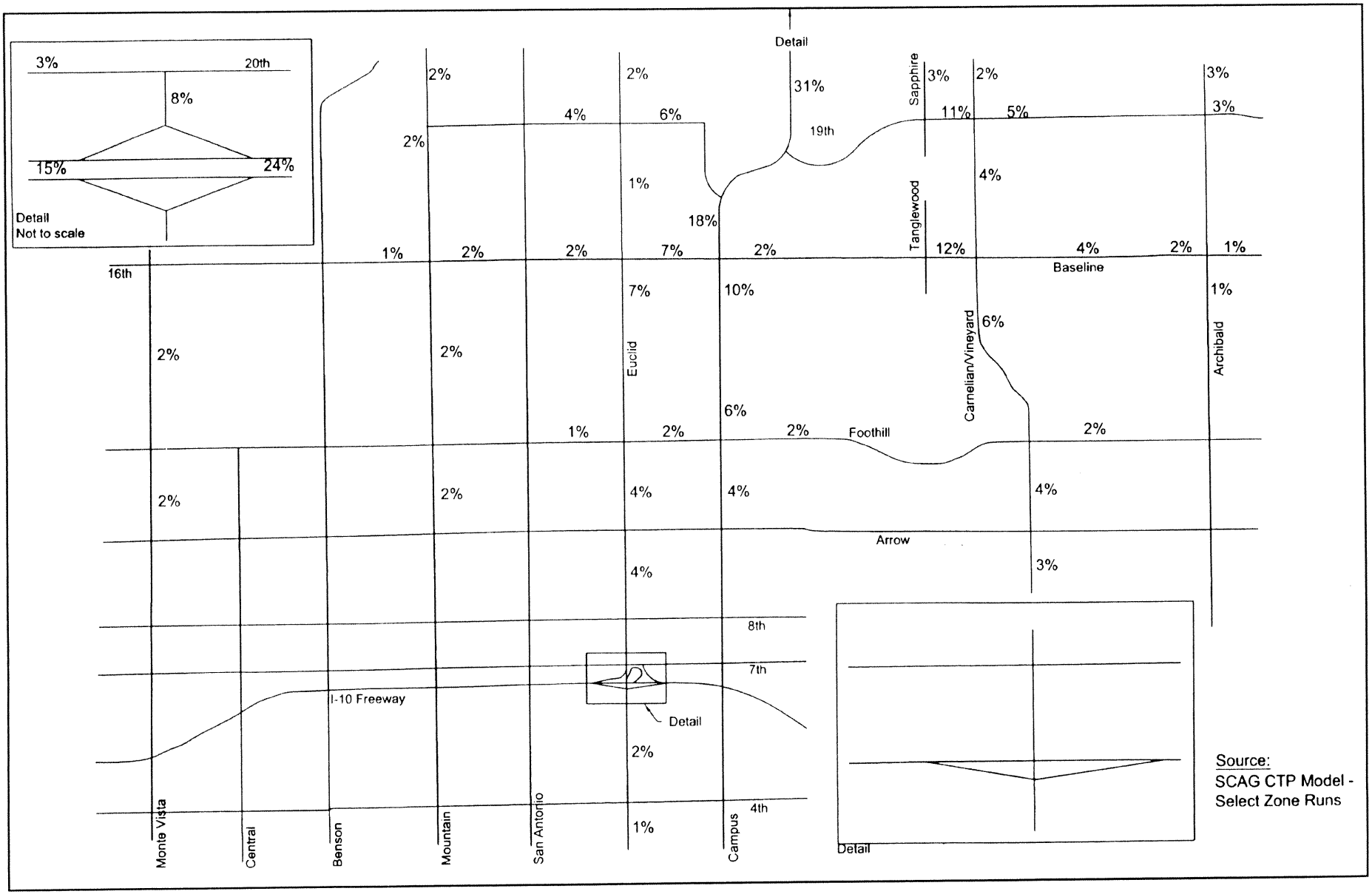
The total project traffic on freeway segments is shown on Table 5.3-7, *Summary of Project Traffic on CMP Freeway Segments*. Only segments with 100 or more two-way project trips are required to be analyzed for CMP requirements. In the case of the I-210 Freeway, freeway analysis was conducted for future conditions, but not for existing, since the freeway does not yet exist in the vicinity of the project.

Table 5.3-7
Summary of Traffic on CMP Freeway Segments

Freeway Segment	Project Trips	
	AM Peak	PM Peak[1]
Interstate 10		
Monte Vista to Central	203	-282
Central to Mountain	226	-214
Mountain to Euclid	340	-95
Euclid to Fourth	358	-162
Interstate 210		
Monte Vista to Central	60	364
Central to Mountain	640	1,065
Mountain to Euclid	226	695
Euclid to Fourth	193	473
Carnelian to Haven	157	524
Haven to Milliken	173	402

NOTES:
[1] The CTP model forecasts show a decrease in traffic on the I-10 Freeway in the morning peak hour, and very low project traffic volumes in the evening peak hour. It appears that the explanation for this is the proximity of the project to the new I-210 Freeway. Traffic on the I-10 Freeway in the "Without Project" scenario appears to divert to the I-210 Freeway to access the project site

Source: Traffic Impact Study for The Colonies at San Antonio, prepared by Kimley-Horn & Associates, May 2002.



Source: Kimley-Horn and Associates, Inc., May 2002.

Exhibit 5.3

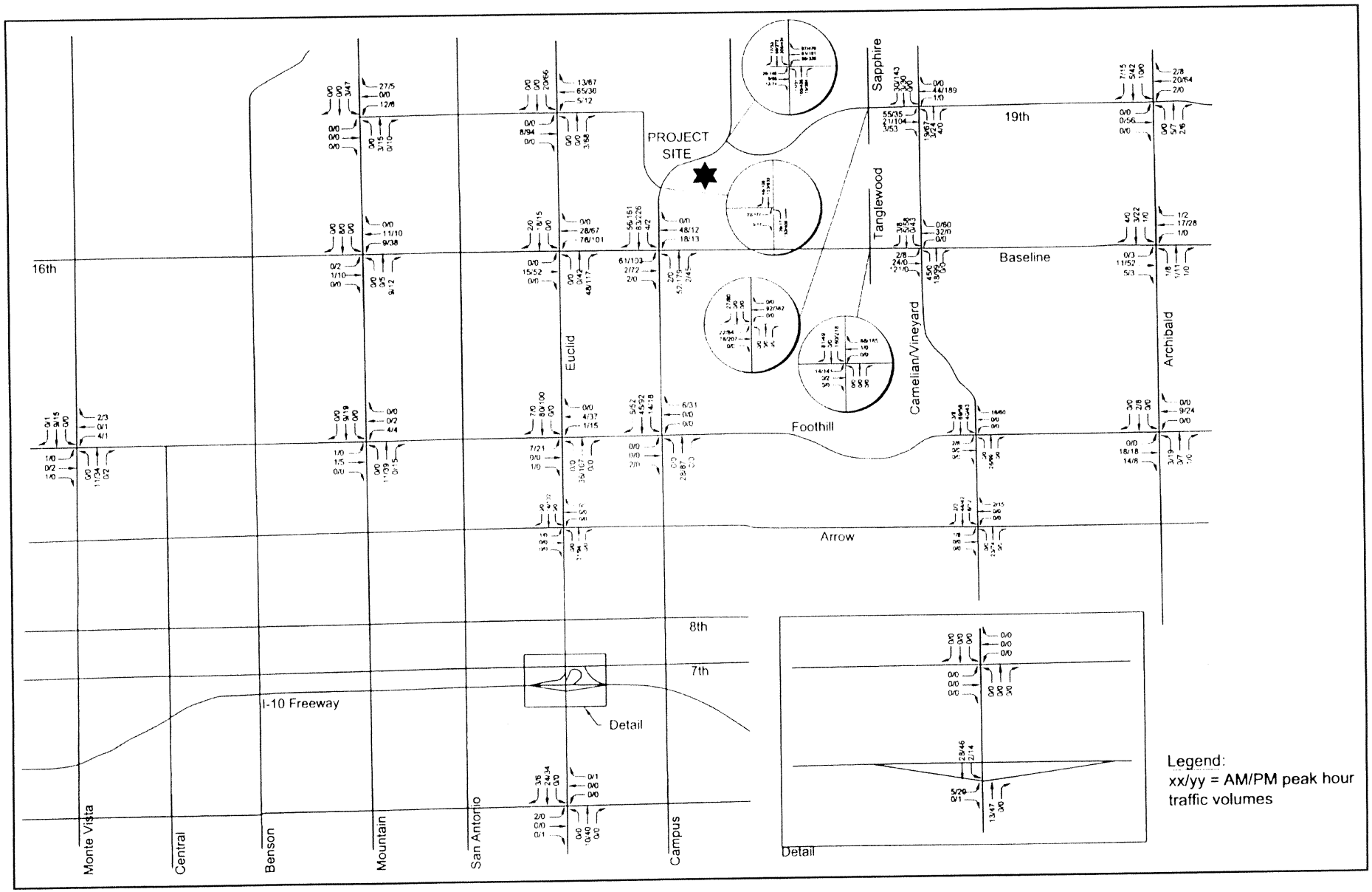
RBF PLANNING ■ DESIGN ■ CONSTRUCTION

06/02 JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Project Traffic Distribution



Source: Kimley-Horn and Associates, Inc., May 2002.

Exhibit 5.3-6

RBF CONSULTING

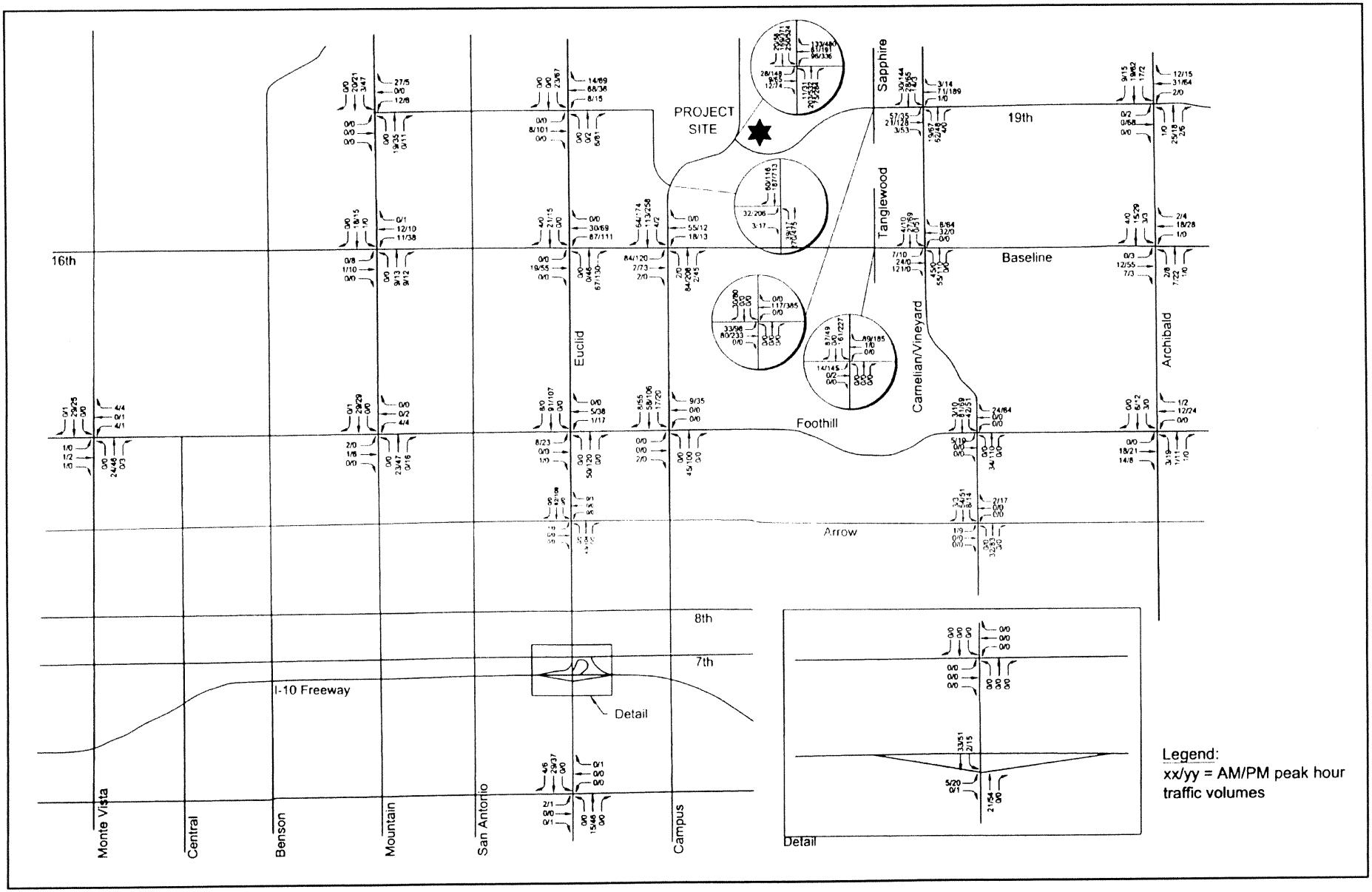
PLANNING ■ DESIGN ■ CONSTRUCTION

06/02 JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Peak Hour Traffic Volumes - Phases 1 and 2



Source: Kimley-Horn and Associates, Inc., May 2002.

Exhibit 5.3

RBF PLANNING ■ DESIGN ■ CONSTRUCTION

06/02 JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Peak Hour Traffic Volumes - Total Project

Using the project trip generation as shown in Table 5.3-6, *Phase 3 and Project Traffic Generation*, and "select zone" model runs of the CTP model, prepared by Southern California Association of Governments (SCAG), it was determined that the project traffic would meet or exceed CMP thresholds along the following CMP freeway segments and at the following key intersections. As such, noted intersections were analyzed further in this Section.

Freeway Segments

- I-10 from Mountain Avenue to Fourth Street [1]
- I-210 future from Monte Vista to Haven Avenue

Intersections

- 19th Street at Mountain Avenue
- 19th Street at Euclid Avenue[1]
- 19th Street at Campus Avenue[2]
- 19th Street at Campus Avenue North[2] [3]
- 19th Street at Campus Avenue South[2] [3]
- 19th Street at Carnelian Avenue (City of Rancho Cucamonga)
- 19th Street at Archibald Avenue (City of Rancho Cucamonga)
- 16th Street at Mountain Avenue
- 16th Street at Euclid Avenue[1]
- 16th Street at Campus Avenue[2]
- Baseline Road at Carnelian Avenue (City of Rancho Cucamonga)
- Baseline Road at Archibald Avenue (City of Rancho Cucamonga)
- Foothill Boulevard at Monte Vista Avenue
- Foothill Boulevard at Mountain Avenue[1]
- Foothill Boulevard at Euclid Avenue[1]
- Foothill Boulevard at Campus Avenue
- Foothill Boulevard at Carnelian Avenue and Vineyard Avenue (City of Rancho Cucamonga)
- Foothill Boulevard at Archibald Avenue (City of Rancho Cucamonga)
- Arrow Route at Euclid Avenue
- Arrow Route at Vineyard Avenue (City of Rancho Cucamonga)
- Euclid Avenue at 7th Street
- Euclid Avenue at I-10 EB Ramps
- Euclid Avenue at 4th Street (City of Ontario)
- 19th Street at Sapphire Street[2]
- 16th Street at Tanglewood Street[2]
- I-210 at Campus Avenue WB Ramps[3]
- I-210 at Campus Avenue EB Ramps[3]

(1) Freeway segment or intersection already deficient, per CMP table 2-1
(2) Not a CMP Facility
(3) Future Intersection or Freeway

As specifically noted in the list above, the list of study intersections contains selected intersections that are not CMP intersections. These intersections are included in the analysis because of their proximity to the project. The study intersections are indicated on Exhibit 5.3-1, *Study Intersections*. The intersection reference numbers shown on Exhibit 5.3-1 are assigned to assist in locating a particular intersection, and are used throughout this Section on intersection worksheets in the project Traffic Report and in summary tables.

Future Traffic Conditions

Future conditions analysis was conducted for the following scenarios:

Without Project

- Year 2011 background with General Plan network
- Year 2015 background with General Plan network
- Year 2020 (General Plan Build-out)

With Project

- Year 2011 with Phases 1 and 2 of the project and proposed project network changes
- Year 2015 with Phases 1, 2, and 3 of the project and proposed project network changes
- Year 2020 (Build-out) with the completed project and proposed project network changes

As previously stated, future year forecasts were developed using a per-year growth increment process based on modeled forecast volumes from the CTP model for Years 1994 and 2020. To arrive at future year forecasts, the per-year growth increment is added to actual existing data for the appropriate number of years to represent a particular forecast timeframe. For Year 2011, 10 years of growth were added to Year 2001 count data; for Year 2015, 14 years of growth was applied; and for 2020, 19 years of growth was assumed.

The trip generation by Phases 1, 2 and 3 of the proposed project would create additional trips on the local street network and freeway system beyond existing conditions. The project data has been utilized in the analysis future traffic conditions discussions as part of Impact Statements 5.3-2 and 5.3-3. As further analyzed and concluded in the future traffic conditions analysis, implementation of mitigation measures recommended in this Section would mitigate potential impacts to the future street network and impacted freeway areas to less than significant levels (refer to Impact Statements 5.3-2 and 5.3-3).

YEAR 2011 FUTURE TRAFFIC CONDITIONS

5.3-2 *Traffic generated by project Phases 1 and 2 would contribute to Year 2011 (without project) over capacity conditions at three intersections. This contribution would be considered a significant impact. Phases 1 and 2 traffic would cause one additional intersection to operate at LOS "E".*

Impacts would be reduced to a less than significant level with implementation of recommended mitigation measures.

Planned Transportation Improvements

The Year 2020 number of through lanes on the area street system was obtained from the CTP traffic model. As part of the I-210 Freeway project, Campus Avenue will be realigned north of 16th Street, to allow adequate spacing between interchanges. In the vicinity of the project, the Circulation Element assumes the realignment of Campus Avenue and the construction of the I-210 Freeway. The Circulation Element also reflects the on-site roadways and network changes that were previously approved as they had been planned to be constructed with the development of project site.

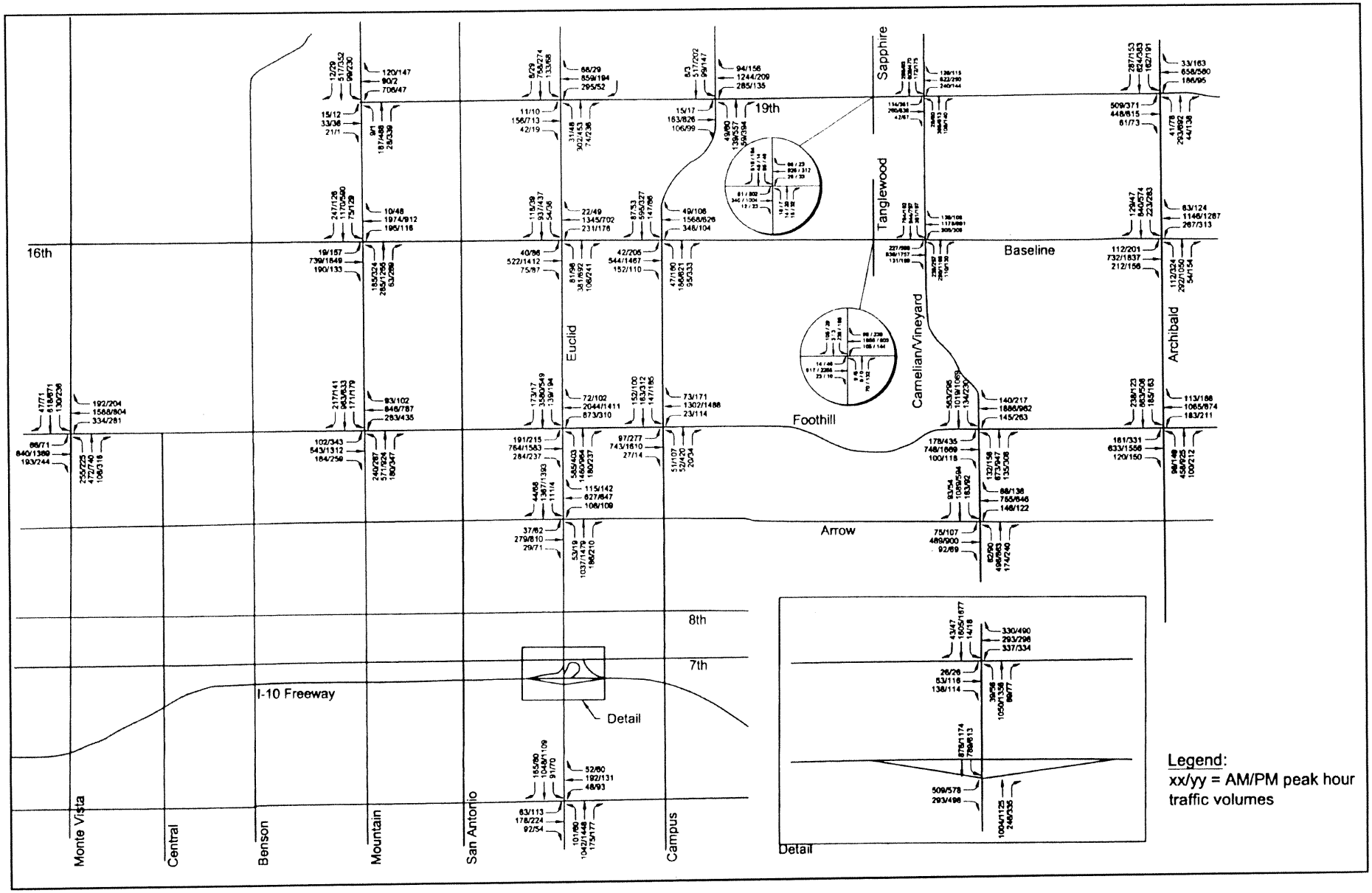
A review of the Circulation Element reveals that 19th Street is shown as realigned through the commercial portion of the project site, but is still shown as a four-way intersection at Campus Avenue. As stated previously, the project site plan reflects 19th Street realigned and offset at 16th Street, replacing the four-legged intersection with two T-intersections. In the "With Project" analysis, the 19th Street/Campus intersection is analyzed as two offset intersections – 19th Street North and 19th Street South at Campus Avenue – for Phases 2 and 3. Existing turning movement volumes were manually reassigned to the two offset intersections to develop future forecast data for the future "With Project" analysis. Project-proposed improvements at these two intersections are assumed in the With Project analysis. Accordingly, the 19th Street North intersection is be assumed to function as a four-legged intersection, with a major project driveway to one of the shopping centers forming the fourth leg.

Review of the Circulation Element also reveals that 18th Street is shown to connect to the realigned 19th Street, west of Campus Avenue. The currently proposed project does not assume this connection. 18th Street is assumed to continue to be terminated west of Campus Avenue.

Year 2011 Background Operating Conditions (Without Project)

Phases 1 and 2 of project are anticipated to be completed by Year 2011. Projected Year 2011 background peak hour volumes without the project traffic are shown on Exhibit 5.3-8, *Year 2011 – Peak Hour Traffic Volumes (Without Project)*. Year 2011 background conditions assume General Plan network changes, including the I-210 Freeway and the realignment of Campus Avenue, but not the realignment and offset of 19th Street proposed by the project. Intersection analysis was conducted using the forecasted peak hour volumes, and the results are summarized on Table 5.3-8, *Comparison of Existing and Future Intersection Operation Without Project*. By the Year 2011, the following intersections are projected to operate at LOS "E" or "F":

- 19th Street at Campus Avenue (AM and PM peaks)
- 16th Street at Mountain Avenue (AM and PM peaks)
- Baseline Street at Carnelian Street (AM and PM peaks)
- Baseline Street at Archibald Avenue (PM peak)



Source: Kimley-Horn and Associates, Inc., May 2002.

Exhibit 5.3

RBF PLANNING ■ DESIGN ■ CONSTRUCTION

06/02 JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Year 2011 - Peak Hour Traffic Volumes (Without Project)

Table 5.3-8
Comparison of Existing + Future Intersection Operation Without Project

Int. #	Intersection	Existing Conditions				Year 2011 w/o Project				Year 2015 w/o Project				Year 2020 w/o Project			
		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	19th / Mountain	21.1	C	12.3	B	26.5	C	11.0	B	49.5	D	37.5	D	74.2	**E**	119.2	**F**
2	19th / Euclid	17.3	B	13.9	B	26.9	C	15.0	B	29.7	C	15.5	B	53.6	D	18.9	B
3	19th / Campus	28.4	C	20.5	C	63.6	**E**	55.5	**E**	105.9	**F**	280.2	**F**	176.2	**F**	305.8	**F**
4	19th / Carnelian	12.8	B	18.2	B	14.3	B	21.9	C	14.4	B	29.6	C	17.1	B	49.2	D
5	19th / Archibald	18.5	B	20.6	C	33.3	C	36.5	D	38.2	D	48.2	D	45.5	D	53.7	D
6	16th / Mountain	48.2	D	89.3	**F**	55.3	**E**	95.4	**F**	62.4	**E**	83.4	**F**	68.9	**E**	90.5	**F**
7	16th / Euclid	15.7	B	22.0	C	16.0	B	29.9	C	16.2	B	33.2	C	17.1	B	49.7	D
8	16th / Campus	17.9	B	20.6	C	18.2	B	21.9	C	19.7	B	23.6	C	28.5	C	30.7	C
9	Baseline / Carnelian	115.9	**F**	154.5	**F**	132.3	**F**	173.5	**F**	123.8	**F**	157.6	**F**	129.8	**F**	170.2	**F**
10	Baseline / Archibald	19.0	B	121.6	**F**	19.2	B	127.7	**F**	19.3	B	129.4	**F**	22.4	C	138.8	**F**
11	Foothill / Monte Vista	22.5	C	18.0	B	23.4	C	25.3	C	26.9	C	27.1	C	31.7	C	40.2	D
12	Foothill / Mountain	12.7	B	14.0	B	12.8	B	14.5	B	12.9	B	14.5	B	13.1	B	15.0	B
13	Foothill / Euclid	15.1	B	26.7	C	16.3	B	32.0	C	16.3	B	28.2	C	16.5	B	29.0	C
14	Foothill / Campus	15.2	B	31.4	C	16.8	B	40.4	D	18.0	B	43.7	D	24.6	C	48.0	D
15	Foothill / Carnelian	27.6	C	36.3	D	39.6	D	46.3	D	41.7	D	46.7	D	47.2	D	51.3	D
16	Foothill / Archibald	14.1	B	22.7	C	14.4	B	33.3	C	15.1	B	27.8	C	15.5	B	41.6	D
17	Arrow / Euclid	13.5	B	14.5	B	15.9	B	16.1	B	16.9	B	20.1	C	19.3	B	23.0	C
18	Arrow / Vineyard	15.0	B	16.2	B	15.7	B	18.3	B	15.8	B	19.9	B	16.1	B	21.1	C
19	Euclid / 7th	13.1	B	14.7	B	17.2	B	26.3	C	17.2	B	26.2	C	18.8	B	30.1	C
20	Euclid / I-10 EB ramps	22.0	C	22.3	C	26.9	C	32.8	C	30.4	C	34.2	C	33.4	C	36.8	D
21	Euclid / 4th	11.2	B	19.7	B	11.6	B	24.2	C	11.8	B	26.8	C	18.3	B	29.9	C
22	19th / Sapphire	19.5	B	11.7	B	41.8	D	12.0	B	54.3	D	13.7	B	75.3	**E**	13.9	B
23	16th / Tanglewood	9.3	A	8.3	A	13.3	B	27.4	C	15.1	B	33.7	C	15.9	B	54.1	D
24	Campus / 210 EB	N/A	N/A	N/A	N/A	13.9	B	15.9	B	14.2	B	16.2	B	14.8	B	16.7	B
25	Campus / 210 WB	N/A	N/A	N/A	N/A	18.2	B	19.7	B	18.7	B	20.3	C	17.7	B	18.3	B

w/o = without LOS = level of service EB = eastbound WB = westbound N/A = not applicable

Source: Traffic Impact Study for The Colonies at San Antonio, prepared by Kimley-Horn & Associates, May 2002.

Review of Table 5.3-8 shows that three of these intersections were shown to be already operating at LOS "E" or "F" under existing conditions. The intersection of 19th Street and Campus is projected to worsen to LOS "E" or "F" with the growth in traffic between existing and Year 2011 without project conditions.

Year 2011 With Project (Phases 1 and 2)

Phase 2 of the proposed project includes a mix of residential and shopping center uses. The residential portion would consist of 350 condominium/townhomes, 495 single-family residences, and an elementary school in the middle and southern part of the project site. On either side of 19th Street, and south of the I-210 Freeway, a total of 786,000 square feet of regional and local shopping center uses are proposed. The commercial planning areas show a variety of commercial uses, including anchor and ancillary retail buildings, outlying restaurant and retail pads and service stations, a 3,800-seat theater, and 80,000 square feet of office space. Phase 2 would also involve the realignment of 19th Street through the project to create two off-set intersections at Campus Avenue, rather than a continuous arterial. This realignment of 19th Street was assumed in the CTP "With Project" model runs.

Peak hour traffic from Phases 1 and 2 of the proposed project was derived from the CTP model through the select zone process, as previously described. The project volumes were added to the Year 2011 forecast volumes, assuming the network changes proposed by the project. Year 2011 peak hour traffic volumes with Phases 1 and 2 are shown on Exhibit 5.3-9, *Year 2011 – Peak Hour Traffic Volumes (With Project)*. It should be noted that intersection volume changes are a result of not only

the addition of the project traffic, but also re-routing of some traffic, in response to the network changes proposed by the project, most notably, the realignment and offset of 19th Street.

The intersection analysis was re-run assuming these network changes and the Phases 1 and 2 traffic volumes. The results are summarized on Table 5.3-9, *Comparison of Intersection Operation – Year 2011 With and Without Project*. With the addition of Phases 1 and 2 traffic, and the realignment and offset of 19th Street, the LOS "E" conditions at 19th Street and Campus Avenue would be eliminated, and the two offset intersections within the project (19th Street at Campus Avenue North and South) are projected to operate at LOS "C" or better. The three other intersections projected to operate at LOS "E" or "F" without the project would continue to do so, and the addition of the project would cause one additional intersection to operate at LOS "E", at 19th at Sapphire Street in both the AM and PM peak hours.

In summary, Phases 1 and 2 traffic would contribute to Year 2011 over-capacity conditions at three of the four intersections. Operations would occur at deficient levels without project traffic and also cause one additional intersection (19th Street and Sapphire Street) to operate at LOS "E" in both peak hours. With development of Phase 2, the project would realign 19th Street and construct improvements at 19th Street and Campus Avenue to replace the four-legged intersection with two offset intersections (19th Street North and 19th Street South at Campus Avenue). Improvements which would eliminate the projected intersection deficiencies at the study intersections and the corresponding LOS with improvements in place are summarized on Table 5.3-16, *Summary of Intersection Operation with Improvements*.

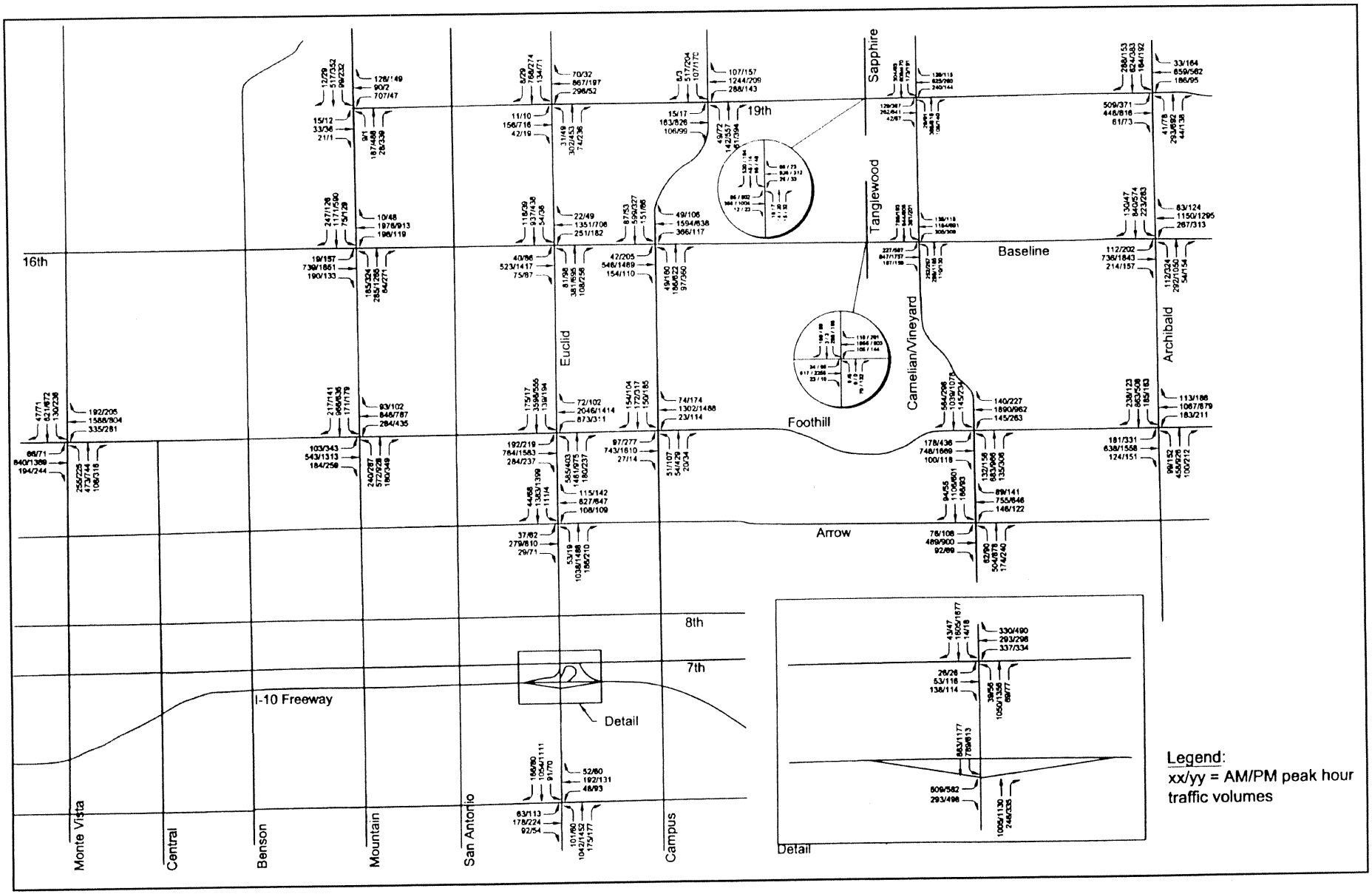
The improvements included in Table 5.3-16 for Year 2011 (with project) would bring each of the four aforementioned deficient intersections back to an LOS "D". As such, implementation of the improvements included in Table 5.3-16 and mitigation measures in this section would reduce project related impacts in Year 2011 to less than significant levels.

YEAR 2015 FUTURE TRAFFIC CONDITIONS

5.3-3 *Project generated traffic (Phases 1, 2 and 3) would contribute to Year 2015 (without project) over-capacity conditions at three intersections and cause one additional intersection to operate at an unacceptable LOS. Impacts would be reduced to a less than significant level with implementation of recommended mitigation measures.*

Year 2015 Background Operating Conditions

All three phases of the proposed project are anticipated to be completed by Year 2015. This would be considered the "Opening Year" of the project for CMP Analysis purposes. Projected Year 2015 background peak hour volumes without the project traffic are shown on Exhibit 5.3-10, *Year 2015 – Peak Hour Traffic Volumes (Without Project)*. Year 2015 background conditions assume General Plan network changes, including the I-210 Freeway and the realignment of Campus Avenue, but not the realignment and offset of 19th Street at Campus Avenue proposed by the project.



Source: Kimley-Horn and Associates, Inc., May 2002.

Exhibit 5.3-9

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

06/02

JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

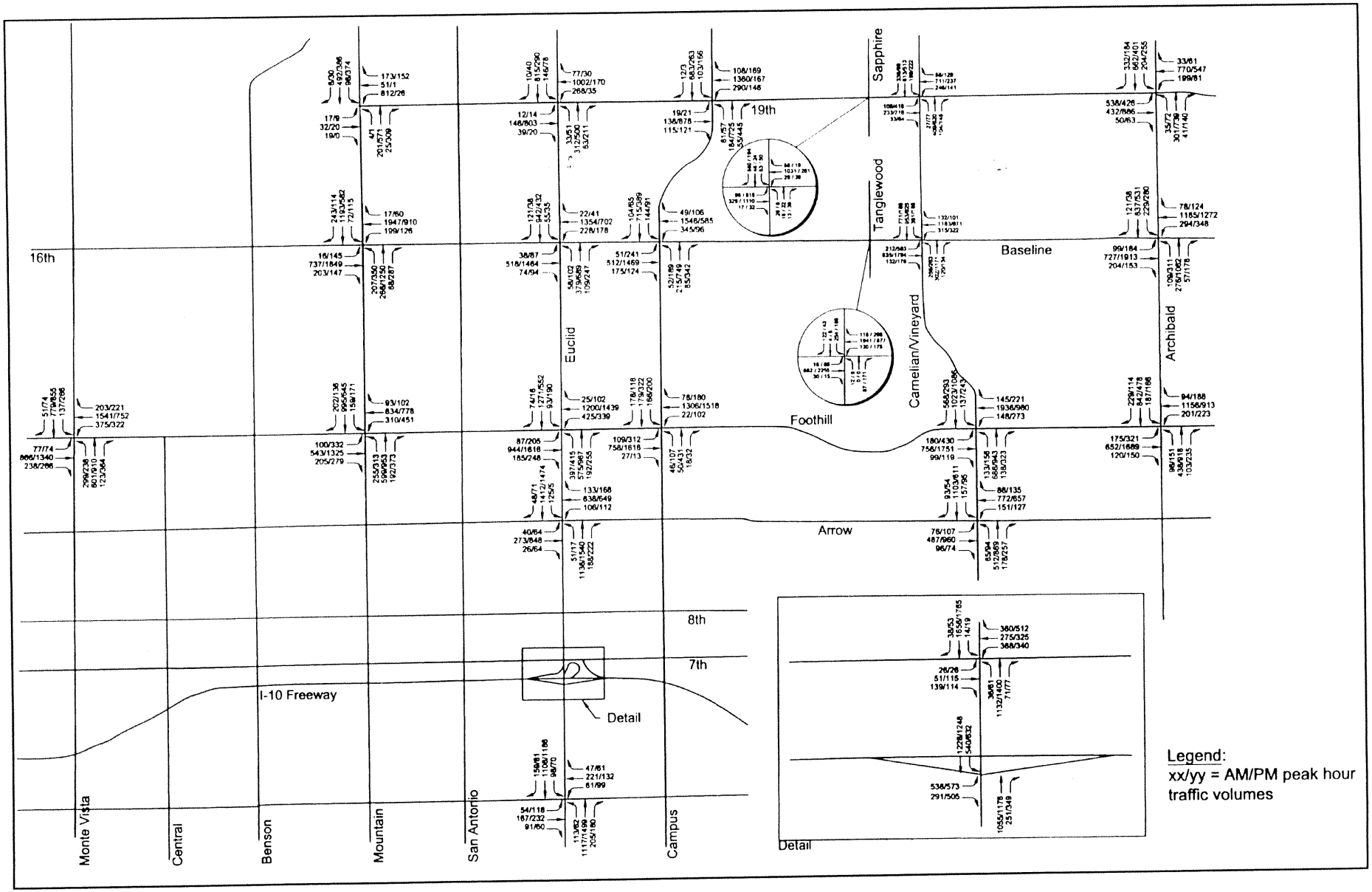
Year 2011 - Peak Hour Traffic Volumes (With Project)

Table 5.3-9
Comparison of Intersection Operation – Year 2011 With and Without Project

Int. #	Intersection	Year 2011 w/o Project				Year 2011 w/ Phase 1 + 2				Project Impa	
		AM Peak		PM Peak		AM Peak		PM Peak		AM	PM
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Peak	Pea
1	19th / Mountain	26.5	C	11.0	B	22.4	C	20.3	C	-4.1	9.3
2	19th / Euclid	26.9	C	15.0	B	23.8	C	17.2	B	-3.1	2.2
3	19th / Campus	63.6	**E**	55.5	**E**	N/A	N/A	N/A	N/A	N/A	N/A
3a	19th / Campus North	N/A	N/A	N/A	N/A	27.8	C	26.9	C	N/A	N/A
3b	19th / Campus South	N/A	N/A	N/A	N/A	9.1	A	23.0	C	N/A	N/A
4	19th / Carnelian	14.3	B	21.9	C	19.5	B	39.2	D	5.2	17.
5	19th / Archibald	33.3	C	36.5	D	36.8	D	42.4	D	3.5	5.9
6	16th / Mountain	55.3	**E**	95.4	**F**	75.1	**E**	92.0	**F**	19.8	-3.
7	16th / Euclid	16.0	B	29.9	C	19.2	B	30.3	C	3.2	0.4
8	16th / Campus	18.2	B	21.9	C	26.0	C	34.4	C	7.8	12.
9	Baseline / Carnelian	132.3	**F**	173.5	**F**	153.5	**F**	183.4	**F**	21.2	9.9
10	Baseline / Archibald	19.2	B	127.7	**F**	23.1	C	130.1	**F**	3.9	2.4
11	Foothill / Monte Vista	23.4	C	25.3	C	24.5	C	28.1	C	1.1	2.8
12	Foothill / Mountain	12.8	B	14.5	B	13.0	B	15.5	B	0.2	1.0
13	Foothill / Euclid	16.3	B	32.0	C	16.6	B	34.4	C	0.3	2.4
14	Foothill / Campus	16.8	B	40.4	D	16.9	B	52.3	D	0.1	11.
15	Foothill / Carnelian	39.6	D	46.3	D	45.1	D	46.6	D	5.5	0.3
16	Foothill / Archibald	14.4	B	33.3	C	14.5	B	35.4	D	0.1	2.
17	Arrow / Euclid	15.9	B	16.1	B	16.9	B	16.7	B	1.0	0.6
18	Arrow / Vineyard	15.7	B	18.3	B	16.5	B	19.5	B	0.8	1.2
19	Euclid / 7th	17.2	B	26.3	C	17.6	B	26.8	C	0.4	0.5
20	Euclid / I-10 EB ramps	26.9	C	32.8	C	27.2	C	36.6	D	0.3	3.8
21	Euclid / 4th	11.6	B	24.2	C	12.0	B	27.5	C	0.4	3.
22	19th / Sapphire	41.8	D	12.0	B	56.3	**E**	70.4	**E**	14.5	58.
23	16th / Tanglewood	13.3	B	27.4	C	24.6	C	41.7	D	11.3	14.
24	Campus / 210 EB	13.9	B	15.9	B	13.6	B	20.1	C	-0.3	4.
25	Campus / 210 WB	18.2	B	19.7	B	22.3	C	28.9	C	4.1	9.

w/o = without LOS = level of service EB = eastbound WB = westbound N/A = not applicable

Source: Traffic Impact Study for The Colonies at San Antonio, prepared by Kimley-Horn & Associates, May 2002.



Source: Kimley-Horn and Associates, Inc., May 2002.

Exhibit 5.3-10

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

06/02

JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Year 2015 - Peak Hour Traffic Volumes (Without Project)

Intersection analysis was conducted using the forecasted 2015 peak hour volumes, and the results are summarized on Table 5.3-8 (presented previously). In Year 2015, it is projected that the following intersections would continue to operate at LOS "E" or "F":

- 19th Street at Campus Avenue (AM and PM peaks)
- 16th Street at Mountain Avenue (AM and PM peaks)
- Baseline Street at Carnelian Street (AM and PM peaks)
- Baseline Street at Archibald Avenue (PM peak)

Review of Table 5.3-8 indicates that all four intersections were shown to be already operating at LOS "E" or "F" under Year 2011 background conditions (without project). The addition of traffic growth to the Year 2015 (without project) is not projected to cause any additional intersections to operate under deficient conditions.

Year 2015 With Project (Phases 1, 2, and 3)

Phase 3 would complete the proposed project with highway commercial development north of the I-210 Freeway, and consist of a 150-room hotel, a 40,000-square-foot health club, a day-care center, two service/gasoline stations, restaurants, and auto sales lots. As with the Year 2011 analysis, the network changes proposed by the project, most notably the realignment and offset of 19th Street, were assumed in the CTP "With Project" model runs.

Peak hour traffic from Phases 1, 2, and 3 of the proposed project was derived from the CTP model through the select zone process, as described previously. The project volumes for the total project were added to the Year 2015 forecasts. Year 2015 With Phase 3 peak hour traffic volumes are shown on Exhibit 5.3-11, *Year 2015 – Peak Hour Traffic Volumes (With Project Phases 1, 2 and 3)*. Once again, the changes in peak hour volumes reflect not only the addition of project traffic, but also the changes in traffic patterns in response to the network changes proposed by the project.

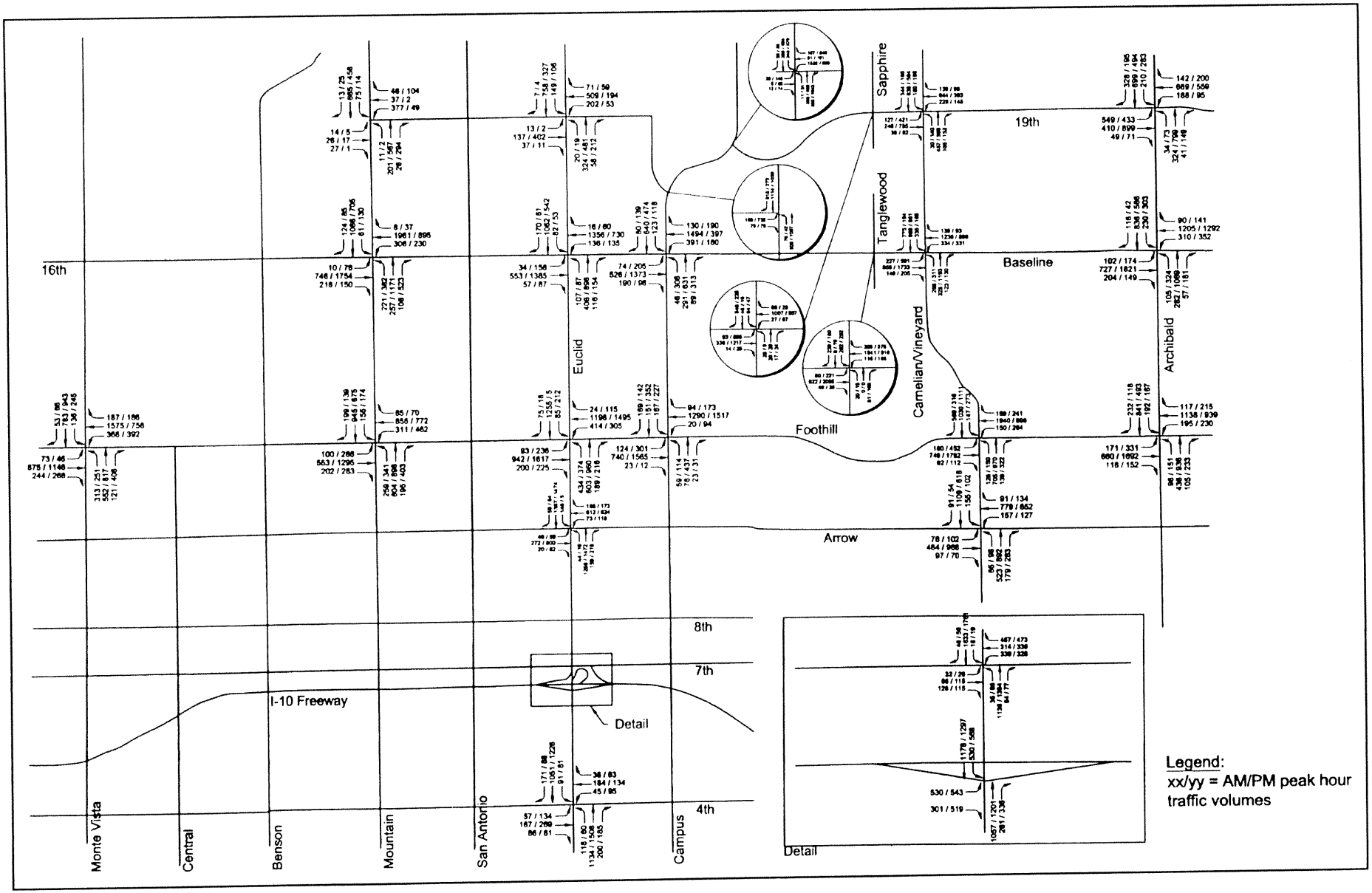
The intersection analysis was rerun, and the results are summarized on Table 5.3-10, *Comparison of Intersection Operation Year 2015 – With and Without Project*. With the addition of the total project traffic, and the realignment and offset of 19th Street, the LOS "E" conditions at 19th Street and Campus Avenue would be eliminated, and the two offset intersections within the site (19th Street at Campus Avenue North and South) are projected to operate at LOS "D" or better. The three other intersections projected to operate at LOS "E" or "F" without the project would continue to do so.

The addition of the project would cause one additional intersection to operate at LOS "E" under 2015 conditions:

- 19th Street at Sapphire Street (AM and PM peak hours)

Of equal importance, the following intersections are shown to improve in the morning peak hour with the addition of the project.

- 19th Street and Mountain Avenue
- 19th Street and Euclid Avenue



Source: Kimley-Horn and Associates, Inc., May 2002.

Exhibit 5.3-11

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

06/02 JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Year 2015 - Peak Hour Traffic Volumes (With Project Phases 1, 2 & 3)

Table 5.3-10
Comparison of Intersection Operation Year 2015 – With and Without Project

Int. #	Intersection	Year 2015 w/o Project				Year 2015 w/ Phase 3				Project Impact	
		AM Peak		PM Peak		AM Peak		PM Peak		AM	PM
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Peak	Peak
1	19th / Mountain	49.5	D	37.5	D	16.7	B	49.1	D	-32.8	11.6
2	19th / Euclid	29.7	C	15.5	B	24.0	C	17.6	B	-5.7	2.1
3	19th / Campus	105.9	F	280.2	F	N/A	N/A	N/A	N/A	N/A	N/A
3a	19th North / Campus	N/A	N/A	N/A	N/A	36.8	D	48.8	D	N/A	N/A
3b	19th South / Campus	N/A	N/A	N/A	N/A	9.7	A	22.2	C	N/A	N/A
4	19th / Carnelian	14.4	B	29.6	C	27.1	C	52.0	D	12.7	22.4
5	19th / Archibald	38.2	D	48.2	D	43.3	D	53.6	D	5.1	5.4
6	16th / Mountain	62.4	E	83.4	F	72.1	E	78.3	E	9.7	-5.1
7	16th / Euclid	16.2	B	33.2	C	19.2	B	34.3	C	3.0	1.1
8	16th / Campus	19.7	B	23.6	C	32.9	C	43.9	D	13.2	20.3
9	Baseline / Carnelian	123.8	F	157.6	F	148.4	F	194.0	F	24.6	36.4
10	Baseline / Archibald	19.3	B	129.4	F	20.7	C	133.1	F	1.4	3.7
11	Foothill / Monte Vista	26.9	C	27.1	C	28.7	C	32.5	C	1.8	5.4
12	Foothill / Mountain	12.9	B	14.5	B	12.8	B	15.1	B	-0.1	0.6
13	Foothill / Euclid	16.3	B	28.2	C	16.3	B	26.5	C	0.0	-1.7
14	Foothill / Campus	18.0	B	43.7	D	16.5	B	53.9	D	-1.5	10.2
15	Foothill / Carnelian	41.7	D	46.7	D	41.6	D	49.9	D	-0.1	3.2
16	Foothill / Archibald	15.1	B	27.8	C	15.2	B	28.8	C	0.1	1.0
17	Arrow / Euclid	16.9	B	20.1	C	16.1	B	21.4	C	-0.8	1.3
18	Arrow / Vineyard	15.8	B	19.9	B	16.7	B	20.0	B	0.9	0.1
19	Euclid / 7th	17.2	B	26.2	C	17.4	B	29.9	C	0.2	3.7
20	Euclid / I-10 EB ramps	30.4	C	34.2	C	32.5	C	42.9	D	2.1	8.7
21	Euclid / 4th	11.8	B	26.8	C	13.9	B	32.0	C	2.1	5.2
22	19th / Sapphire	54.3	D	13.7	B	71.9	E	58.0	E	17.6	44.3
23	16th / Tanglewood	15.1	B	33.7	C	23.0	C	53.7	D	7.9	20.0
24	Campus / 210 EB	14.2	B	16.2	B	16.9	B	27.3	C	2.7	11.1
25	Campus / 210 WB	18.7	B	20.3	C	25.9	C	30.9	C	7.2	10.6

w/o = without LOS = level of service EB = eastbound WB = westbound N/A = not applicable

Source: Traffic Impact Study for The Colonies at San Antonio, prepared by Kimley-Horn & Associates, May 2002.

There are a number of potential explanations for these improvements:

- The CTP model forecasts suggest that the introduction of the regional shopping centers and the residential neighborhoods in the northeast area of the City would attract people and traffic that are currently existing in the network, in other parts of the area. The attraction of trips to the project site would potentially represent the diversion, and therefore a reduction of traffic in other areas.

- The CTP model forecasts also suggests that the proximity of the project site to the future I-210 Freeway would draw people to the site via the freeway, whereas trips with the same purpose but without the project may have stayed on the arterial street system, or may have accessed the area via the I-10 Freeway.

- With the realignment of 19th Street through the project and the offset of 19th Street at Campus Avenue, the CTP model appears to have reassigned east-west through trips to other continuous east-west arterials, such as 16th Street and the I-210 Freeway.

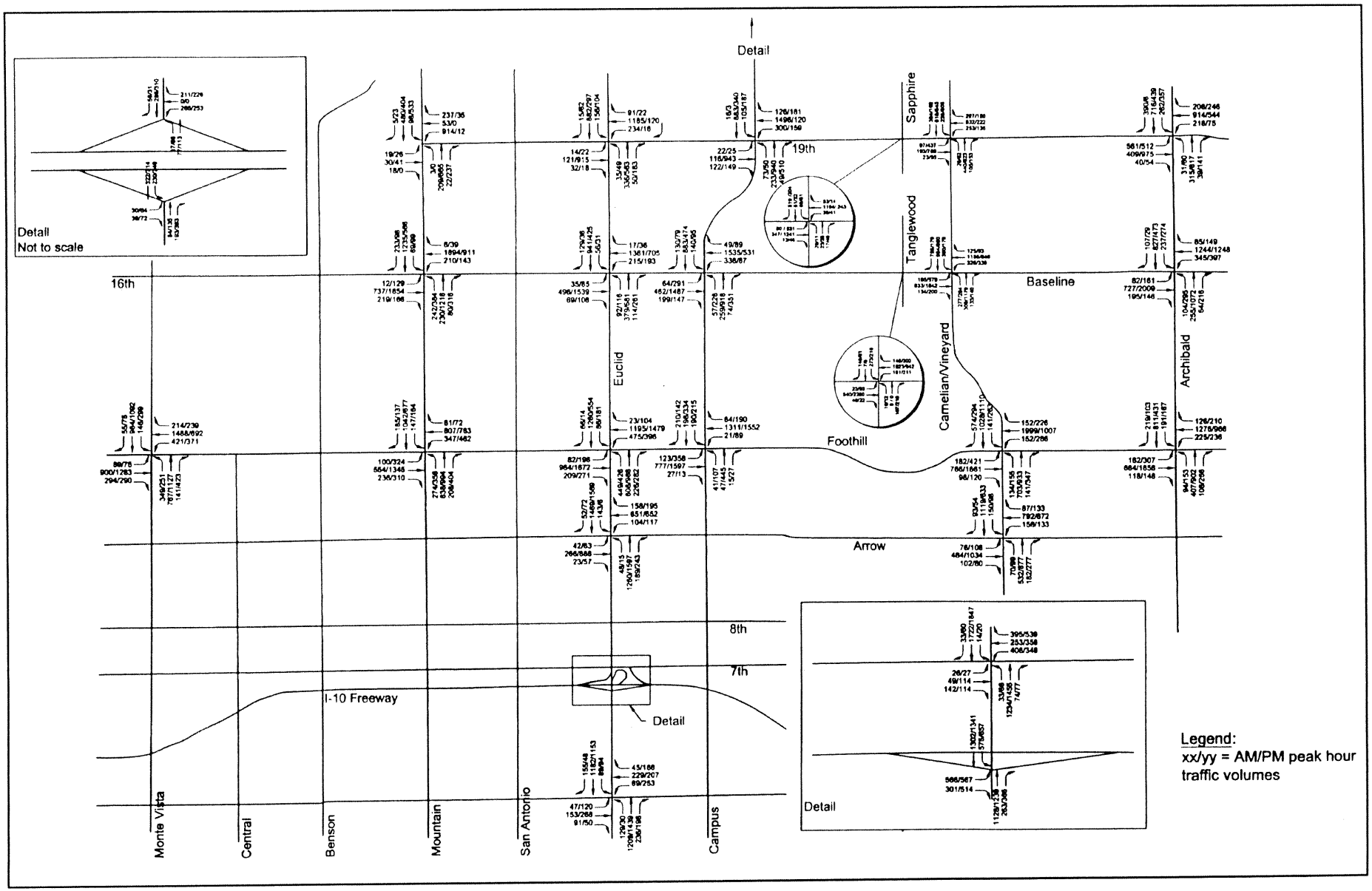
In summary, by Year 2011 (without project) traffic conditions, the same four intersections projected to operate at a deficient level under 2011 (without project) conditions would remain deficient. By project opening year (2015), Phases 1, 2 and 3 project traffic would contribute to Year 2015 (without project) over-capacity conditions at three of the four deficient intersections. Project traffic would also cause one additional intersection (19th and Sapphire Streets) to operate at LOS "E" in both peak hours. As described in the Year 2011 analysis, development of Phase 2 would include the realignment of 19th Street and Campus Avenue to replace the four-legged intersection with two offset intersections (19th Street North and 19th Street South at Campus Avenue). Improvements which would eliminate the projected deficiencies at the study intersections and the corresponding LOS with improvements in place are summarized in Table 5.3-16, *Summary of Intersection Operation with Improvements*. The improvement included in Table 5.3-16 for Year 2015 (with project) would bring each of the four aforementioned deficient intersections back to LOS "D". As such, implementation of the improvements included in Table 5.3-16 and mitigation measures in this Section would reduce project-related impacts in Year 2015 to less than significant levels.

YEAR 2020 BUILDOUT TRAFFIC CONDITIONS

5.3-4 *Project buildout traffic would contribute to Year 2020 (without project) over-capacity conditions at four of six deficient intersections but would not cause additional intersections to operate at a deficient LOS. Impact would be reduced to a less than significant level with implementation of recommended mitigation measures.*

Year 2020 Buildout Without Project

Projected Year 2020 build-out peak hour volumes, representing build-out of the area, are shown on Exhibit 5.3-12, *Year 2020 – Buildout Peak Hour Traffic Volumes (Without Project)*. Intersection analysis was conducted using these peak hour



Source: Kimley-Horn and Associates, Inc., May 2002.

Exhibit 5.3-

RBF PLANNING ■ DESIGN ■ CONSTRUCTION

06/02 JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Year 2020 - Buildout Peak Hour Traffic Volumes (Without Project)

volumes, and the results are summarized on Table 5.3-8 (presented previously). By the Year 2020 without project, the following intersections would continue to operate at LOS "E" or "F":

- 19th Street at Campus Avenue (AM and PM peaks)
- 16th Street at Mountain Avenue (AM and PM peaks)
- Baseline Street at Carnelian Street (AM and PM peaks)
- Baseline Street at Archibald Avenue (PM peak)

In addition, the following intersections would worsen to LOS "E" or "F" under 2020 without project conditions:

- 19th Street at Mountain Avenue (AM and PM peaks)
- 19th Street at Sapphire Street (AM peak)

Year 2020 With Project (Phase 3 Total Project)

The total project traffic volumes were added to the background Year 2020 forecasts. Year 2020 peak hour traffic volumes with the total project are shown on Exhibit 5.3-13, *Year 2020 – Peak Hour Traffic Volumes (With Total Project)*.[1] The intersection analysis was rerun and the results are summarized on Table 5.3-11, *Comparison of Intersection Operation-Year 2020 With and Without Project*.

With the addition of the complete proposed project traffic in Year 2020, the following intersections are projected to operate at LOS "E" or "F".

- 16th Street at Mountain Avenue (AM and PM peaks)
- Baseline Street at Carnelian Street (AM and PM peaks)
- Baseline Street at Archibald Avenue (PM peak)
- 19th Street at Sapphire Street (AM Peak)

These four intersections were shown to be operating under deficient conditions in the 2020 without project condition and would continue to worsen as traffic volumes grow. The "Project Impact" column on Table 5.3-11 indicates that the proposed total project would contribute to existing and background peak hour deficiencies, but would not cause additional intersections to operate at LOS "E" or "F".

As with Year 2011 and 2015 "With Project" conditions, the realignment and offset of 19th Street at Campus Avenue combined with the improvements proposed by the project applicant, the deficient intersection of 19th Street and Campus would be replaced with 19th North and 19th South at Campus, both of which are projected to operate at an acceptable LOS (refer to recommended mitigation measures).

As shown previously, some intersections are projected to experience improved operations in the "With Phase 3 Project" conditions. Potential explanations for this are the same as enumerated above under 2015 with project conditions.

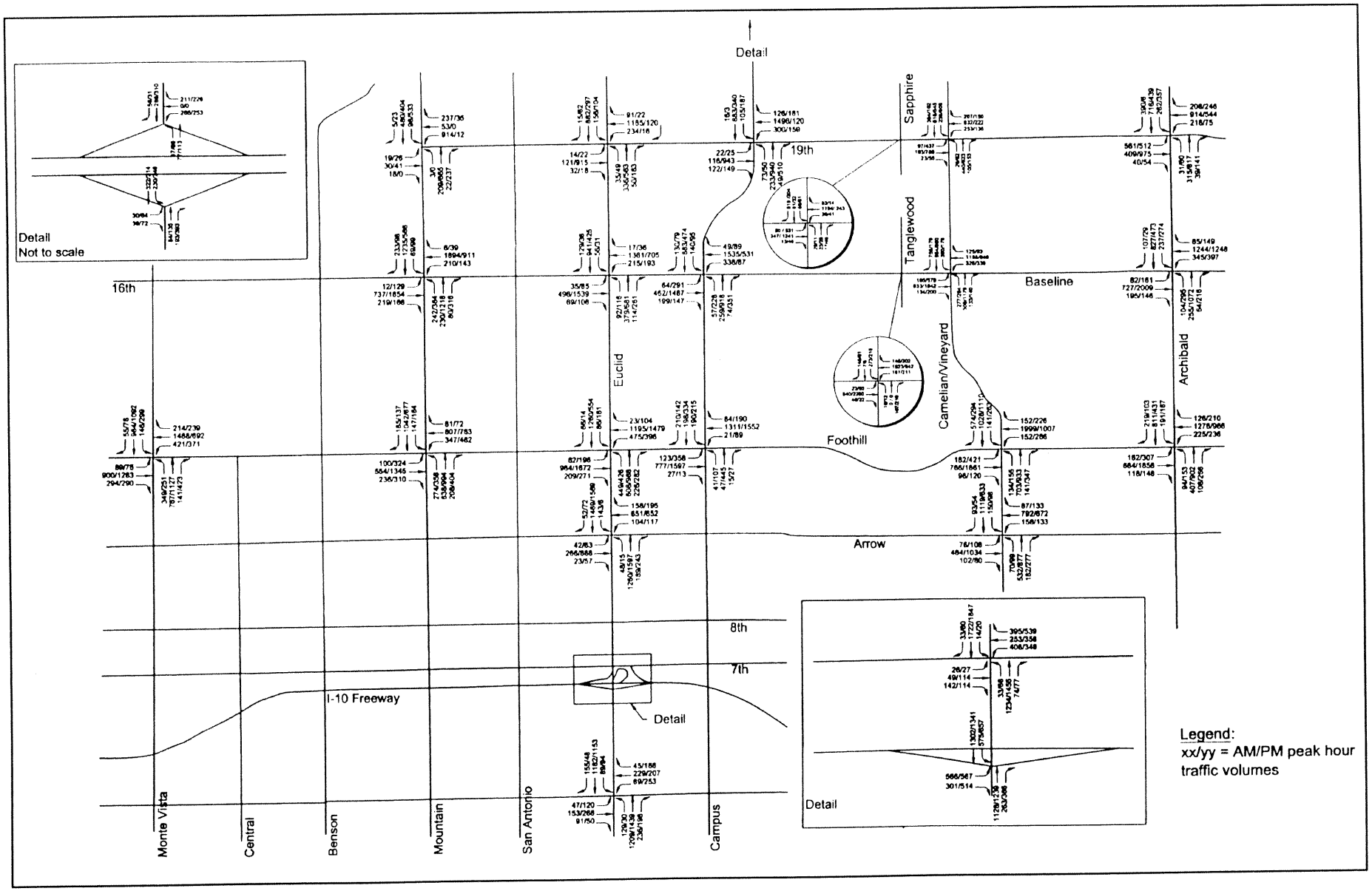
[1] The realignment of 19th Street was assumed in the CTP "With Project" model runs.

Table 5.3-11
Comparison of Intersection Operation Year 2020 With and Without Project

Int. #	Intersection	Year 2020 w/o Project				Year 2020 w/ Project				Project Impa	
		AM Peak		PM Peak		AM Peak		PM Peak		AM	PM
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Peak	Pea
1	19th / Mountain	74.2	E	119.2	F	20.0	B	7.0	A	-54.2	-112
2	19th / Euclid	53.6	D	18.9	B	31.5	C	15.5	B	-22.1	-3.
3	19th / Campus	176.2	F	305.8	F	N/A	N/A	N/A	N/A	N/A	N/
3a	19th North / Campus	N/A	N/A	N/A	N/A	47.5	D	35.9	D	N/A	N/
3b	19th South / Campus	N/A	N/A	N/A	N/A	14.4	B	23.0	C	N/A	N/
4	19th / Carnelian	17.1	B	49.2	D	19.2	B	50.2	D	2.1	1.
5	19th / Archibald	45.5	D	53.7	D	47.6	D	54.8	D	2.1	1.
6	16th / Mountain	68.9	E	90.5	F	108.1	F	113.6	F	39.2	23
7	16th / Euclid	17.1	B	49.7	D	19.4	B	52.2	D	2.3	2.
8	16th / Campus	28.5	C	30.7	C	44.1	D	51.6	D	15.6	20
9	Baseline / Carnelian	129.8	F	170.2	F	156.2	F	179.4	F	26.4	9.
10	Baseline / Archibald	22.4	C	138.8	F	25.0	C	149.6	F	2.6	10
11	Foothill / Monte Vista	31.7	C	40.2	D	33.8	C	40.4	D	2.1	0.
12	Foothill / Mountain	13.1	B	15.0	B	13.3	B	15.1	B	0.2	0.
13	Foothill / Euclid	16.5	B	29.0	C	16.8	B	31.4	C	0.3	2.
14	Foothill / Campus	24.6	C	48.0	D	30.2	C	49.5	D	5.6	1.
15	Foothill / Carnelian	47.2	D	51.3	D	47.9	D	54.2	D	0.7	2.
16	Foothill / Archibald	15.5	B	41.6	D	15.5	B	42.6	D	0.0	1.
17	Arrow / Euclid	19.3	B	23.0	C	20.0	B	22.1	C	0.7	-0
18	Arrow / Vineyard	16.1	B	21.1	C	16.3	B	22.0	C	0.2	0.
19	Euclid / 7th	18.8	B	30.1	C	25.5	C	34.5	C	6.7	4.
20	Euclid / I-10 EB ramps	33.4	C	36.8	D	34.7	C	38.2	D	1.3	1.
21	Euclid / 4th	18.3	B	29.9	C	19.3	B	34.2	C	1.0	4.
22	19th / Sapphire	75.3	E	13.9	B	78.7	E	31.7	C	3.4	17
23	16th / Tanglewood	15.9	B	54.1	D	19.5	B	54.4	D	3.6	0.
24	Campus / 210 EB	14.8	B	16.7	B	17.4	B	31.1	C	2.6	14
25	Campus / 210 WB	17.7	B	18.3	B	27.6	C	34.3	C	9.9	16

w/o = without LOS = level of service EB = eastbound WB = westbound N/A = not applicable

Source: Traffic Impact Study for The Colonies at San Antonio, prepared by Kimley-Horn & Associates, May 2002.



Source: Kimley-Horn and Associates, Inc., May 2002.

Exhibit 5.3-13

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

06/02 JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Year 2020 - Buildout Peak Hour Traffic Volumes (With Total Project)

CMP FREEWAY EVALUATION

5.3-5 *The proposed project would contribute ADT to the I-10 and I-210 Freeways. The addition of project-generated traffic would result in an incremental contribution to an LOS F condition for the I-210 eastbound freeway lane from Monte Vista to Milliken. There are no feasible mitigation measures for this impact. Consequently, the impact is significant and unavoidable.*

As required by the San Bernardino CMP, an analysis of future year freeway LOS is required for all freeway segments which would carry 100 or more project trips in the peak hour. The CMP LOS standard for all freeway segments and intersections is "LOS E or the current level, whichever is farthest from LOS "A".

The freeway peak hour forecasts have been developed for Opening Year (Year 2015) and Buildout (Year 2020) using the peak period CTP model data. The project would contribute traffic to the I-210 and the I-10 Freeways. Table 5.3-12, *Summary of Freeway Operations 2015 – General Plan Without Project*, presents the analysis for Year 2015 freeway operation, for the morning and evening peak hours for the "without project" traffic scenario, while with project conditions are presented on Table 5.3-13, *Summary of Freeway Operations Year 2015 – With Project*. All freeway segments are shown to operate at LOS "F" in the eastbound direction in the evening peak hour with or without the project. The I-10 segments are included in the already-deficient CMP list. The project would contribute to projected LOS "F" conditions in the evening peak hour on the I-210 Freeway. Any contribution to LOS "F" conditions would be considered significant. Since the I-210 Freeway is currently under construction as a new freeway, there are no future planned improvements. Improvements to the I-210 are under the authority of Caltrans. However, there is no mechanism for development project proponents to pay fees or make fair share contributions toward improving mainline freeway lanes. Consequently, there are no feasible mitigation measures and the impact is significant and unavoidable.

Year 2020 Without Project freeway operation is summarized on Table 5.3-13, *Summary of Freeway Operations 2020 – General Plan Without Project*, and "with project" conditions are presented on Table 5.3-14, *Summary of Freeway Operations Year 2020 – With Project*. As these tables show, the westbound segment of I-210 from Mountain Avenue to Euclid Avenue is forecasted to operate at LOS "F" in the morning peak hour. All freeway segments are shown to operate at LOS "F" in the eastbound direction in the evening peak hour with or without the project. The I-10 segments are included in the already-deficient CMP list. The project would contribute to projected LOS "F" conditions in the evening peak hour on the I-210 Freeway. Any contribution to LOS "F" conditions would be considered significant. Since the I-210 Freeway is currently under construction as a new freeway, there are no future planned improvements. Also, as stated for the 2015 condition, improvements to the I-210 are under the authority of Caltrans. However, there is no mechanism for development project proponents to pay fees or make fair share contributions toward improving mainline freeway lanes. Consequently, there are no feasible mitigation measures and the impact is significant and unavoidable.

Table 5.3-12
Summary of Freeway Operations 2015 – General Plan Without Project

AM Peak Hour							
Freeway Segment		AM Peak Volume	Peak Hour Factor	Total Capacity	Number of Lanes (Main/HOV)	V/C	LOS
Interstate 10							
Monte Vista to Central	EB	7,376	0.95	10,800	4 / 1	0.74	C
	WB	8,680	0.95	10,800	4 / 1	0.87	D
Central to Mountain	EB	7,146	0.95	10,800	4 / 1	0.72	C
	WB	8,415	0.95	10,800	4 / 1	0.85	D
Mountain to Euclid	EB	7,356	0.95	10,800	4 / 1	0.74	C
	WB	8,699	0.95	10,800	4 / 1	0.88	D
Euclid to Fourth	EB	7,182	0.95	10,800	4 / 1	0.72	C
	WB	8,706	0.95	10,800	4 / 1	0.88	D
Interstate 210							
Monte Vista to Central	EB	1,251	0.95	8,500	3 / 1	0.16	A
	WB	5,658	0.95	8,500	3 / 1	0.72	C
Central to Mountain	EB	1,278	0.95	8,500	3 / 1	0.16	A
	WB	5,276	0.95	8,500	3 / 1	0.68	B
Mountain to Euclid	EB	1,578	0.95	8,500	3 / 1	0.20	A
	WB	6,016	0.95	8,500	3 / 1	0.77	C
Euclid to Carnelian	EB	1,480	0.95	8,500	3 / 1	0.19	A
	WB	5,700	0.95	8,500	3 / 1	0.73	C
Carnelian to Haven	EB	1,363	0.95	8,500	3 / 1	0.17	A
	WB	5,649	0.95	8,500	3 / 1	0.72	C
Haven to Milliken	EB	1,253	0.95	8,500	3 / 1	0.16	A
	WB	5,626	0.95	8,500	3 / 1	0.72	C
PM Peak Hour							
Freeway Segment		AM Peak Volume	Peak Hour Factor	Total Capacity	Number of Lanes (Main/HOV)	V/C	LOS
Interstate 10							
Monte Vista to Central	EB	11494	0.95	10800	4 / 1	1.16	F
	WB	8507	0.95	10800	4 / 1	0.86	D
Central to Mountain	EB	11150	0.95	10800	4 / 1	1.12	F
	WB	8320	0.95	10800	4 / 1	0.84	D
Mountain to Euclid	EB	11572	0.95	10800	4 / 1	1.17	F
	WB	8690	0.95	10800	4 / 1	0.88	D
Euclid to Fourth	EB	11342	0.95	10800	4 / 1	1.14	F
	WB	8552	0.95	10800	4 / 1	0.86	D
Interstate 210							
Monte Vista to Central	EB	8859	0.95	8500	3 / 1	1.13	F
	WB	3625	0.95	8500	3 / 1	0.46	A
Central to Mountain	EB	8153	0.95	8500	3 / 1	1.04	F
	WB	3590	0.95	8500	3 / 1	0.46	A
Mountain to Euclid	EB	9323	0.95	8500	3 / 1	1.19	F
	WB	4213	0.95	8500	3 / 1	0.54	A
Euclid to Carnelian	EB	8826	0.95	8500	3 / 1	1.13	F
	WB	4062	0.95	8500	3 / 1	0.52	A
Carnelian to Haven	EB	8715	0.95	8500	3 / 1	1.12	F
	WB	3918	0.95	8500	3 / 1	0.50	A
Haven to Milliken	EB	8588	0.95	8500	3 / 1	1.10	F
	WB	3650	0.95	8500	3 / 1	0.47	A

V/C calculations are based on the 1985 Highway Capacity Manual, Chapter 3.

V/C = Volume/(Capacity per lane x Number of lanes x Lane Width Adjustment Factor x Heavy Vehicle Factor x Driver Population Factor)

Capacity per lane is based on 3 to 6 mainline freeway lanes with 2300 vehicles/hour capacity plus capacity. one HOV lane with 1600 vehicles/hour capacity.

Table 5.3-13
Summary of Freeway Operations Year 2015 – With Project

AM Peak Hour							
Freeway Segment		AM Peak Volume	Peak Hour Factor	Total Capacity	Number of Lanes (Main/HOV)	V/C	LOS
Interstate 10							
Monte Vista to Central	EB	7,403	0.95	10,800	4 / 1	0.75	C
	WB	8,855	0.95	10,800	4 / 1	0.89	D
Central to Mountain	EB	7,154	0.95	10,800	4 / 1	0.72	C
	WB	8,632	0.95	10,800	4 / 1	0.87	D
Mountain to Euclid	EB	7,411	0.95	10,800	4 / 1	0.75	C
	WB	8,984	0.95	10,800	4 / 1	0.91	E
Euclid to Fourth	EB	7,170	0.95	10,800	4 / 1	0.72	C
	WB	9,076	0.95	10,800	4 / 1	0.91	E
Interstate 210							
Monte Vista to Central	EB	1,371	0.95	8,500	3 / 1	0.18	A
	WB	5,598	0.95	8,500	3 / 1	0.72	C
Central to Mountain	EB	1,524	0.95	8,500	3 / 1	0.20	A
	WB	5,670	0.95	8,500	3 / 1	0.73	C
Mountain to Euclid	EB	1,742	0.95	8,500	3 / 1	0.22	A
	WB	6,078	0.95	8,500	3 / 1	0.78	C
Euclid to Carnelian	EB	1,628	0.95	8,500	3 / 1	0.21	A
	WB	5,745	0.95	8,500	3 / 1	0.74	C
Carnelian to Haven	EB	1,484	0.95	8,500	3 / 1	0.19	A
	WB	5,684	0.95	8,500	3 / 1	0.73	C
Haven to Milliken	EB	1,365	0.95	8,500	3 / 1	0.17	A
	WB	5,687	0.95	8,500	3 / 1	0.73	C
PM Peak Hour							
Freeway Segment		AM Peak Volume	Peak Hour Factor	Total Capacity	Number of Lanes (Main/HOV)	V/C	LOS
Interstate 10							
Monte Vista to Central	EB	11,234	0.95	10,800	4 / 1	1.13	F
	WB	8,485	0.95	10,800	4 / 1	0.86	D
Central to Mountain	EB	10,965	0.95	10,800	4 / 1	1.11	F
	WB	8,291	0.95	10,800	4 / 1	0.84	D
Mountain to Euclid	EB	11,490	0.95	10,800	4 / 1	1.16	F
	WB	8,677	0.95	10,800	4 / 1	0.87	D
Euclid to Fourth	EB	11,242	0.95	10,800	4 / 1	1.13	F
	WB	8,490	0.95	10,800	4 / 1	0.86	D
Interstate 210							
Monte Vista to Central	EB	9,016	0.95	8,500	3 / 1	1.15	F
	WB	3,832	0.95	8,500	3 / 1	0.49	A
Central to Mountain	EB	8,813	0.95	8,500	3 / 1	1.13	F
	WB	3,996	0.95	8,500	3 / 1	0.51	A
Mountain to Euclid	EB	9,668	0.95	8,500	3 / 1	1.24	F
	WB	4,563	0.95	8,500	3 / 1	0.58	A
Euclid to Carnelian	EB	9,002	0.95	8,500	3 / 1	1.15	F
	WB	4,359	0.95	8,500	3 / 1	0.56	A
Carnelian to Haven	EB	8,915	0.95	8,500	3 / 1	1.14	F
	WB	4,241	0.95	8,500	3 / 1	0.54	A
Haven to Milliken	EB	8,765	0.95	8,500	3 / 1	1.12	F
	WB	3,875	0.95	8,500	3 / 1	0.50	A

V/C calculations are based on the 1985 Highway Capacity Manual, Chapter 3.

V/C = Volume/(Capacity per lane x Number of lanes x Lane Width Adjustment Factor x Heavy Vehicle Factor x Driver Population Factor)

Capacity per lane is based on 3 to 6 mainline freeway lanes with 2300 vehicles/hour capacity plus capacity. one HOV lane with 1600 vehicles/hour capacity.

Table 5.3-14
Summary of Freeway Operations 2020 – General Plan Without Project

AM Peak Hour							
Freeway Segment		AM Peak Volume	Peak Hour Factor	Total Capacity	Number of Lanes (Main/HOV)	V/C	LOS
Interstate 10							
Monte Vista to Central	EB	7,701	0.95	10,800	4 / 1	0.78	C
	WB	8,966	0.95	10,800	4 / 1	0.90	D
Central to Mountain	EB	7,462	0.95	10,800	4 / 1	0.75	C
	WB	8,695	0.95	10,800	4 / 1	0.88	D
Mountain to Euclid	EB	7,688	0.95	10,800	4 / 1	0.77	C
	WB	9,008	0.95	10,800	4 / 1	0.91	E
Euclid to Fourth	EB	7,524	0.95	10,800	4 / 1	0.76	C
	WB	9,100	0.95	10,800	4 / 1	0.92	E
Interstate 210							
Monte Vista to Central	EB	1,668	0.95	8,500	3 / 1	0.21	A
	WB	7,544	0.95	8,500	3 / 1	0.97	E
Central to Mountain	EB	1,704	0.95	8,500	3 / 1	0.22	A
	WB	7,034	0.95	8,500	3 / 1	0.90	D
Mountain to Euclid	EB	2,104	0.95	8,500	3 / 1	0.27	A
	WB	8,021	0.95	8,500	3 / 1	1.03	F
Euclid to Carnelian	EB	1,973	0.95	8,500	3 / 1	0.25	A
	WB	7,600	0.95	8,500	3 / 1	0.97	E
Carnelian to Haven	EB	1,818	0.95	8,500	3 / 1	0.23	A
	WB	7,532	0.95	8,500	3 / 1	0.96	E
Haven to Milliken	EB	1,671	0.95	8,500	3 / 1	0.21	A
	WB	7,501	0.95	8,500	3 / 1	0.96	E
PM Peak Hour							
Freeway Segment		AM Peak Volume	Peak Hour Factor	Total Capacity	Number of Lanes (Main/HOV)	V/C	LOS
Interstate 10							
Monte Vista to Central	EB	11,445	0.95	10,800	4 / 1	1.15	F
	WB	8,482	0.95	10,800	4 / 1	0.85	D
Central to Mountain	EB	11,102	0.95	10,800	4 / 1	1.12	F
	WB	8,294	0.95	10,800	4 / 1	0.84	D
Mountain to Euclid	EB	11,520	0.95	10,800	4 / 1	1.16	F
	WB	8,661	0.95	10,800	4 / 1	0.87	D
Euclid to Fourth	EB	11,290	0.95	10,800	4 / 1	1.14	F
	WB	8,522	0.95	10,800	4 / 1	0.86	D
Interstate 210							
Monte Vista to Central	EB	8,703	0.95	8,500	3 / 1	1.11	F
	WB	3,562	0.95	8,500	3 / 1	0.46	A
Central to Mountain	EB	8,010	0.95	8,500	3 / 1	1.03	F
	WB	3,527	0.95	8,500	3 / 1	0.45	A
Mountain to Euclid	EB	9,159	0.95	8,500	3 / 1	1.17	F
	WB	4,139	0.95	8,500	3 / 1	0.53	A
Euclid to Carnelian	EB	8,671	0.95	8,500	3 / 1	1.11	F
	WB	3,991	0.95	8,500	3 / 1	0.51	A
Carnelian to Haven	EB	11,620	0.95	8,500	3 / 1	1.49	F
	WB	5,224	0.95	8,500	3 / 1	0.67	B
Haven to Milliken	EB	11,451	0.95	8,500	3 / 1	1.47	F
	WB	4,866	0.95	8,500	3 / 1	0.62	B

V/C calculations are based on the 1985 Highway Capacity Manual, Chapter 3.

V/C = Volume/(Capacity per lane x Number of lanes x Lane Width Adjustment Factor x Heavy Vehicle Factor x Driver Population Factor)

Capacity per lane is based on 3 to 6 mainline freeway lanes with 2300 vehicles/hour capacity plus capacity. one HOV lane with 1600 vehicles/hour capacity.

Table 5.3-15
Summary of Freeway Operations Year 2020 – With Project

AM Peak Hour							
Freeway Segment		AM Peak Volume	Peak Hour Factor	Total Capacity	Number of Lanes (Main/HOV)	V/C	LOS
Interstate 10							
Monte Vista to Central	EB	7,728	0.95	10,800	4 / 1	0.78	C
	WB	9,141	0.95	10,800	4 / 1	0.92	E
Central to Mountain	EB	7,471	0.95	10,800	4 / 1	0.75	C
	WB	8,913	0.95	10,800	4 / 1	0.90	D
Mountain to Euclid	EB	7,743	0.95	10,800	4 / 1	0.78	C
	WB	9,293	0.95	10,800	4 / 1	0.94	E
Euclid to Fourth	EB	7,512	0.95	10,800	4 / 1	0.76	C
	WB	9,470	0.95	10,800	4 / 1	0.95	E
Interstate 210							
Monte Vista to Central	EB	1,788	0.95	8,500	3 / 1	0.23	A
	WB	7,484	0.95	8,500	3 / 1	0.96	E
Central to Mountain	EB	1,950	0.95	8,500	3 / 1	0.25	A
	WB	7,428	0.95	8,500	3 / 1	0.95	E
Mountain to Euclid	EB	2,268	0.95	8,500	3 / 1	0.29	A
	WB	8,083	0.95	8,500	3 / 1	1.04	F
Euclid to Carnelian	EB	2,121	0.95	8,500	3 / 1	0.27	A
	WB	7,644	0.95	8,500	3 / 1	0.98	E
Carnelian to Haven	EB	1,939	0.95	8,500	3 / 1	0.25	A
	WB	7,567	0.95	8,500	3 / 1	0.97	E
Haven to Milliken	EB	1,782	0.95	8,500	3 / 1	0.23	A
	WB	7,563	0.95	8,500	3 / 1	0.97	E
PM Peak Hour							
Freeway Segment		AM Peak Volume	Peak Hour Factor	Total Capacity	Number of Lanes (Main/HOV)	V/C	LOS
Interstate 10							
Monte Vista to Central	EB	11,185	0.95	10,800	4 / 1	1.13	F
	WB	8,460	0.95	10,800	4 / 1	0.85	D
Central to Mountain	EB	10,917	0.95	10,800	4 / 1	1.10	F
	WB	8,266	0.95	10,800	4 / 1	0.83	D
Mountain to Euclid	EB	11,438	0.95	10,800	4 / 1	1.15	F
	WB	8,648	0.95	10,800	4 / 1	0.87	D
Euclid to Fourth	EB	11,189	0.95	10,800	4 / 1	1.13	F
	WB	8,460	0.95	10,800	4 / 1	0.85	D
Interstate 210							
Monte Vista to Central	EB	8,861	0.95	8,500	3 / 1	1.13	F
	WB	3,769	0.95	8,500	3 / 1	0.48	A
Central to Mountain	EB	8,670	0.95	8,500	3 / 1	1.11	F
	WB	3,933	0.95	8,500	3 / 1	0.50	A
Mountain to Euclid	EB	9,504	0.95	8,500	3 / 1	1.22	F
	WB	4,489	0.95	8,500	3 / 1	0.57	A
Euclid to Carnelian	EB	8,847	0.95	8,500	3 / 1	1.13	F
	WB	4,288	0.95	8,500	3 / 1	0.55	A
Carnelian to Haven	EB	11,820	0.95	8,500	3 / 1	1.51	F
	WB	5,547	0.95	8,500	3 / 1	0.71	C
Haven to Milliken	EB	11,628	0.95	8,500	3 / 1	1.49	F
	WB	5,091	0.95	8,500	3 / 1	0.65	B

V/C calculations are based on the 1985 Highway Capacity Manual, Chapter 3.

V/C = Volume/(Capacity per lane x Number of lanes x Lane Width Adjustment Factor x Heavy Vehicle Factor x Driver Population Factor)

Capacity per lane is based on 3 to 6 mainline freeway lanes with 2300 vehicles/hour capacity plus capacity. one HOV lane with 1600 vehicles/hour capacity.

As discussed earlier, in the "With Project" condition, traffic volumes are projected to decrease slightly on the I-10 in the evening peak hour. It is postulated that diversion to the I-210 Freeway, due to the proximity of the project site to the I-210 Freeway, is the cause of this.

SUMMARY OF FUTURE INTERSECTION OPERATIONS

This subsection summarizes the Traffic Study conclusions for the three phases of analysis. The report identified the projected operating conditions for Years 2011, 2015, and 2020 with and without the proposed project traffic. LOS "E" or "F" operating conditions are considered deficient by City standards. The analysis results indicated the following in the "With" and "Without Project" condition:

- By Year 2011, four intersections would be deficient;
  - 19th Street at Campus Avenue
  - 16th Street at Mountain Avenue
  - Baseline Street at Carnelian Street
  - Baseline Street at Archibald Avenue

- Phase 1 and 2 project traffic would contribute to Year 2011 over-capacity conditions at three of the four deficient intersections, and would cause one additional intersection to operate at LOS "E" in both peak hours: 19th Street and Sapphire Street.

- Also with development of Phase 2, the project would realign 19th Street and construct improvements at 19th Street and Campus Avenue to replace the four-legged intersection with two offset intersections, 19th Street North and 19th Street South at Campus Avenue. With the improvements proposed by the project, the deficient conditions at 19th Street and Campus Avenue would be eliminated, and the two offset intersections would operate at an acceptable level of service in both peak hours.

- By Year 2015 without the project, the same four intersections would remain deficient.

- By Project Opening Year, Phase 1, 2, and 3 project traffic would contribute to Year 2015 over-capacity conditions at three of the four deficient intersections, and would cause one additional intersection to operate at LOS "E" in both peak hours: 19th Street and Sapphire Street.

- Also, with development of Phase 2, the project would realign 19th Street and construct improvements at 19th Street and Campus Avenue to replace the four-legged intersection with two offset intersections, 19th Street North and 19th Street South at Campus Avenue. With the improvements proposed by the project, the deficient conditions at 19th Street and Campus Avenue would be eliminated, and the two offset intersections would operate at an acceptable level of service in both peak hours.

- Also in Year 2015, two intersections are shown to improve in the morning peak hour in the "With Project" condition:

5.4-3 and 5.4-4, respectively. As previously stated, the Basin is designated non-attainment for State and Federal standards for O_3, and PM_{10} and for CO (Federal standards only). Any increase in these pollutants would create a significant and unavoidable air quality impact.[4]

IMPACTS

SUMMARY OF PREVIOUS ENVIRONMENTAL DOCUMENTATION FOR THE COLONIES AT SAN ANTONIO

EIR No. 800 compared total emissions to total San Bernardino County emissions. The air quality analysis concluded that "since the emissions projected by the project are such a small fraction of regional emissions, there will be no significant regional air quality impacts as a result of the proposed project." This analysis also concluded that the project as proposed would not be consistent with the AQMP and that significant cumulative and unavoidable air quality impacts would occur.

The Supplemental EIR prepared in 1998 states that changes to the Specific Plan analyzed in the Draft EIR would result in a less than significant increase in emissions in proportion to the reduction in traffic generation related to the land use changes. However, cumulative impacts would remain significant, unavoidable and adverse as determined in EIR No. 800.

SHORT-TERM AIR QUALITY IMPACTS

5.4-1 *Significant short-term air quality impacts would occur during site preparation and project construction. These impacts are considered significant before and after mitigation for ROG, NO_X and PM_{10} emissions from construction equipment exhaust and significant before and after mitigation for PM_{10} fugitive dust. Impacts would be less than significant for other pollutants. (Mitigation in this instance refers to applicable City Development Code Sections and SCAQMD Rules.)*

Short-term air quality impacts would occur during grading and construction activities associated with implementation of the proposed project. The short-term air quality analysis considers cumulative construction emissions combined for all three phases. The temporary impacts include:

- Particulate (fugitive dust) emissions from clearing and grading activities on-site;
- Exhaust emissions and potential odors from the construction equipment used on-site as well as the vehicles used to transport materials to and from the site;

[4] The SCAQMD is in the process of revising the *CEQA Air Quality Handbook* . Three chapters have been revised to date including Chapters 2 - Improving Air Quality, 3 – Basin Air Quality Information, and 4 – Early Consultation and Sensitive Receptor Siting Criteria.

- Off-site air pollutant emissions at the power plant serving the site, while temporary power lines are needed to operate construction equipment and provide lighting; and

- Exhaust emissions from the motor vehicles of the construction crew.

The above described power plant and vehicle emissions are generated during construction activities. However, emissions from these sources would continue after project completion as a result of long-term electricity consumption and traffic generated by the proposed land uses. Project-related power plant and motor vehicle emissions are further analyzed in the long-term impacts portion of this Section.

It should be noted that emissions produced during grading and construction activities are "short-term" in nature as they endure only for the duration of construction.

Fugitive Dust Emissions

Construction activities are a source of fugitive dust (PM_{10}) emissions that may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the project vicinity. Fugitive dust emissions are associated with land clearing, ground excavation, cut and fill operations, and truck travel on unpaved roadways. Dust emissions also vary substantially from day to day, depending on the level of activity, the specific operations, and weather conditions.

Fugitive dust from grading and construction is expected to be short-term and would cease following project completion. Additionally, most of this material is inert silicates, rather than the complex organic particulates released from combustion sources, which are more harmful to health. Dust (larger than 10 microns) generated by such activities usually becomes more of a local nuisance than a serious health problem. Of particular health concern is the amount of PM_{10} (particulate matter smaller than 10 microns) generated as a part of fugitive dust emissions. As previously discussed, PM_{10} poses a serious health hazard; alone or in combination with other pollutants. The URBEMIS 2001 computer model (adapted from the URBEMIS7G model by the SCAQMD) calculates PM_{10} fugitive dust as part of the site grading emissions (refer to Table 5.4-2, below). Even with implementation of standard construction practices regarding dust control techniques (i.e., daily watering), limitations on construction hours, and adherence to SCAQMD Rule 403 (requires watering for inactive and perimeter areas, track out requirements, etc.), impacts from PM_{10} fugitive dust would remain a significant impact.

Construction Equipment and Worker Vehicle Exhaust
(Significant after mitigation for ROG, NOx, and PM_{10} emissions)

Exhaust emissions from construction activities include emissions associated with the transport of machinery and supplies to and from the project site, emissions produced on-site as the equipment is used, and emissions from trucks transporting materials to/from the site. Emitted pollutants would include CO, ROG, NO_x, and PM_{10}.

Table 5.4-2, *Construction Emissions*, presents exhaust emission factors for typical diesel-powered heavy equipment. Refer to Appendix 15.3, *Air Quality Data*, for a listing of mobile and stationary construction equipment included in these calculations. Computer model results are also included in Appendix 15.3. Construction emissions were based on the following construction assumptions totaled cumulatively for all three phases: 30,769 cubic yards of earth would be moved per day, assuming a maximum of two "spreads." The maximum area estimated to be disturbed per day would total 38.1 acres. Assuming that a maximum amount of grading took place five days per week throughout the year (260 days) and taking into account site characteristics and development requirements, grading of the site is estimated to require 324 working days (approximately 15 months).

As indicated in Table 5.4-2, emissions associated with construction equipment within the project area are anticipated to exceed SCAQMD construction thresholds for three pollutants (ROG, NOx and PM_{10}). Feasible mitigation measures are not available to reduce the significance of short-term construction ROG, NOx or PM_{10} emissions to less than significant levels. As such, short-term air emissions for these three pollutants would be considered significant and unavoidable.

Table 5.4-2
Construction Emissions

Emissions Source	Pollutant (pounds/day)[1]			
	ROG	NOX	CO	PM_{10}
Unmitigated Emissions[2]	112.53	874.10	23.24	470.69
SCAQMD Threshold	55	55	550	150
Is Threshold Exceeded Before Mitigation?	Yes	Yes	No	Yes
Mitigated Emissions[4]	109.00	832.07	23.24	203.50
Is Threshold Exceeded After Mitigation?	Yes	Yes	No	Yes

ROG = reactive organic gases
CO = carbon monoxide
NOx = nitrogen oxides
PM_{10} = fine particulate matter

NOTES:

[1] Emissions calculated using the URBEMIS 2001 Computer Model as recommended by the SCAQMD and project specific construction data provided by the project applicant.

[2] Calculations include emissions from numerous sources including: site grading, construction worker trips, stationary equipment, diesel and gas mobile equipment, and asphalt off-gassing using a maximum amount of grading per day of 38.1 acres and 260 working days per year. Results are based on the maximum amount of site grading, construction and asphalt activity that would occur in one day.

[3] Refer to Appendix 15.3, *Air Quality Data*, for assumptions used in this analysis, including quantified emissions reduction by mitigation measures. Emissions would also exceed the SCAQMD quarterly construction emissions for ROG, NOx and PM10.

[4] The reduction/credits for construction emission mitigations are based on mitigations included in the UREBMIS 2001 computer model and as typically required by the SCAQMD. The mitigations include the following: soil erosion measures (water exposed surfaces two times daily); proper maintenance of mobile and other construction equipment and speed limitation on unpaved roads to 15 miles per hour.

LONG-TERM OPERATIONAL IMPACTS

5.4-2 *The project would result in an overall increase in the local and regional pollutant load due to direct impacts from vehicle emissions and indirect impacts from electricity and natural gas consumption. Combined mobile and area source emissions for Phase 2 would exceed SCAQMD thresholds for ROG, NOx, CO and PM_{10} and Phase 3 would exceed SCAQMD thresholds for ROG, NOx, and CO. These exceedances are considered significant and cannot be mitigated to a less than significant level.*

The following analysis is based upon the Phase 2 and 3 scenario's utilized to conduct the Traffic Study (refer to Section 5.3, *Traffic and Circulation*). Phase 1 is currently under construction and long-term operational impacts were previously evaluated as a part of the Supplemental EIR for the Amendment in 1998. The following summarizes the assumptions for Phases 2 and 3. The phasing assumptions are utilized for the purposes of the analysis. The Project phasing is provided in further detail in Section 3.5 of this EIR.

Phase 2

Phase 2 would consist of development of the remaining project area south of the future I-210 Freeway. This entails 350 condominium/townhomes, 495 single-family residences, an elementary school, a total of 786,000 square feet of regional and local shopping center uses, a 3,800-seat theater, and 80,000 square feet of office space.

Phase 3

Phase 3 would complete The Colonies project, and -would comprise the project area located along the north side of the future I-210 Freeway. It would consist of a 150-room hotel, a 40,000 square-foot health club, a daycare center, two service/gasoline stations, restaurants, and auto sales lots.

Long-term air quality impacts would consist of mobile source emissions generated from project-related traffic and from stationary source emissions generated directly from the natural gas consumed and indirectly from the power plant providing electricity to the project site. Emissions associated with each of these sources are discussed and calculated below. The project Traffic Study (contained in Appendix 15.2 of this EIR) identified three different development phases for the proposed project. Phases 1 and 2 have been analyzed for completion in Year 2011 while Phase 3 would open in Year 2015. The following air quality analyses is based on implementation of the land uses identified in the traffic study for Phases 2 and 3. Phase 1 is considered in the cumulative analysis and has been incorporated accordingly into the Phase 2 and 3 assumptions. Also refer to Section 5.2, *Traffic and Circulation*, of this EIR.

Mobile Source Emissions Only: Regional Impacts
(Phase 2 - Significant for ROG, NOx, CO and PM10 emissions; Phase 3 – Significant for ROG, NOx and CO emissions)

Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NOx, SOx, and PM_{10} are all pollutants of regional concern. (NOx and ROG react with sunlight to form O_3 or photochemical smog, and SOx and PM_{10} are readily transported by wind currents). However, CO tends to be a localized pollutant, dispersing rapidly at the source. Long-term impacts to regional air quality levels are analyzed below.

As previously discussed, the Basin is a non-attainment area for Federal and State air quality standards for O_3 and PM_{10} and for CO (Federal standard only). Nitrogen oxides and ROG are regulated O_3 precursors. (A precursor is defined as a directly emitted air contaminant that, when released into the atmosphere, forms or causes to the formed or contributes to the formation of a secondary air contaminant for which an ambient air quality standard has been adopted). Project-generated vehicle emissions have been estimated using the URBEMIS 2001 computer model (published by the SCAQMD and based on the URBEMIS7G model). This model predicts ROG, CO, NOx, and PM_{10} emissions from motor vehicle traffic associated with new or modified land uses (refer to Appendix 15.3, *Air Quality Data*, for model input values used for this project with the model output). Project trip generation rates were based on the Project Traffic Study (refer to Section 5.3, *Traffic and Circulation*, and Appendix 15.2, *Traffic Report*). Table 5.4-3, *Long-Term Project Emissions*, presents regional mobile emissions anticipated for each of the three proposed project phases.

As shown in Table 5.4-3, emissions generated by proposed project Phases 2 and 3 would exceed established SCAQMD thresholds for NOx, ROG and CO. Additionally, implementation of Phase 2 would cause the SCAQMD PM_{10} threshold to be exceeded.

Area Source Emissions
(Phase 2 – Significant for ROG and CO emissions and Phase 3 – Less than significant for identified pollutants)

The proposed project would generate electrical demand and heating demands resulting in natural gas combustion. Electrical demand would result in electrical generation emissions from local power plants. As shown in Table 5.4-3, *Long-term Project Emissions*, stationary source emissions generated directly from the natural gas consumed and indirectly from the power plant providing electricity to the project site would exceed SCAQMD thresholds with operation of Phase 2 (ROG and CO only). Area source emissions for implementation of Phase 3 would not exceed thresholds.

Table 5.4-3
Long-Term Project Emissions[1]
(Phases 2 and 3)

Phases	Pollutant (Pounds/Day)			
	ROG	NOx	CO	PM_{10}
Phase 2 (unmitigated) • Area Source Emissions • Vehicle Emissions	 989.09 429.58	 27.72 429.76	 1051.03 4046.13	 143.04 220.36
Total Unmitigated Emissions	1418.67	457.48	5097.16	363.40
SCAQMD Threshold	55	55	550	150
Is Threshold Exceeded? (Significant Impact?)	**Yes**	**Yes**	**Yes**	**Yes**
Phase 3 (unmitigated) • Area Source Emissions • Vehicle Emissions	 0.37 100.84	 1.61 83.31	 2.83 881.88	 0.01 54.72
Total Unmitigated Emissions	101.21	84.92	884.71	54.73
SCAQMD Threshold	55	55	550	150
Is Threshold Exceeded? (Significant Impact?)	**Yes**	**Yes**	**Yes**	**No**
ROG = reactive organic gases NOx = nitrogen oxides CO = carbon monoxide PM_{10} = fine particulate matter				
NOTE: [1] Based on URBMIS 2001 modeling results for Phase 2 in 2010/2011 and Phase 3 in 2015, worst-case seasonal emissions for area and mobile emissions, and trip rate data provided in the project Traffic Study.				

Total Project Operational Emissions (Area and Mobile Sources)

As shown in Table 5.4-3, the combined mobile source and area emissions associated with the proposed project would generate pollutant emissions in excess of SCAQMD thresholds. These exceedances would occur with implementation of Phase 2 (ROG, NOx, CO and PM_{10}) and Phase 3 (ROG, NOX and CO). Thus, implementation of the proposed project would create a significant and unavoidable individual project impact from these pollutants emissions. In addition, the Basin is in non-attainment for the O_3, CO and PM_{10}. As the proposed project would exceed established ROG/NOX, CO and PM_{10} thresholds, the project would create a significant and unavoidable *cumulative* impact to regional levels of these pollutants (refer to cumulative discussion below).

While long-term emissions would remain significant and unavoidable, the City of Upland may determine to condition the proposed Specific Plan to include one or several of the following measures which would serve to reduce the amount of pollutant emissions, but not to a level below the significance threshold:

- Include planned community transit service throughout the site.
- Provide enhanced pedestrian and bicycle facilities for both residential and non-residential areas through a variety of facilities including:

- Sidewalks/paths throughout the site
- Street trees which provide shade cover
- Provide visually interesting uses along walkways/paths and visually interesting walking routes
- Provide interconnected bikeways
- Provide bike routes along paved shoulders
- Provide designated safe bicycle routes to schools
- Provide a variety of land uses within cycling distance
- Approve bike parking ordinance

♦ Encourage non-residential uses which promote employee non-commute trips (telecommuting).

♦ Provide internal park and ride lots.

Localized CO Emissions

According to the *SCAQMD CEQA Air Quality Handbook*, localized concentration modeling for CO should be accomplished for projects whose associated traffic would negatively impact levels of service (LOS) at locations adjacent to sensitive receptors. In these instances, a localized CO hotspot (i.e., an exceedance of established State and/or Federal standard) may be created at specific intersections. The project site is in an area with low carbon monoxide (CO) ambient level (see Table 5.4-1), with the monitored highest 8-hour CO concentrations in the past five years ranging from 2.09 ppm to 4.75 ppm (State and federal standards are 9 ppm). Based on the EPA's recommendation, the highest of the second highest monitored CO levels in the past two years is used for the baseline ambient CO levels for the existing and future conditions. This level is 4.7 ppm measured at the Azusa monitoring station, the closest air quality monitoring station with CO data. This ambient CO level is almost half of the State and Federal standard (9 ppm) and is from all types of emission sources in the project vicinity.

According to the project Traffic Study (refer to Appendix 15.2, *Traffic Study*, Tables 7 through 10, and Section 5.2, *Traffic and Circulation*, of this EIR), all but three local intersections are currently operating at an acceptable LOS in both the a.m. and p.m. peak hours. In Year 2011, four intersections are projected to operate at a deficient LOS (LOS "E" or "F") in one or more peak hours. Phases 1 and 2 traffic would contribute to Year 2011 over-capacity conditions at the four deficient intersections and would cause one additional intersection to operate at LOS "E" in both peak hours. By Year 2015 without the project, the same four intersections would remain deficient and no additional intersections would worsen to LOS "E" or "F". At project opening year, project traffic would contribute to Year 2015 over-capacity conditions at three of the four deficient intersections and would cause one additional intersection to operate at LOS "E" in both peak hours. By Year 2020 build-out conditions without the project, the four previously deficient intersections would remain deficient and two more intersections would worsen to LOS "E" or "F" for a total of six intersections. Total project traffic would contribute to Year 2020 over-capacity conditions at four of the six deficient intersections but would not cause any additional intersections to operate at LOS "E" or "F". However, upon implementation of mitigation measures recommended in the Traffic Study, impacts would be reduced

to a less than significant level and intersections would operate at acceptable LOS and intersections would not be significantly impacted by project generated traffic.

Caltrans has developed a Transportation Project-Level Protocol (Protocol) (December, 1997) for assessing CO impacts. The procedures and guidelines comply with the following regulations without imposing additional requirements: the California Environmental Quality Act (CEQA) requirements [California Code Regulations, Title 21 Section 1509.3(25)]; Section 4 of the Protocol assesses local analysis. Assessment of the project's effect on localized ambient air quality is based on analysis of carbon monoxide (CO).

Localized emissions of CO may increase with implementation of the proposed project. CO is used as an indicator of a project's direct and indirect impact on local air quality, since CO does not readily disperse in the local environment in cool weather, when the wind is fairly still. As stated in the Protocol, the determination of project level CO impacts should be carried out according to the Local Analysis flow chart shown in Figure 3 of the Protocol. The following discussion provides explanatory remarks for every step of the local analysis in the Protocol.

Level 1: Is the project located in a CO nonattainment area? NO, the project site is located in a CO attainment area for State CO standards.

Was the area redesignated as "attainment" after the 1990 Clean Air Act? YES.

Has "continued attainment" been verified with the local Air District if appropriate? YES (Proceed to Level 7)

Level 7: Does the project worsen air quality? YES, the proposed project would generate additional criteria pollutants in the project area.

Is project suspected of resulting in higher CO concentrations than those existing within the region at the time of attainment demonstration? NO.

Project Satisfactory. No further analysis needed.

Therefore, based on a) low ambient CO levels in the project vicinity, b) the project area is in attainment with State CO standards, and c) upon implementation of mitigation measures recommended in Section 5.3, *Traffic and Circulation*, intersections would operate at acceptable LOS and would not be significantly impacted by project generated traffic. Thus, it is concluded that no CO hot spot would occur as a result of the proposed project.

CONSISTENCY WITH AIR QUALITY MANAGEMENT PLAN

5.4-3 *The project may conflict with the Air Quality Management Plan (AQMP). Analysis has concluded that the proposed project is consistent with the AQMP criteria.*

As noted under the Significance Criteria discussion, a potentially significant impact to air quality would occur if the project would conflict with or obstruct the

implementation of the applicable air quality plan. Although the project would represent an incremental negative impact to air quality in the Basin, of primary concern is that project-related impacts have been properly anticipated in the regional air quality planning process and reduced whenever feasible. Therefore, it is necessary to assess the project's consistency with the AQMP.

According to the South Coast Air Quality Management District CEQA Air Quality Handbook (SCAQMD, April 1993), the purpose of the consistency finding is to determine if a project is inconsistent with the assumptions and objectives of the regional air quality plans, and thus if it would interfere with the region's ability to comply with federal and State air quality standards. If the project is inconsistent, local governments need to consider project modifications or inclusion of mitigation to eliminate the inconsistency. It is important to note that even if a project is found consistent it could still have a significant impact on air quality under CEQA. Consistency with the AQMP means that a project is consistent with the goals, objectives, and assumptions in the respective plan to achieve the federal and State air quality standards.

The proposed Specific Plan Amendment would increase the amount of Commercial development proposed within the Specific Plan area (from 48.9 acres of Commercial and 3 acres of Business Park uses to 114.92 acres of Commercial uses, or from approximately 530,000 square feet of Commercial uses and 52,000 square feet of Business Park uses to 1,200,000 square feet of Commercial uses) and reduce the residential development yield (from up to 1,479 dwelling units to a maximum of 1,150 dwelling units).

Project-related traffic generation at build out would increase from 39,133 trips per day for the adopted 1998 Specific Plan to 67,319 trips per day under the proposed Specific Plan Amendment. Based on Table 5.4-3, Long-Term Project Emissions, calculated for the currently proposed land uses (URBEMIS2001), it is estimated that the net increase in pollutants from the levels analyzed in the 1998 Supplemental EIR would be 801 pounds per day (ppd) of ROG, 248 ppd of NOx, 2,824 ppd of CO, and 206 ppd of PM_{10}. These net increases would exceed the SCAQMD daily emissions thresholds for all four pollutants.

Based on the CO hot spot analysis provided in this EIR Section, the proposed amendment would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations (on CO), or delay timely attainment of air quality standards (on ozone and PM_{10}) or the interim emission reductions specified in the Air Quality Management Plan (AQMP).

Because the proposed amendment would reduce the residential development yield, the growth projections and location of population would be lower than those proposed and analyzed in the 1998 Supplemental EIR for the project site. In addition, as previously stated, with implementation of mitigation measures recommended in Section 5.3, *Traffic and Circulation*, intersections would operate at acceptable LOS and intersections would not be significantly impacted by project generated traffic in year 2020.

Based on the above analysis, the proposed amendment would not exceed the projections of population growth in the Growth Management Plan (SCAG, 1996),

would not result in the deterioration of the level of service (LOS) at intersections in the project vicinity following implementation of referenced mitigation, would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations (on CO), and would not delay timely attainment of air quality standards (on ozone and PM_{10}) or the interim emission reductions specified in the Air Quality Management Plan (AQMP). Therefore, although the projected daily emissions increases would exceed the SCAQMD daily emissions thresholds, it is concluded that the proposed amendment is consistent with the AQMP.

CUMULATIVE IMPACTS

5.4-4 *Impacts to regional air quality resulting from development of cumulative projects would significantly impact existing air quality levels. Impacts would be significant and unavoidable for ROG, CO, NO_X and PM_{10} emissions.*

The annual short-term and long-term emissions associated with the proposed project and cumulative projects indicated in Section 4.0, *Basis for Cumulative Analysis*, would be dependent on the internal phasing of each project. Adherence to SCAQMD rules and regulations would help to alleviate potential impacts related to cumulative conditions. However, the build-out, sale and occupancy of the dwelling units and other uses would be controlled by market demand. Emission reduction technology, strategies and plans are constantly being developed. As discussed in Impact Discussion 5.4-4, since the Basin is non-attainment for O_3 and PM_{10} air quality standards (both State and Federal standards) and CO (Federal standards), additional emissions of ROG and NO_X (precursors to O_3), CO and PM_{10} would be considered significant and unavoidable cumulative impacts.

MITIGATION MEASURES

The following mitigation measures directly correspond to the identified impact statements provided in the impacts Subsection for the proposed project:

SHORT-TERM AIR QUALITY IMPACTS

5.4-1 In accordance with the City Development Code and SCAQMD Rules, the Project Applicant shall incorporate the following measures during the construction phase of the Project to the satisfaction of the SCAQMD and City Public Works Director. Compliance with this measure is subject to periodic field inspections by the SCAQMD and City Public Works Director.

Grading:

Apply non-toxic soil stabilizers according to manufacturer's specifications to all inactive construction areas (previously graded for ten days or more);

- Replace ground cover in disturbed areas as quickly as possible;

- Enclose, cover, water two times daily or apply non-toxic soil binders in accordance to manufacturer's specifications to exposed piles (i.e., gravel, sand, dirt) with 5% or greater silt content;
- Water active sites at least three times daily;
- Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph; and
- All trucks hauling dirt, sand, soil, or other loose materials shall be covered and shall maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer) in accordance with the requirements of the CVC Section 23114.

Paved Roads:

- Sweep streets at the end of the day if visible soil material is carried onto adjacent public paved roads; and
- Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip.

LONG-TERM OPERATIONAL IMPACTS

5.4-2 No mitigation measures are recommended.

CONSISTENCY WITH AIR QUALITY MANAGEMENT PLAN

5.4-3 No mitigation measures are recommended.

CUMULATIVE IMPACTS

5.4-4 SCAQMD Standards and City Municipal Code requirements would be implemented on a project-by-project basis.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The following air quality impacts would remain significant and unavoidable following mitigation:

- ROG, NO_x and PM_{10} from construction vehicle exhaust and PM_{10} fugitive dust emissions from construction activities;
- Project Operations: Phase 2 (ROG, NO_x, CO and PM_{10}) and Phase 3 (ROG, NO_x and CO) emissions from project operations;
- Cumulative development would also result in significant and unavoidable impacts to regional air quality levels of ROG, NO_x, CO and PM_{10}.

If the City Upland approves the project, the City shall be required to cite their findings in accordance with Section 15091 of CEQA and prepare a Statement of Overriding Considerations in accordance with Section 15093 of CEQA.

5.5 NOISE

The purpose of this Section is to analyze Project-related noise source impacts on-site and to surrounding land uses. Mitigation measures are also recommended to minimize the noise impacts of the Project. This Section evaluates short-term construction related impacts as well as long-term buildout conditions. Information in this Section was obtained from the *City of Upland General Plan* and traffic information contained in the Project Traffic Study (refer to Section 5.3, *Traffic and Circulation*, and Appendix 15.2, *Traffic Study*). Refer to Appendix 15.4, *Noise Data*, for the assumptions used in this analysis.

EXISTING CONDITIONS

NOISE SCALES AND DEFINITIONS

Sound is technically described in terms of the loudness (amplitude) of the sound and frequency (pitch) of the sound. The standard unit of measurement of the loudness of sound is the Decibel (dB). Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale has been revised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Decibels are based on the logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner similar to the Richter scale used to measure earthquakes. In terms of human response to noise, a sound 10 dBA higher than another is judged to be twice as loud, and 20 dBA higher four times as loud, and so forth. Everyday sounds normally range from 30 dBA (very quiet) to 100 dBA (very loud). Examples, of various sound levels in different environments are shown in Table 5.5-1, *Sound Levels and Human Response.*

Many methods have been developed for evaluating community noise to account for, among other things:

- The variation of noise levels over time;
- The influence of periodic individual loud events; and
- The community response to changes in the community noise environment.

Numerous methods have been developed to measure sound over a period of time. These methods include: 1) the Community Noise Equivalent Level (CNEL); 2) the Equivalent Sound Level (Leq); and 3) Day/Night Average Sound Level (Ldn). These methods are described below.

Table 5.5-1
Sound Levels and Human Response

Noise Source	dB(A) Noise Level	Response
	150	
Carrier Jet Operation	140	Harmfully Loud
	130	Pain Threshold
Jet Takeoff (200 feet; thence.) Discotheque	120	
Unmuffled Motorcycle Auto Horn (3 feet; thence.) Rock'n Roll Band Riveting Machine	110	Maximum Vocal Effort Physical Discomfort
Loud Power Mower Jet Takeoff (2000 feet; thence.) Garbage Truck	100	Very Annoying Hearing Damage (Steady 8-Hour Exposure)
Heavy Truck (50 feet; thence.) Pneumatic Drill (50 feet; thence.)	90	
Alarm Clock Freight Train (50 feet; thence.) Vacuum Cleaner (10 feet; thence.)	80	Annoying
Freeway Traffic (50 feet; thence.)	70	Telephone Use Difficult
Dishwashers Air Conditioning Unit (20 feet; thence.)	60	Intrusive
Light Auto Traffic (100 feet; thence.)	50	Quiet
Living Room Bedroom	40	
Library Soft Whisper (15 feet; thence.)	30	Very Quiet
Broadcasting Studio	20	
	10	Just Audible
	0	Threshold of Hearing

Source: Melville C. Branch and R. Dale Beland, *Outdoor Noise in the Metropolitan Environment*, 1970, page 2.

COMMUNITY NOISE EQUIVALENT LEVEL (CNEL)

The predominant community noise rating scale used in California for land use compatibility assessment is the Community Noise Equivalent Level (CNEL). The CNEL reading represents the average of 24 hourly readings of equivalent levels, known as Leq's, based on an A-weighted decibel with upward adjustments added to account for increased noise sensitivity in the evening and night periods. These adjustments are +5 dBA for the evening, 7:00 p.m. to 10:00 p.m., and +10 dBA for the night, 10:00 p.m. to 7:00 a.m. CNEL may be indicated by "dBA CNEL" or just "CNEL".

LEQ

The Leq is the sound level containing the same total energy over a given sample time period. The Leq can be thought of as the steady sound level which, in a stated period of time, would contain the same acoustic energy as the time-varying sound level during the same period. Leq is typically computed over 1, 8 and 24-hour sample periods.

DAY NIGHT AVERAGE (LDN)

Another commonly used method is the day/night average level or Ldn. The Ldn is a measure of the 24-hour average noise level at a given location. It was adopted by the U.S. Environmental Protection Agency (EPA) for developing criteria for the evaluation of community noise exposure. It is based on a measure of the average noise level over a given time period called the Leq. The Ldn is calculated by averaging the Leq's for each hour of the day at a given location after penalizing the "sleeping hours" (defined as 10:00 p.m. to 7:00 a.m.), by 10 dBA to account for the increased sensitivity of people to noises that occur at night. The maximum noise level recorded during a noise event is typically expressed as Lmax. The sound level exceeded over a specified time frame can be expressed as Ln (i.e., L_{90}, L_{50}, L_{10}, etc.). L_{50} equals the level exceeded 50 percent of the time, L_{10} ten percent of the time, etc.

As previously mentioned, people tend to respond to changes in sound pressure in a logarithmic manner. In general, a 3 dBA change in sound pressure level is considered a "just detectable" difference in most situations. A 5 dBA change is readily noticeable and a 10 dBA change is considered a doubling (or halving) of the subjective loudness. It should be noted that a 3 dBA increase or decrease in the average traffic noise level is realized by a doubling or halving of the traffic volume, or by about a 7 mile per hour (mph) increase or decrease in speed.

For each doubling of distance from a point noise source, the sound level will decrease by 6 dBA. In other words, if a person is 100 feet from a machine, and moves to 200 feet from that source, sound levels will drop approximately 6 dBA. For each doubling of distance from a line source, like a roadway, noise levels are reduced by 3 to 5 decibels, depending on the ground cover between the source and the receiver.

NOISE ATTENUATION

Noise barriers provide approximately a 5 dBA noise reduction (additional reduction may be provided with a barrier of appropriate height, material, location and length). A row of buildings provides up to 5 dBA noise reduction with a 1.5 dBA reduction for each additional row up to a maximum reduction of approximately 10 dBA. The exact degree of noise attenuation depends on the nature and orientation of the structure and intervening barriers.

NOISE STANDARDS

It is difficult to specify noise levels which are generally acceptable to everyone. What is annoying to one person may be unnoticed by another. Standards may be based on documented complaint activity in response to documented noise levels, or based on studies on the ability of people to sleep, talk, or work under various noise conditions. All such studies, however, recognize that individual responses vary considerably. Standards usually address the needs of most of the general population.

STATE NOISE STANDARDS

The State of California Office of Noise Control has established guidelines for acceptable community noise levels which are based on the CNEL rating scale. The guidelines rank noise land use compatibility in terms of "normally acceptable", "conditionally acceptable", and "clearly unacceptable" noise levels for various land use types. As shown in Table 5.5-2, *California Land Use Compatibility Noise Guidelines*, a project in the "normally acceptable" category would be acceptable in terms of both its indoor/outdoor noise exposure without special noise abatement measures. Where outdoor noise exposure is less important, projects can be designed to provide acceptable interior environments in the "conditionally acceptable" category. This may involve providing air conditioning so that windows can remain closed, or, at higher levels, sound rated windows and walls. Acoustical reports are recommended to be required where the noise exposure is "conditionally acceptable" or "normally unacceptable."

As shown in Table 5.5-2, the State Office of Noise Control, in its Land Use Compatibility Standards, defines an outdoor level of 60 dBA CNEL or less as being "normally acceptable" for residential uses. The intent of the 60 dBA CNEL level is partly to provide acceptable outdoor levels. A 60 dBA CNEL is generally considered to be an appropriate exterior level near roadways where outdoor use is a major consideration, such as in backyards, recreation areas in residential projects, and many park areas. A second intent of the 60 dBA CNEL standard is to provide, either through design, location, or insulation, for interior noise levels no greater than 45 dBA CNEL, which is generally accepted as the maximum acceptable noise level for most indoor residential activities.

Table 5.5-2
California Land Use Compatibility Noise Guidelines

LAND USE CATEGORY	COMMUNITY NOISE EXPOSURE			
	Ldn or CNEL, dBA			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential - Low Density, Single-Family, Duplex, Mobile Homes	50 – 60	55 - 70	70-75	75-85
Residential - Multiple Family	50 – 65	60 - 70	70 - 75	70 - 85
Transient Lodging - Motel, Hotels	50 – 65	60 - 70	70 - 80	80 - 85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 – 70	60 - 70	70 - 80	80 - 85
Auditoriums, Concert Halls, Amphitheaters	NA	50 - 70	NA	65 - 85
Sports Arenas, Outdoor Spectator Sports	NA	50 - 75	NA	70 - 85
Playgrounds, Neighborhood Parks	50 - 70	NA	67.5 - 75	72.5 - 85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 - 70	NA	70 - 80	80 - 85
Office Buildings, Business Commercial and Professional	50 - 70	67.5 - 77.5	75 - 85	NA
Industrial, Manufacturing, Utilities, Agriculture	50 - 75	70 - 80	75 - 85	NA

Source: Office of Noise Control, California Department of Health.

Notes:

NORMALLY ACCEPTABLE
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

CONDITIONALLY ACCEPTABLE
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

NORMALLY UNACCEPTABLE
New Construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

CLEARLY UNACCEPTABLE
New construction or development should generally not be undertaken.

NA: Not Applicable

State Noise Insulation Standards are consistent with the Office of Noise Control residential Land Use Compatibility standards. In 1974, the State adopted Noise Insulation Standards (Title 25, State Administrative Code) for new hotels, motels, and dwellings other than single-family detached dwellings. Those standards established 45 dBA CNEL as the maximum interior sound level (attributable to exterior sources) in any room. Where exterior sound levels are 60 dBA CNEL or above, acoustical analyses for projects are required to ensure that the structure has been designed to limit outside noise to the allowable interior levels. The State Noise Insulation Standards also include standards to be met for sound transmission between units.

UPLAND NOISE ORDINANCE

Chapter 4.5, *Unnecessary Noise*, of the City of Upland Municipal Code pertains to the regulation of excessive noise from *existing* uses. Section 5400.500 (base ambient noise level) and 5400.800 (maximum residential noise levels) of the Municipal Code establish noise levels that may not be exceeded based upon the nature of the receiving land use and the time of day that the noise occurs. Per Section 5400.500, "base ambient noise levels" (BANL) are as follows in Table 5.5-3, City *Noise Standards*.

Table 5.5-3
City of Upland Noise Standards

Decibels	Time	Use
45 dB(A)	10:00 p.m. to 7:00 a.m.	Residential
55 dB(A)	7:00 a.m. to 10:00 p.m.	Residential
65 dB(A)	Anytime	Uses not specified
75 dB(A)	Anytime	Industrial and Commercial
Source: *City of Upland Municipal Code*, Chapter 4.5, *Unnecessary Noise*.		

Actual decibel measurements exceeding the noise standards in Table 5.5-3 at the corresponding time and use shall be deemed as the BANL. Exterior noise shall be measured on the exterior of any residential property and no noise level shall exceed the noise levels as indicated in Table 5.5-4, *Noise Levels and Duration*, for the duration periods specified.

Table 5.5-4
Noise Levels and Duration

Noise Level Exceeded	Maximum Allowed Duration Period
Base Ambient Noise Level	30 minutes in any one hour
5 dB(A) above Base Ambient Noise Level	15 minutes in any one hour
10 dB(A) above Base Ambient Noise Level	5 minutes in any one hour
15 dB(A) above Base Ambient Noise Level	1 minute in any one hour
10 dB(A) above Base Ambient Noise Level	Not Permitted
Source: *City of Upland Municipal Code*, Chapter 4.5, *Unnecessary Noise*.	

The following sources are exempt from the noise level provisions stated above:

- Safety devices and warning signals;
- Emergency equipment, vehicles, devices and activities; and
- Temporary construction, maintenance or demolition activities conducted between the hours of 7:00 a.m. and 6:00 p.m. on weekdays.

LOCATION OF SENSITIVE RECEPTORS

Certain land uses are particularly sensitive to noise, including schools, hospitals, rest homes, long-term medical and mental care facilities and parks and recreation areas. Residential areas are also considered noise sensitive, especially during the nighttime hours.

Existing sensitive receptors within the vicinity of the project site include residential uses to the east, west and south of the project site. Land designated for open space uses and Campus Avenue separate the existing residential uses to the west from the project site. Additionally, the Cucamonga Creek Channel separates the existing residential uses to the east from the project site.

EXISTING NOISE ENVIRONMENTS

FIELD MEASUREMENTS

In order to quantify existing ambient noise levels in the project area, noise measurements were conducted by RBF Consulting in April 2002. The noise measurement sites were representative of typical existing noise exposure within and immediately adjacent to the Project site.

Noise monitoring equipment used for the ambient noise survey consisted of a Larson Davis Laboratories Model LDL 820 sound level analyzer equipped with a Bruel & Kjaer (B&K) Type 4176 ½" microphone. The instrumentation was calibrated prior to use with a B&K Type 4230 acoustical calibrator to ensure the accuracy of the measurements, and complies with applicable requirements of the American National Standards Institute (ANSI) for Type I (precision) sound level meters. The results of the field measurements are indicated in Table 5.5-5, *Noise Measurements.*

Table 5.5-5
Noise Measurements
(Based on Field Measurements)

Site No.	General Location	Leq (dBA)	Time	Sources of Peak Noise
1	Foxgrove Ct.; end of cul-de-sac.	48.5	11:00 a.m. to 11:15 a.m.	Construction Equipment, Trees, Wind
2	Southwest corner of Hummingbird Rd/Tanglewood Ave.	53.6	11:30 a.m. to 11:45 a.m.	Construction Equipment, Auto and Truck Traffic.
3	Along Scenic View Street, adjacent to nearest residential units.	54.8	1:15 p.m. to 1:30 p.m.	Aircraft overflight, Auto and Truck Traffic.
4	Along Campus Ave., east of project site.	71.6	1:50 to 2:05 p.m.	Auto and truck traffic.
Source: Noise Monitoring Survey conducted by RBF Consulting, April 2, 2002.				

The highest noise level measurement (71.6 dBA) was taken at Site No. 4, along Campus Avenue to the east of the site. Noise levels measured in residential areas (Site No. 1, 2, and 3) range from approximately 48 dBA to 55 dBA Leq. This is typical of most residential areas within the City of Upland except during periods of high winds or other severe weather conditions. In addition, ambient noise levels are affected by construction associated with Phase 1 of the Specific Plan and the I-210 segment through Upland.

COMPUTER MODELING

Existing and future roadway noise levels within the vicinity of the proposed Project were projected using the Federal Highway Administration's Highway Noise Prediction Model (FHWA RD-77-108) together with several roadway and site parameters. These parameters determine the projected impact of vehicular traffic noise and include the roadway cross-section (e.g., number of lanes), the roadway width, the average daily traffic (ADT), the vehicle travel speed, the percentages of auto and truck traffic, the roadway grade, the angle-of-view, the site conditions ("hard" or "soft"), and the percent of total ADT which flows each hour throughout a 24-hour period. The model does not account for ambient noise levels (i.e., noise from adjacent land uses) or topographical differences between the roadway and adjacent land uses. Noise projections are based on modeled vehicular traffic as derived from the Project Traffic Study.

A 35 to 50 mile per hour (mph) average vehicle speed was assumed for existing conditions (varies depending on roadway) based on empirical observations and posted maximum speeds along the adjacent roadways. ADT estimates were based on the Project traffic report (refer to Appendix 15.2, *Traffic Study*).

EXISTING TRAFFIC NOISE LEVELS

Table 5.5-6, *Existing Traffic Noise Levels*, indicates the location of the 60, 65, and 70 CNEL noise contours associated with vehicular traffic along local roadways as modeled with the aforementioned FHWA computer model. Vehicular noise along 13 roadways were modeled to estimate existing noise levels from mobile traffic. The roadways include 19th Street, 16th Street, Baseline Road, Foothill Boulevard, Arrow Highway, Mountain Avenue, Euclid Avenue, Campus Avenue, Tanglewood Avenue, Vineland Avenue, Carnelian Street, Sapphire Street, and Archibald Avenue, as described in Table 5.5-6.

SIGNIFICANCE CRITERIA

Appendix G, *Initial Study Checklist*, of the CEQA Guidelines contains analysis guidelines related to the assessment of noise impacts. These guidelines have been utilized as thresholds of significance for this analysis. As stated in Appendix G, a project may create a significant environmental impact if one or more of the following occurs:

- Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies (refer to Impact Statements 5.5-1, 5.5-2, 5.5-3 and 5.5-4);

Table 5.5-6
Existing Traffic Noise Levels
(Based on Traffic Volumes)

Roadway Segment	ADT	DBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)		
			60 Ldn Noise contour	65 Ldn Noise Contour	70 Ldn Noise Contour
19th Street:					
Mountain to San Antonio	6,800	58.56	87	41	19
San Antonio to Euclid	8,800	59.68	104	48	22
Euclid to Campus	18,000	61.37	135	63	29
Euclid to 19th	NA	NA	NA	NA	NA
19th (SB) to Campus	NA	NA	NA	NA	NA
Campus to Sapphire	18,500	65.91	293	136	63
Sapphire to Carnelian	14,800	62.73	179	83	38
Carnelian to Archibald	22,900	64.63	239	111	52
16th Street:					
Benson to Mountain	25,000	65.01	253	118	55
Mountain to San Antonio	37,900	66.96	334	155	72
San Antonio to Euclid	26,100	65.20	261	121	56
Euclid to Campus	28,500	65.58	277	128	60
Campus to Tanglewood	33,400	66.27	308	143	66
Tanglewood to Carnelian	43,100	67.33	365	169	79
Baseline Road:					
Carnelian to Archibald	38,400	66.83	338	157	73
Foothill Boulevard:					
Vineland to Archibald:	37,789	66.45	334	155	72
Arrow Highway:					
San Antonio to Euclid	18,300	63.66	206	96	44
Euclid to Campus	19,800	64.17	217	101	47
Campus to Vineland	19,100	63.94	212	98	46
Vineland to Archibald:	21,900	64.39	232	108	50
Mountain Avenue:					
Arrow to Foothill	29,600	65.47	284	132	61
Foothill to 16th	27,800	65.47	272	126	59
16th to 19th	17,900	63.56	203	94	44
Euclid Avenue:					
7th to Arrow	31,000	63.33	240	112	52
Arrow to Foothill	34,000	63.73	256	119	55
Foothill to 16th	24,600	63.61	251	117	54
16th to 19th	14,500	61.31	176	82	38
North of 19th	7,500	58.45	114	53	25

Table 5.5-6 - Continued
Existing Traffic Noise Levels
(Based on Traffic Volumes)

Roadway Segment	ADT	DBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)		
			60 Ldn Noise contour	65 Ldn Noise Contour	70 Ldn Noise Contour
Campus Avenue:					
Arrow to Foothill	11,300	59.37	99	46	21
Foothill to 16th	13,200	62.24	166	77	36
16th to 19th	8,400	60.57	123	57	26
19th to 19th	NA	NA	NA	NA	NA
North of 19th	4,800	57.80	84	39	18
Tanglewood Avenue:					
North of 16th	2,600	52.96	37	17	8
Vineland Avenue:					
Arrow to Foothill	26,100	65.20	261	121	56
Carnelian Street:					
Foothill to Baseline	33,000	64.93	250	116	54
Baseline to 19th	25,600	65.11	257	119	55
North of 19th	16,800	63.29	195	90	42
Sapphire Street:					
North of 19th	16,800	61.04	129	60	28
Archibald Avenue:					
Arrow to Foothill	24,714	64.96	252	117	54
Foothill to Baseline	29,256	65.65	282	131	61
Baseline to 19th	27,945	65.54	273	127	59
North of 19th	13,685	62.44	170	79	37

- Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels (refer to Impact Statement 5.5-1);

- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project (refer to Impact Statement 5.5-2, 5.5-3 and 5.5-4);

- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project (refer to Impact Statement 5.5-1);

- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels (refer to Section 10, *Effects Found Not to be Significant*); and

- For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels (refer to Section 10.0, *Effects Found Not to be Significant*).

Based on these standards, the effects of the proposed project have been categorized as either a "less than significant impact" or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant and unavoidable impact. The standards used to evaluate the significance of impacts are often qualitative rather than quantitative because appropriate quantitative standards are either not available for many types of impacts or are not applicable for some types of projects.

SIGNIFICANCE OF CHANGES IN AMBIENT NOISE LEVELS

A project is considered to have a significant noise impact where it causes an adopted noise standard to be exceeded for the project site or for adjacent sensitive receptors. In addition to being concerned about the absolute noise level that might occur when a new source is introduced into an area, it is also important to consider the existing noise environment. If the existing noise environment is quiet and the new noise source greatly increases the noise exposure, even though a criterion level might not be exceeded, an impact may occur. Lacking adopted standards for evaluating such impacts, general considerations for community noise environments are that a change of over 5 dBA is readily noticeable and, therefore, is considered a significant impact (refer to Table 5.5-7, *Significance of Changes in Cumulative Noise Exposure*).[1] Changes from 3 to 5 dBA may be noticed by some individuals and are, therefore considered an adverse environmental impact, since under these conditions sporadic complaints may occur. Changes in community noise levels of less than 3 dBA are normally not noticeable and are therefore considered less than significant.[2] Adverse impacts would result if increases in noise levels are audible (increases equal to, or greater than 3 dBA), although the noise level may not exceed the significant impact criteria specified above.

Table 5.5-7
Significance of Changes in Cumulative Noise Exposure

Ambient Noise Level Without Project (Ldn or CNEL)	Significant Impact Assumed to Occur if the Project Increases Ambient Noise Levels by:
< 60 dBA	+ 5.0 dBA or more
60-65 dBA	+3.0 dBA or more
> 65 dBA	+1.0 dBA or more

Sources: FICON, FHWA, and Caltrans as applied by Brown-Buntin Associates, Inc., 1997.

[1] Assessment of Noise with Respect to Community Response, ISDR 1996, International Standardization, Switzerland.

[2] Fundamentals and Abatement of Highway Traffic Noise, Bolt, Beranek and Newman, 1973.

Potential impacts are grouped below according to topic. The numbered mitigation measures at the end of this Section directly correspond with the numbered impact statements.

IMPACTS

SUMMARY OF PREVIOUS ENVIRONMENTAL DOCUMENTATION FOR THE COLONIES AT SAN ANTONIO

Final EIR No. 800 identified significant unavoidable noise effects associated with the San Antonio Lakes Specific Plan. The EIR concluded that short-term noise construction may impact the surrounding area and the project site. Also, noise related to future daily traffic volumes and general urban activities on the project site would increase local noise levels, thus, affecting the project site and surrounding areas. Furthermore, the EIR concluded that Campus Avenue and Tanglewood Avenue would experience significant noise impacts.

In October 1998, the City of Upland approved an amendment to the Specific Plan and certified a Supplemental EIR. The Supplemental EIR concluded that the amended Specific Plan did not change the significance of noise impacts.

SHORT-TERM CONSTRUCTION NOISE AND VIBRATION IMPACTS

5.5-1 *Grading and construction within the Specific Plan area would result in temporary noise and/or vibration impacts to nearby noise sensitive receptors. Analysis has concluded that construction noise and vibration impacts would be less than significant following compliance with the City Municipal Code requirements.*

Construction activities are generally of relatively short duration, lasting from a few days to a period of months. Groundborne vibration, groundborne noise, and other types of construction related noise impacts would typically occur during the initial site preparation, which can create the highest levels of groundborne vibration and noise. Generally, site preparation has the shortest duration of all construction phases. Activities that occur during this phase include earthmoving and compacting of soils. High groundborne noise levels, ground vibration and other miscellaneous noise levels can be created during this phase due to the operation of heavy-duty trucks, backhoes, and front-end loaders.

Noise levels typically range from 73 to 96 dBA at 50 feet from individual pieces of equipment.[3] The figures indicated in Table 5.5-8, *Typical Construction Equipment Noise Levels*, below, represents the "worst-case" day in which all equipment used during a given phase is operating. Because all equipment would not be operating on most days during construction, actual noise levels would, on many days, be lower than presented in Table 5.5-8.

[3] United States EPA, 1971.

Table 5.5-8
Typical Construction Equipment Noise Levels

Type of Equipment	Maximum Level, dB (50 feet; thence)
Scrapers	88
Bulldozers	87
Heavy Trucks	88
Backhoe	85
Pneumatic Tools	85

In addition to construction noise from the project site, the construction periods would also cause traffic noise along access routes to the site due to movement of equipment and workers on the site. The primary heavy equipment construction tools/vehicles are expected to be moved on to the site once during the initial grading/ construction period and would have a less than significant short-term effect on noise levels. Daily transportation of construction workers is not expected to cause a significant effect since this traffic would not be a substantial percentage of current daily volumes in the area, and would not be anticipated to increase traffic noise levels by more than 1 dBA.

The draft Specific Plan's Environmental Performance Standards (Section 7.9.9) include standards related to ground vibration. The standards include the following:

- No operation or activity is to be permitted which would cause an earth-borne vibration beyond the property within the vibration was originally created which produces a particle velocity greater than two-tenths inches per second (0.2 inch/sec) measured at or beyond the property line.

- Vibration velocity is to be measured with a seismograph or other instrument capable of measuring and recoding displacement and frequency, particle velocity or acceleration. Readings are to be made at points of maximum vibration along any lot line.

Project construction activities would temporarily increase local noise and vibration levels in the project study area and may temporarily exceed City noise standards. However, the City of Upland Municipal Code (Chapter 4.5) exempts construction activities from adhering to City noise standards as long as construction is limited to the hours of 7:00 a.m. to 6:00 p.m. on weekdays, or when the City Building Inspector approves special provisions for construction activities. Additionally, as stated in the Specific Plan (Section 7.9.9), ground vibration caused by moving vehicles, trains, aircraft, or temporary construction or demolition is exempted from Environmental Standard No. 1 listed above, as is ground vibration caused by emergency equipment, vehicles, devices, and activities, as well as temporary construction maintenance, or demolition activities conducted between the hours of 7:00 a.m. and 6:00 p.m.

With adherence to the Municipal Code and the Environmental Performance Standards referenced in the draft Specific Plan, and due to the relatively short period of construction, noise and vibration impacts are concluded as less than significant.

The basis for this significance conclusion to differ from conclusions rendered in previous environmental documentation for the project is that this EIR study has acknowledged the Upland Municipal Code which exempts construction activities from adhering to City Noise Standards. Additional mitigation measures beyond the City Code and Environmental Performance Standards are not required.

LONG-TERM NOISE IMPACTS

5.5-2 *Implementation of the Specific Plan Amendment would generate additional vehicular travel on the surrounding roadway network, thereby resulting in noise level increases. Analysis has concluded that long-term noise impacts would be significant for roadway segments along 19th Street and Campus Avenue under the Year 2015 and 2020 traffic scenarios. Compliance with the recommended mitigation measures would reduce impacts to a less than significant level.*

Project implementation would result in additional traffic on adjacent roadways, thereby increasing vehicular generated noise in the vicinity of existing and proposed residential uses. As discussed in Section 5.3, *Traffic and Circulation*, the traffic scenarios are separated into three phases. Phases 1 and 2 would be completed in 2011 and Phase 3 would be completed in 2015. Year 2020 accounts for General Plan buildout conditions. Thus, mobile noise impacts from the surrounding street network were modeled for Year 2011, 2015 and 2020. In accordance with the project traffic study, with and without the proposed project scenarios were modeled for all three years. Phase 1 is currently under construction and long-term noise impacts were previously evaluated as a part of the supplemental EIR for the Amendment in 1998. The 2011, 2015 and 2020 scenarios account for buildout of Phase 1.

2011 TRAFFIC NOISE LEVELS

Noise levels within the vicinity of the proposed project area were modeled for with and without project scenarios for the year 2011 to determine the location and extent of future vehicular generated noise conditions. Table 5.5-9, *Exterior Noise Exposure Adjacent to Nearby Roadways, 2011*, indicates the noise increase and/or decrease for the analyzed roadways within the City of Upland and City of Rancho Cucamonga. According to Table 5.5-9, under the "2011 without Project" scenario, noise levels at a distance of 100 feet from centerline would range from approximately 56 to 67 dBA. The highest noise levels would occur on 16th Street, from Tanglewood Avenue to Carnelian Street. Noise levels along this roadway segment would be approximately 67 dBA at 100 feet from the roadway centerline. The lowest noise levels would occur along Tanglewood Avenue (north of 16th Street). Noise levels along this roadway segment would be approximately 56 dBA at 100 feet from the roadway centerline.

In Table 5.5-9, under the "2011 with Project" scenario, noise levels at a distance of 100 feet from centerline would range from approximately 57 to 68 dBA. Similar to the "2011 without Project" scenario, the highest and lowest noise levels would occur along 16th Street (Tanglewood Ave. to Carnelian St.) and Tanglewood Avenue (North of 16 the Street), respectively.

Table 5.5-9
Exterior Noise Exposure Adjacent to Nearby Roadways, 2011
(Based on Traffic Volumes)

Roadway Segment	2011 Without Project					2011 with Project					Difference in DBA @100 Feet from Roadway
	ADT	DBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)			ADT	DBA @ 100 feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)			
			60 Ldn Noise Contour	65 Ldn Noise Contour	70 Ldn Noise Contour			60 Ldn Noise Contour	65 Ldn Noise Contour	70 Ldn Noise Contour	
19th Street:											
Mountain to San Antonio	9,212	59.87	107	50	23	9,258	59.90	107	50	23	0.03
San Antonio to Euclid	11,650	60.89	125	58	27	11,730	60.92	126	58	27	0.03
Euclid to Campus	13,961	60.26	114	53	24	14,099	60.31	114	53	25	0.05
Euclid to 19th	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	---
19th (SB) to Campus	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	---
Campus to Sapphire	21,471	66.56	324	150	70	21,839	66.63	327	152	71	0.07
Sapphire to Carnelian	16,698	63.26	194	90	42	16,698	63.26	194	90	42	0.00
Carnelian to Archibald	16,813	63.29	195	90	42	17,147	63.37	197	91	42	0.08
16th Street:											
Benson to Mountain	40,262	67.08	348	162	75	40,296	67.08	348	162	75	0.00
Mountain to San Antonio	38,215	67.00	336	156	73	38,307	67.01	337	156	73	0.01
San Antonio to Euclid	27,876	65.48	272	126	59	28,003	65.50	273	127	59	0.02
Euclid to Campus	30,142	65.82	287	133	62	30,533	65.88	290	134	62	0.06
Campus to Tanglewood	31,303	65.99	295	137	63	32,154	66.10	300	139	65	0.11
Tanglewood to Carnelian	44,022	67.42	370	172	80	45,092	67.53	376	174	81	0.11
Baseline Road:											
Carnelian to Archibald	38,974	66.89	341	158	73	39,135	66.91	342	159	74	0.02
Foothill Boulevard:											
Vineland to Archibald:	41,941	66.90	358	166	77	42,102	66.92	359	167	77	0.02
Arrow Highway:											
San Antonio to Euclid	19,286	63.88	213	99	46	19,286	63.88	213	99	46	0.00
Euclid to Campus	22,103	64.65	234	108	50	22,103	64.65	234	108	50	0.00
Campus to Vineland	21,459	64.44	229	106	49	21,459	64.44	229	106	49	0.00
Vineland to Archibald:	24,587	64.89	251	116	54	24,633	64.90	251	117	54	0.01
Mountain Avenue:											
Arrow to Foothill	33,178	65.97	306	142	66	33,270	65.98	307	142	66	0.01
Foothill to 16th	31,016	65.95	293	136	63	31,073	65.96	293	136	63	0.01
16th to 19th	14,122	62.53	173	80	37	14,122	62.53	173	80	37	0.00

Table 5.5-9 - Continued
Exterior Noise Exposure Adjacent to Nearby Roadways, 2011
(Based on Traffic Volumes)

Roadway Segment	2011 Without Project					2011 with Project					Differ in D @100 fro Road
	ADT	DBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)			ADT	DBA @ 100 feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)			
			60 Ldn Noise Contour	65 Ldn Noise Contour	70 Ldn Noise Contour			60 Ldn Noise Contour	65 Ldn Noise Contour	70 Ldn Noise Contour	
Euclid Avenue:											
7th to Arrow	37,732	64.18	274	127	59	37,904	64.20	275	128	59	0.0
Arrow to Foothill	36,202	64.00	267	124	57	36,375	64.02	267	124	58	0.0
Foothill to 16th	19,907	62.69	218	101	47	20,194	62.75	220	102	47	0.0
16th to 19th	12,443	60.65	159	74	34	12,455	60.65	159	74	34	0.0
North of 19th	9,936	59.67	137	64	30	9,994	59.69	138	64	30	0.0
Campus Avenue:											
Arrow to Foothill	11,512	59.45	100	46	22	11,673	59.51	101	47	22	0.0
Foothill to 16th	19,033	63.83	211	98	46	19,504	63.93	215	100	46	0.1
16th to 19th	16,641	63.54	193	90	42	16,894	63.61	195	91	42	0.0
19th to 19th	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	–
North of 19th	12,443	61.93	159	74	34	12,742	62.04	162	75	35	0.1
Tanglewood Avenue:											
North of 16th	5,428	56.16	61	28	13	7,314	57.46	74	34	16	1.3
Vineland Avenue:											
Arrow to Foothill	32,879	66.20	304	141	66	33,201	66.24	306	142	66	0.0
Carnelian Street:											
Foothill to Baseline	32,396	64.85	247	115	53	32,695	64.89	249	116	54	0.0
Baseline to 19th	17,526	63.47	200	93	43	17,595	63.49	201	93	43	0.0
North of 19th	21,241	64.30	227	106	49	21,321	64.32	228	106	49	0.0
Sapphire Street:											
North of 19th	9,097	58.38	85	40	18	9,097	58.38	85	40	18	0.
Archibald Avenue:											
Arrow to Foothill	24,783	64.97	252	117	54	24,840	64.98	252	117	54	0.
Foothill to Baseline	29,567	65.69	283	132	61	29,578	65.70	284	132	61	0.
Baseline to 19th	16,779	63.33	194	90	42	16,779	63.33	194	90	42	0.
North of 19th	22,460	64.59	236	110	51	22,483	64.60	236	110	51	0.

Note: Noise level models computed for 2011 scenarios utilized existing 2000 roadway cross-section data.

Table 5.5-9 also compares noise levels under the "2011 without Project" scenario with the "2011 with Project" scenario. Based on the information cited in the Table 5.5-10, all roadway segments comparatively analyzed, with the exception of Tanglewood Avenue (north of 16th Street), would experience a noise increase of less than 1 dBA at 100 feet from the roadway centerline. Thus, noise impacts along these roadway segments would be less than significant based on the significance criteria as stated within Table 5.5-7, *Significance of Changes in Cumulative Noise Exposure*. Noise levels along Tanglewood Avenue (north of 16th Street) under the "2011 without Project" scenario would be less than 60 dBA (CNEL). Thus, as referred in Table 5.5-7, since the noise level along this roadway segment would not increase by more than 5.0 dBA, a significant noise impact would not occur along this roadway segment.

In summary, based on the significance criteria established in Table 5.5-7, the proposed Specific Plan Project would not create significant vehicular related noise impacts along the analyzed roadway segments in 2011.

2015 TRAFFIC NOISE LEVELS

Table 5.5-10, *Exterior Noise Exposure Adjacent to Nearby Roadways, 2015*, indicates the noise increase and/or decrease for the analyzed roadways within the City of Upland and City of Rancho Cucamonga. According to Table 5.5-10, under the "2015 without Project" scenario, noise levels at a distance of 100 feet from centerline would range from approximately 57 to 68 dBA. The highest noise levels would occur on 16th Street, from Tanglewood Avenue to Carnelian Street. Noise levels along this roadway segment would be approximately 67 dBA at 100 feet from the roadway centerline. The lowest noise levels would occur along Tanglewood Avenue (north of 16th Street). Noise levels along this roadway segment would be approximately 57 dBA at 100 feet from the roadway centerline.

In Table 5.5-10, under the "2015 with Project" scenario, noise levels at a distance of 100 feet from centerline would range from approximately 57 to 68 dBA. Similar to the "2015 without Project" scenario, the highest noise levels would occur along 16th Street (Tanglewood Avenue to Carnelian Street). The lowest noise levels would occur along 19th Street, from Mountain Avenue to San Antonio Avenue. Noise levels along this roadway segment would be approximately 57 dBA at 100 feet from the roadway centerline.

Table 5.5-10 also compares noise levels under the "2015 without Project" scenario with the "2015 with Project" scenario. Based on the information referenced in Table 5.5-10, all roadway segments comparatively analyzed, with the exception of two roadway segments, would not exceed the significance criteria established in Table 5.5-7. The following discussion addresses the two roadway segments which exceed the threshold.

Table 5.5-10 indicates that the roadway segment on Campus Avenue, north of 19th Street, would have a noise level of 62.89 dBA (CNEL) under the "2015 without Project" scenario. Under the "2015 with Project" scenario, this segment would have a noise level of 65.94 dBA (CNEL). The difference between the two scenarios is an increase of 3.05 dBA under the "2015 with Project" scenario. According to Table 5.5-7, since the "2015 without Project" noise level is between 60-65 dBA (CNEL) and a

Table 5.5-11
Exterior Noise Exposure Adjacent to Nearby Roadways, 2020
(Based on Traffic Volumes)

Roadway Segment	ADT	2020 w/out Project				ADT	2020 with Project				Difference 2020
		CNEL[1]	60	65	70		CNEL	60	65	70	
19th Street:											
Mountain to San Antonio	9,867	60.17	112	52	24	3,887	56.13	60	28	13	-4.04
San Antonio to Euclid	13,639	61.58	139	65	30	7,107	58.75	90	42	19	-2.83
Euclid to Campus	14,835	60.53	118	55	25	NA	NA	NA	NA	NA	—
Euclid to 19th	NA	NA	NA	NA	NA	11,305	59.35	99	46	21	—
19th (SB) to Campus	NA	NA	NA	NA	NA	11,707	59.02	101	47	22	—
Campus to Sapphire	24,150	67.07	350	163	75	37,939	69.03	473	220	102	1.96
Sapphire to Carnelian	18,849	63.79	210	98	45	24,587	64.94	251	116	54	1.15
Carnelian to Archibald	23,598	64.76	244	113	53	22,690	64.59	51	110	238	-0.17
16th Street:											
Benson to Mountain	40,733	67.13	351	163	76	38,123	66.84	336	156	72	-0.29
Mountain to San Antonio	39,386	67.13	343	159	74	41,584	67.37	356	165	77	0.24
San Antonio to Euclid	29,774	65.77	285	132	61	29,716	65.76	284	132	61	-0.01
Euclid to Campus	31,775	66.05	297	138	64	29,394	65.71	282	131	61	-0.34
Campus to Tanglewood	30,360	65.86	289	134	62	28,911	65.64	279	130	60	-0.22
Tanglewood to Carnelian	46,610	67.67	384	178	83	46,966	67.70	386	179	83	0.03
Baseline Road:											
Carnelian to Archibald	39,537	66.96	344	160	74	38,491	66.84	338	157	73	-0.12
Foothill Avenue:											
Vineland to Archibald:	45,885	67.29	380	176	82	47,070	67.40	386	179	83	0.11
Arrow Highway:											
San Antonio to Euclid	20,091	64.06	219	102	47	19,182	63.86	212	99	46	-0.20
Euclid to Campus	24,162	65.03	248	115	53	23,449	64.90	243	113	52	-0.13
Campus to Vineland	23,541	64.85	244	113	52	23,426	64.83	243	113	52	-0.02
Vineland to Archibald:	26,991	65.30	267	124	58	27,290	65.35	269	125	58	0.05
Mountain Avenue:											
Arrow to Foothill	36,835	66.42	328	152	71	37,559	66.51	333	154	72	0.09
Foothill to 16th	32,120	66.10	300	139	65	38,410	66.88	338	157	73	0.78
16th to 19th	15,157	62.84	182	84	39	16,813	63.29	195	90	42	0.45
Euclid Avenue:											
7th to Arrow	41,377	64.58	291	135	63	40,699	64.51	288	134	62	-0.07
Arrow to Foothill	40,273	64.46	286	133	62	40,020	64.43	285	132	61	-0.03
Foothill to 16th	20,516	62.82	222	103	48	22,529	63.22	236	110	51	0.40
16th to 19th	12,949	60.82	164	76	35	12,938	60.81	163	76	35	-0.01
North of 19th	12,305	60.60	158	73	34	12,719	60.74	162	75	35	0.14

Table 5.5-11 - Continued
Exterior Noise Exposure Adjacent to Nearby Roadways, 2020
(Based on Traffic Volumes)

Roadway Segment	ADT	2020 w/out Project				ADT	2020 with Project				Difference 2020
		CNEL	60	65	70		CNEL	60	65	70	
Campus Avenue:											
Arrow to Foothill	11,673	59.51	101	47	22	12,156	59.69	104	48	22	0.18
Foothill to 16th	25,358	65.07	256	119	55	29,705	65.76	284	132	61	0.69
16th to 19th	24,702	65.26	252	117	54	31,027	66.25	293	136	63	0.99
19th to 19th	NA	NA	NA	NA	NA	41,389	64.50	234	109	50	---
North of 19th	19,274	63.84	213	99	46	34,765	66.40	316	147	68	2.56
Tanglewood Avenue:											
North of 16th	7,843	57.76	77	36	17	15,410	60.39	121	56	26	2.63
Vineland Avenue:											
Arrow to Foothill	33,937	66.34	311	144	67	34,385	66.40	314	146	68	0.06
Carnelian Street:											
Foothill to Baseline	34,523	65.13	258	120	56	36,352	65.35	267	124	58	0.22
Baseline to 19th	18,090	63.61	204	95	44	20,746	64.20	224	104	48	0.59
North of 19th	28,348	65.56	276	128	59	26,646	65.29	265	123	57	-0.27
Sapphire Street:											
North of 19th	11,305	59.32	99	46	21	10,902	59.16	96	45	21	-0.16
Archibald Avenue:											
Arrow to Foothill	24,564	64.94	251	116	54	25,243	65.05	255	118	55	0.11
Foothill to Baseline	29,889	65.74	286	133	62	30,878	65.88	292	135	63	0.14
Baseline to 19th	18,239	63.69	205	95	44	20,873	64.28	225	104	48	0.59
North of 19th	27,336	65.45	269	125	58	32,649	66.22	303	141	65	0.77

Note: Noise level models computed for 2020 scenarios utilized General Plan/buildout roadway cross-section data.
[1] CNEL at 500 feet.

STATIONARY NOISE IMPACTS

5.5-3 *Implementation of the Specific Plan Amendment would result in the generation of on-site noise associated with commercial activities that include loading/unloading activities, mechanical equipment, P.A. systems and activities occurring in parking lots. Analysis has concluded that stationary source impacts would be reduced to less than significant levels with adherence to the City of Upland Municipal Code requirements relating to noise level standards and recommended mitigation measures.*

Noise typically associated with operation activities of commercial uses would be generated by the following sources:

- Trucks traveling on the site, to and from loading docks;
- Activities at loading docks (maneuvering and idling trucks, banging and clanging of equipment);
- Public announcement (PA) systems;

- Mechanical equipment (air conditioners, trash compactors, emergency generators, etc.);
- Parking lot sweepers; and
- Typical parking lot activities (i.e., parking lot traffic).

Existing and proposed residences are located to the east, west, and south of proposed commercial areas. Cucamonga Creek borders the east side and separates the project site from single-family residences in the Cities of Upland and Rancho Cucamonga. Within the project site, based on the preliminary site plan for the proposed commercial uses within Planning Area 17 (PA-17), PA-18, and PA-19, proposed residential uses on the south side of 19th Street in PA-4 and PA-5 are located at distances ranging from 175 (PA-5) to 225 (PA-4) feet from the nearest parking areas on the commercial site north of 19th Street (refer to Exhibit 5.5-1, *Commercial Planning Areas*). Existing residential on the east side of Cucamonga Creek are also approximately 300 to 400 feet from the easternmost parking area on the project site.

Loading areas on the proposed commercial site are at distances ranging from 200 feet (Pad 34), 225 feet (Major 29), 250 feet (Major 27), to 575 feet (Major 32) from the nearest proposed residences to the south. The proposed Major 32 loading area north of a proposed outdoor garden center is approximately 400 feet to the residences on the east side of Cucamonga Creek, which is approximately 22 feet higher in elevation than the Major 32 site.

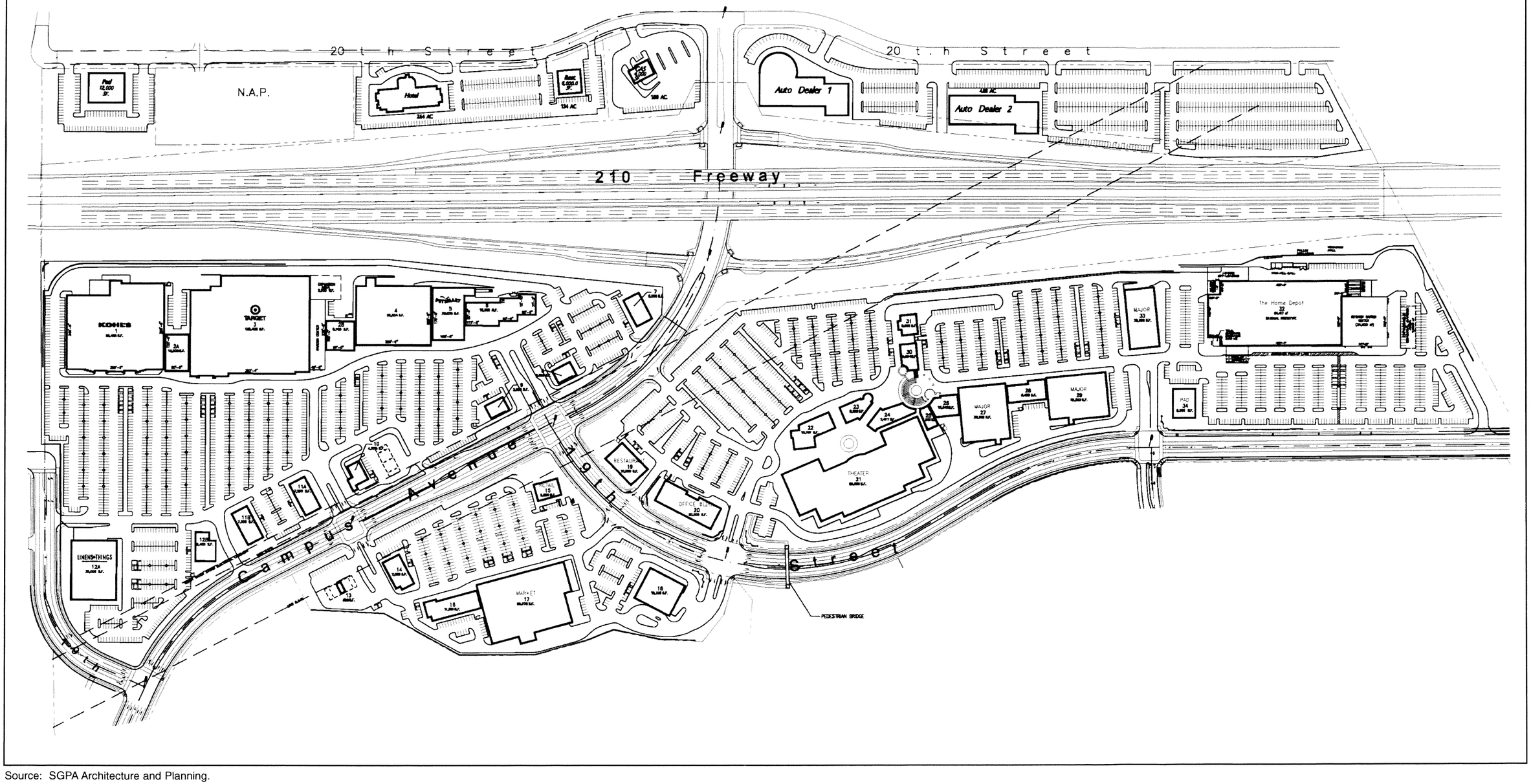
A potential site for a gas station with a fast food drive-thru window on Pad 10 is located more than 1,250 feet from the nearest residential uses in PA-4. Pad 18 is a proposed pharmacy with a drive-thru window and is approximately 350 feet from the nearest residences in PA-4. Pad 8 and Pad 9 could have a drive-thru window as well, and they both are more than 1,000 feet from the nearest residences in PA-4.

Noise Ordinance Standards

It is stated in the City's Municipal Code Noise Ordinance that exterior noise levels in residential property shall not exceed the basic noise standard of 55 dBA between the hours of 7:00 a.m. and 10:00 p.m. and shall not exceed 45 dBA between the hours of 10:00 p.m. and 7:00 a.m. (refer to Table 5.5-3).

In addition to the noise standards by zone, the City's Noise Ordinance specifies the maximum duration for which different noise levels cannot be exceeded. As noise levels increase, the time allowed decreases. Based on the ordinance, it is unlawful to create or allow any noise that exceeds the specified levels/duration when measured on any residential, public institutional, professional, commercial, or industrial property (refer to Table 5.5-4).

Therefore, the maximum noise level (L_{max}) not to be exceeded in a residential area is 75 dBA during daytime hours and 65 dBA during nighttime hours. For events lasting less than 1 minute in any hour ($L_{1.7}$), the maximum noise levels allowed are 70 and 60 dBA, respectively, during daytime and nighttime hours. For events lasting more than 1 minute but less than 5 minutes in any hour ($L_{8.3}$), the maximum noise levels allowed are 65 and 55 dBA, respectively, during daytime and nighttime hours.



Source: SGPA Architecture and Planning.

Not to Scale

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

06/02 JN 10-101248

CITY OF UPLAND
THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Commercial Planning Areas

Exhibit 5.5-1

For events lasting more than 5 minutes but less than 15 minutes in any hour (L_{25}), the maximum noise levels allowed are 60 and 50 dBA, respectively, during daytime and nighttime hours. For events lasting more than 15 minutes but less than 30 minutes in any hour (L_{50}), the maximum noise levels allowed are 55 and 45 dBA, respectively, during daytime and nighttime hours.

Potential Source Noise Levels

Representative parking activities, such as customers conversing and door slamming, would generate approximately 60 dBA L_{max} at 50 feet. Slow moving trucks, at 5 to 10 miles per hour (mph), would generate up to 75 dBA L_{max} when traveling and braking at 50 feet. Passenger cars generate on average 8 to 10 dBA lower than trucks. Loading and unloading activities generate approximately 75 dBA L_{max} at 50 feet when the loading area is fully open, and 8 to 10 dBA lower when the loading area is partially or fully blocked.

Outdoor paging generates approximately 85 dBA L_{max} from a speaker directed to the activity area, where the sound level meter is located. A noise survey conducted at an existing Carl's Jr restaurant in Rancho Santa Margarita provided noise levels generated by outdoor drive-through order speaker. The drive-thru vehicle would block the speaker during the ordering process, thus, the sound level meter was positioned at different angles (at a distance of approximately 15 feet) from the speaker to get a better sound coverage from the speaker. When measured in front of the drive-thru vehicle with the highest exposure to the speaker, sound from the speaker fluctuated between 55 and 65 dBA L_{max}. Customer voice fluctuated between 60 and 62 dBA L_{max}. When measured behind the drive-thru vehicle, sound from the speaker fluctuated between 53 and 62 dBA L_{max}. When the speaker was completely blocked by the drive-thru vehicle, sound from the speaker fluctuated between 50 and 58 dBA L_{max}. Drive-thru vehicles generated noise levels lower than 60 dBA L_{max} at 15 feet from the sound level meter.

Stationary Noise Analysis

Based on the project's preliminary site plan for the commercial uses, the distance from the nearest residential uses to the parking areas, loading areas, and potential outdoor order menu/speaker were described previously in the noise sensitive receptor locations.

Parking Lot Noise. Typical parking lot noise from conversation and door slamming of 60 dBA L_{max} at 50 feet would be reduced to 49 dBA L_{max} at 175 feet. Because these event occur intermittently and lasting only a very short time period (i.e., a few seconds), they are compared to the maximum noise level standard specified in the City's Noise Ordinance. For residential uses, the maximum noise level standard is 75 dBA L_{max} during daytime hours and 65 dBA L_{max} during nighttime hours. Therefore, typical parking lot noise generated at the project site would be below both the daytime and nighttime noise standards at the nearest existing and proposed residential uses. No mitigation measures are recommended.

Loading/Unloading Noise. Noise from loading/unloading activities of 75 dBA L_{max} would be reduced by distance attenuation alone to 63 dBA L_{max} (Pad 34), 62 dBA L_{max} (Major 29), 61 dBA L_{max} (Major 27), 54 dBA L_{max} (Major 32 to south), and 57 dBA

L_{max} (Major 32 to east) at the nearest existing or proposed residences. Noise from loading area at the Major 32 site would be blocked partially to the south by the wall on the north side of a proposed outdoor garden center and fully blocked by the Cucamonga Creek (22 feet higher in elevation). Loading/Unloading noise at Major 32 loading area would be reduced to 48 dBA L_{max} (residences to the south), and 38 dBA L_{max} (residences to the east) at the nearest existing or proposed residences Therefore, the loading/unloading noise would not exceed the nighttime (10 p.m. to 7 a.m.) maximum noise standard of 65 dBA L_{max} at the nearest residences. Mitigation measures are not recommended.

Outdoor Paging Noise. Outdoor paging at the proposed Major 32 garden center would generate up to 85 dBA L_{max} at 50 feet. It is located approximately 575 feet (-21 dBA) to the nearest residences to the south and 450 feet (-19 dBA) to the nearest residences to the east across Cucamonga Creek. Proposed and existing residences would experience outdoor paging noise from the garden center up to 64 and 66 dBA L_{max}, respectively. The noise levels at residences to the south would potentially exceed the City's nighttime noise standard of 65 dBA L_{max} but would be below the daytime noise standard of 75 dBA L_{max}. Mitigation is recommended to reduce potential impacts to a less than significant level.

Drive-Thru Speaker Noise. The outdoor speaker at a proposed pharmacy at Pad 18 is approximately 350 feet from the nearest residential area in PA-4. A source level of 65 dBA L_{max} at 15 feet would be attenuated to 38 dBA L_{max}. This maximum noise level is lower than the 75 and 65 dBA L_{max} noise standards specified in the City's noise ordinance. It should be noted that, during the remainder of the time when the speaker is not in use, sound levels attributed to the pharmacy operation would be lower than when it is in use. Therefore, the sound averaged over that time period would be lower than the maximum level used in this analysis.

Assuming that during a busy hour, a total of 20 customers (one every three minutes) would drive through and pick up their prescription orders from the drive-thru window, each time the speaker would be in use for 20 seconds (from pharmacy staff responding to customer). This would result in a cumulative time of 400 seconds, or 6.6 minutes, over the entire hour for the speaker in use. As previously stated, for events lasting more than 5 minutes but less than 15 minutes in any hour (L_{25}), the maximum noise levels allowed are 60 and 50 dBA, respectively, during daytime and nighttime hours. Noise from the outdoor drive-thru speaker would be below the City's daytime and nighttime noise standards. The proposed gas station/drive-thru window on Pad 10 is more than 1,250 feet from the nearest residences in PA-4, and would receive a minimum of 38 dBA in noise reduction compared to the level measured at 15 feet. Therefore, outdoor speaker noise at Pad 10 would be attenuated to 27 dBA L_{max} or lower. Potential outdoor speaker use at Pads 8 and 9 would receive a minimum of 36 dBA in noise attenuation from distance divergence, and would be attenuated to 27 dBA L_{max} or lower. This range of maximum noise levels is below the City's noise ordinance standard of 75 and 65 dBA L_{max} for daytime and nighttime hours, respectively. No mitigation measures are recommended.

Although several noise sources would be introduced in the Specific Plan area, most would occur for only very brief time periods, including truck movements, parking lot sweepers and trash compactors. Trucks could potentially make deliveries to commercial operations at numerous access points via 19th Street. Parking lot

sweepers typically operate during the early morning hours when parking lots are empty. Trash compactors are often located near loading docks and usually operate a few times per day for 1 to 2 minutes during each compaction cycle. These types of sources and/or activities usually do not operate concurrently and can meet the hourly permitted standards described in the City of Upland noise regulations. Other noise sources, such as air conditioning equipment, parking lot traffic, and loading dock activities operate for comparatively longer periods of time. Loading dock activities that generate noise include truck movements, idling trucks, P.A. systems, roll-up doors and talking employees. The Specific Plan Amendment would be required to comply with City noise standards and demonstrate adherence to Chapter 4.5, *Unnecessary Noise*, of the City of Upland Municipal Code (refer to Table 5.5-3, *City Noise Standards* and Table 5.5-4, *Noise Levels and Duration*). Compliance with City Noise Standards and recommended mitigation would reduce stationary noise impacts to a less than significant level.

Furthermore, a subsequent noise analysis shall be prepared for the Commercial Planning Areas prior to Final Development Plan approval. Noise studies shall demonstrate that stationary noise sources would not exceed Code criteria and would not significantly impact adjacent noise sensitive areas (i.e., residential areas). With the preparation of a noise analysis and adherence to the recommended mitigation measures, long-term stationary noise impacts generated within the Specific Plan area would be reduced to a less than significant level.

CUMULATIVE IMPACTS

5.5-4 *Implementation of the Specific Plan Amendment, combined with cumulative projects, would increase the ambient noise levels in the site vicinity. Impact analysis and mitigation of impacts are determined on a project-by-project basis.*

Implementation of the proposed project, combined with development of cumulative projects, would increase ambient noise levels in the site vicinity. This increase would be due to both vehicular traffic noise along local roadways and stationary noise sources associated with development. The evaluation of noise impacts is typically determined on a project-by-project basis in order to focus mitigation on a particular noise source. As such, future development proposals within the City would require separate discretionary approval and CEQA assessment which would address potential noise impacts and identify appropriate attenuation measures where appropriate. As previously stated above, the proposed project, as well as cumulative development projects, would be individually required to reduce noise impacts to below City noise standards and demonstrate adherence to Municipal Code requirements.

MITIGATION MEASURES

This section directly corresponds to the identified Impact Statements in the impacts subsection.

SHORT-TERM CONSTRUCTION NOISE AND VIBRATION IMPACTS

5.5-1 No mitigation measures are recommended.

LONG-TERM NOISE IMPACTS

5.5-2 Residential units located south of 19th Street, within Planning Areas 4 and 5, shall be located or architecturally designed such that the noise levels do not exceed the City of Upland Noise Ordinance (Section 5400.500 and Section 5400.800) requirements for residential uses. Design features could include setbacks, berms, landscaping, and architectural features as stated in the Development Regulations (Section 7.0) and Design Guidelines (Section 8.0) of the Colonies at San Antonio Specific Plan Amendment.

LONG-TERM STATIONARY NOISE

5.5-3a Prior to Final Development Plan approval for Commercial Planning Areas of the Specific Plan area, subsequent noise studies shall be prepared, to the satisfaction of the Community Development Director, which demonstrates the site placement of stationary noise sources would not exceed criteria established in the City of Upland Noise Ordinance Code. The analysis shall verify that loading dock facilities, rooftop equipment, trash compactors and other stationary noise sources are adequately shielded and/or located at an adequate distance from residential areas in order to comply with the City's noise standards.

5.5-3b Outdoor PA systems shall not be permitted to operate in Planning Area 19, within 300 feet of the easterly property line, between the hours of 10:00 p.m. and 7:00 a.m. and shall not exceed the City's Noise Ordinance standards. Adherence with this measure is subject to periodic site inspections by the City of Upland.

5.5-3c Directional speakers shall be shielded and/or oriented away from off-site residences to the satisfaction of the Community Development Director.

CUMULATIVE IMPACTS

5.5-4 No mitigation measures are recommended.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

No unavoidable significant impacts related to noise have been identified following implementation of recommended mitigation measures and compliance with applicable City codes and ordinances, and standards specified in the Specific Plan Amendment.

5.6 BIOLOGICAL RESOURCES

The purpose of this Section is to identify existing biological resources on-site and in the vicinity, analyze potential Project-related impacts to these resources (including sensitive species) and recommend mitigation measures to reduce the significance of impacts which are identified. Information in this Section is based on a *Biological Resources Report* dated June 2002, and prepared by LSA Associates, Inc. Report data is included in Appendix 15.5, *Biological Assessment.* This Section describes the biological character of the site in terms of vegetation, flora, wildlife, and wildlife habitats and analyzes the biological significance of the site in consideration of federal, state and local laws and policies. Impacts to resources within the areas of Phase 1 (305 units) and I-210 were addressed in separate environmental assessments and are not addressed in the LSA Associates Report.

Information on the biological resources of the proposed development site has been drawn from a number of documents. The following documents were reviewed by LSA Associates:

- Biological Assessment [for] Colonies at San Antonio, Upland, California, 1998.
- Biological Assessment [for] San Antonio Lakes Specific Land Use Plan, Upland, California, 1987.
- California Gnatcatcher and Cactus Wren Survey for Caltrans SR-30 in Eastern Los Angeles and Western San Bernardino Counties, 1994.
- California Natural Diversity Data Base information on the Mt. Baldy, Cucamonga Peak, Guasti, and Ontario 7.5' Topographic Quadrangles, 2001 and 1997.
- California Native Plant Society Information on Sensitive Plants for the Mt. Baldy, Cucamonga Peak, Guasti, and Ontario 7.5' Topographic Quadrangles, 2001 and 1997.
- California Department of Fish and Game letter, Re: Notice of Preparation of a Draft Environmental Impact Report, May 8, 2001.
- U.S. Army Corps of Engineers letter, Re: Jurisdictional Areas and SWANCC Decision, November 7, 2001.
- Significant Natural Areas Program Information. February 6, 2002. http://www.dfg.ca.gov/whdab/html/moresna.html.

Field surveys for sensitive species and vegetation communities were conducted by qualified LSA Associates biologists who are experienced with the sensitive species in the area, using the resource agency's established methods for identifying the involved species. Surveys were conducted in 1997, 1998, 2000, and 2002. These surveys provide the basis for most of the biological information used in this section. The sensitive biological resources potentially present on-site were updated with

information provided by the 2001 versions of the California Natural Diversity Data Base (CNDDB) and the California Native Plant Society (CNPS).

DATA COLLECTION

LSA Associates conducted two reconnaissance-level surveys in July 1997 concentrating on categorizing plant communities throughout the property and identifying habitat for sensitive plants and animals. This resulted in the 1998 vegetation map. LSA Associates updated the plant community boundaries of the 1998 vegetation map using a topographic map, from a flight flown in August 2001, at a scale of 1 inch = 200 feet. The mapping was based on structural type (alluvial scrub, alluvial chaparral, willow-mule fat scrub, and ruderal/disturbed). LSA Associates biologists, Mr. Jack Easton and Ms. Wendy Walters, visited the site in February 2002 to ground truth vegetation currently on-site.

LSA Associates conducted a total number of 9 focused surveys (over a period of 18 weeks) for the California gnatcatcher (*Polioptila californica*) throughout the site from mid-July 1997 to mid-November 1997, between 6:00 a.m. and 12:00 p.m. Surveys for other sensitive plants and animals were conducted concurrently. During this season, a small mammal trapping survey was conducted for a total of 5 nights, checking the traps in the middle of the night, and again at dawn.

LSA Associates conducted focused surveys for least Bell's vireo (*Vireo bellii pusillus*) and sensitive plants between April and August 1998. Least Bell's vireo focused surveys were conducted, according to USFWS protocol, between dawn and 11:00 a.m. Sensitive plant species surveys were conducted during flowering season in the spring and summer of 1998. An additional California gnatcatcher 18-week focused survey was conducted between July and November 2000, according to the USFWS protocol.

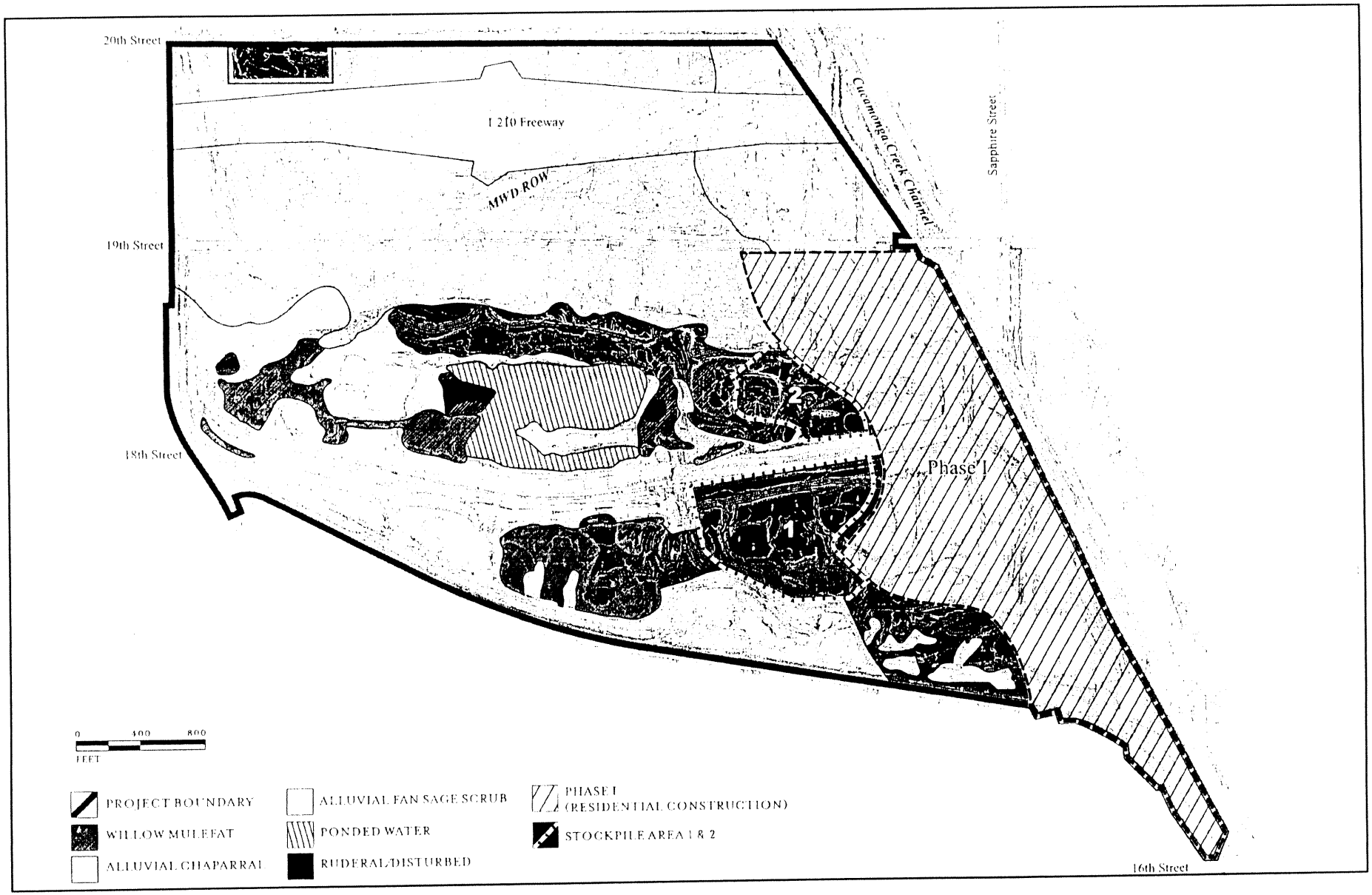
Although no sensitive species were detected during these surveys, given the time that has elapsed, focused surveys are being conducted for these animal species again during the spring and summer of 2002 to ensure compliance with the Endangered Species Act, and to confirm that said species have not subsequently occupied the site. No threatened or endangered species have been observed thus far.

EXISTING CONDITIONS

PLANT COMMUNITIES AND VEGETATION

The following plant communities were identified as being present on the Project site (refer to Exhibit 5.6-1, *Vegetation Map*):

Alluvial fan sage scrub	119 acres
Alluvial chaparral	105 acres
Willow-mule fat scrub	16 acres
Ruderal/Disturbed	75 acres
Ponded water	13 acres



Source: LSA Associates, Inc.

Exhibit 5.6-1

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

06/02

JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Vegetation Map

Alluvial fan sage scrub and alluvial chaparral may be considered as two different stages of the alluvial scrub plant community. "Alluvial scrub" is a vegetation type of the region that is adapted to occasional, destructive flooding.[1] Areas scoured by a major flood event are then colonized by a "pioneer" stage of the alluvial scrub community. In the absence of additional flooding, the species composition and structure of the vegetation gradually changes to a mature, "climax" stage. The cycle of ecological succession is re-started by another major flood event.

The vegetation within the Project area is representative of intermediate or mature alluvial scrub. However, past land uses in the vicinity have substantially altered the local hydrologic regime and have apparently eliminated flooding from the upland portions of the site. Construction of the Cucamonga Creek Channel, 19th Street, and local mining operations have interrupted natural flood regime of the local alluvial fan. Thus, flooding and scouring have been eliminated from the alluvial scrub community effectively interrupting the cycle of ecological succession. The likely result being that the community will remain in a climax stage. It is possible that some other disturbance (e.g., fire) could act to replace flooding thereby re-starting the successional process.

The net effect of the elimination of flooding and resulting alteration of the successional cycle is that the alluvial chaparral and alluvial fan sage scrub are of somewhat lower value than a pristine system with all ecological processes functioning.

Alluvial Fan Sage Scrub. The site contains extensive areas of Riversidean alluvial fan sage scrub (119 acres) on the historic Cucamonga Creek floodplain and extending westward throughout the southern portion of the property (above the floor of the quarries). The alluvial fan sage scrub vegetation community is largely undisturbed on this site. This vegetation on-site is dominated by scalebroom (*Lepidospartum squamatum*), California buckwheat (*Eriogonum fasciculatum*), and California sagebrush (*Artemisia californica*). The understory is mostly bare, gravelly soil with a scattering of low annuals. Riversidean alluvial fan sage scrub is considered to be a sensitive plant community.

Alluvial Chaparral. The alluvial chaparral plant community (105 acres) exists on the benches north of the large central quarry, west of the Cucamonga Creek floodplain. Dominant species in this habitat include holly-leaved cherry (*Prunus ilicifloia*), laurel sumac (*Malosma laurina*), chamise (*Adenostoma fasciculatum*), sugarbush (*Rhus ovata*), scalebroom, and California buckwheat. In general, this vegetation is denser and taller than the alluvial scrub vegetation, and supports a slightly higher density of low-lying annuals in the understory.

Willow-Mule Fat Scrub. Approximately 16 acres of Willow-mule fat scrub is found on the floors of each of the abandoned quarries (most of which are seasonally wet), and along the narrow channels in the southwestern portion of the site (which have permanent, or nearly so, water sources). The dominant species are mule fat (*Baccharis salicifolia*) and four species of willow (*Salix* spp.). The height and density of the scrub in the southern-central quarry is more typical of willow riparian forest.

[1] Biological Resources Report, Colonies at San Antonio Project, LSA Associates, Inc., February 13, 2002, Page 5.

Those areas immediately adjacent to open water support some emergent freshwater marsh vegetation such as cattails (*Typha* spp.).

Ruderal/Disturbed. The ruderal plant community (75 acres) is most prevalent on the southern portion of the bench rising above the large central quarry. The dominant species in this area are non-native grasses, tree tobacco (*Nicotiana glauca*), and tocalote (*Centaurea melitensis*). Small patches of this type of disturbance-related community can be found throughout the site, although, this area is the only one where this vegetation predominate. Disturbed areas supporting little or no vegetation are present in scattered locations. These areas are characterized by bare ground and are remnants of previous mining or other similar activities on the site.

Ponded Water. The largest quarry pit, located near the center of the site, contains ponded water (13 acres) that is present for much of the year. As the water gradually evaporates and recedes, it leaves behind mudflats that are virtually devoid of vegetation.

WILDLIFE HABITATS AND WILDLIFE

ALLUVIAL SCRUB AND CHAPARRAL HABITATS

Alluvial sage scrub and chaparral habitats provide a moderate to high number of physical resources for wildlife. Food, cover, nesting, burrowing, and foraging habitats are the principal resources. Scrub habitats have a moderate structural complexity, the level of complexity being dependent upon the scrub type, age of the stand and geographic location. The principal components include understory, shrub layer, and occasionally open ground.

Reptiles that forage and burrow in the scrub habitats include western fence lizard (*Sceloporus occidentalis*), and side-blotched lizard (*Uta stansburiana*). Bird species commonly nesting and/or foraging in scrub habitat include the following:

- California quail (*Callipepla californica*);
- Greater roadrunner (*Geococcyx californianus*);
- Anna's hummingbird (*Calypte anna*);
- Ash-throated flycatcher (*Myiarchus cinerascens*);
- Western scrub-jay (*Aphelocoma californica*);
- Bushtit (*Psaltriparus minimus*);
- Bewick's wren (*Thryomanes bewickii*);
- Wrentit (*Chamaea fasciata*);
- California thrasher (*Toxostoma redivivum*);
- Spotted towhee (*Pipilo maculatus*);
- California towhee (*Pipilo crissalis*); and
- Several sparrow species.

Mammals that occur in this habitat include the following:

- Audubon's cottontail (*Sylvilagus audubonii*);
- Deer mouse (*Peromyscus maniculatus*);
- Cactus mouse (*Peromyscus ememicus*);

- California mouse (*Peromyscus californicus*);
- Desert woodrat (*Neotoma lepida*);
- Pacific kangaroo rat (*Dipodomys agilis*);
- Coyote (*Canis latrans*);
- Bobcat (*Lynx rufus*); and
- Mule deer (*Odocoileus hemionus*).

WILLOW-MULE FAT SCRUB HABITATS

Willow-mule fat scrub habitats provide a great number of biotic and abiotic resources for wildlife. Water, cover, food, nesting and roosting sites, shade, and movement corridors are all associated with these woodlands. Woodlands have a high degree of structural complexity, with understory, shrubs, and tree canopy forming the main components. Riparian habitats on-site provide food, roosting, nesting, and foraging habitat for the following species:

- Cooper's hawk (*Accipter cooperi*);
- great horned owl (*Bubo virginianus*);
- downy woodpecker (*Picoides pubescens*);
- black phoebe (*Sayornis nigricans*);
- common yellowthroat (*Geothlypis trichas*);
- song sparrow (*Melospiza melodia*); and
- numerous migrant passerine species.

These habitats also support a number of amphibian, reptile, and mammal species, and are important source of water and cover for large mammals such as coyote and mule deer (both of which have been observed repeatedly on the site).

RUDERAL/DISTURBED HABITAT

Ruderal habitats provide minimal foraging habitat and generally are used only by widespread, generalist species. Nevertheless, the tree tobacco blooming in these areas supported large numbers of migrant hummingbirds (four species).

PONDED WATER

Areas of ponded water provide a seasonal drinking source and provide habitat for waterfowl, herons, and egrets. Ponded water is an important and locally uncommon habitat component. Its presence on the site in close proximity to other habitat types increases the overall habitat value of the site.

SENSITIVE BIOLOGICAL RESOURCES

SENSITIVE PLANT COMMUNITIES

The CNDDB lists the Riversidean alluvial fan sage scrub and the Willow riparian forest (i.e., scrub) plant communities as sensitive or of concern. It was previously believed that southern sycamore alder riparian woodland could potentially occur

on-site. However, it has been concluded that no such vegetative community exists on or adjacent to the proposed Project site.[2]

The following sensitive plant species were determined to be absent from the site since none were detected during focused surveys conducted within the past five years:

- Slender Horned Spineflower. Focused surveys were conducted in the summer of 1998. No slender horned spineflowers were detected on-site. Therefore, it is concluded that the slender horned spineflower is absent from the Project site.

- Nevin's Barberry. Focused surveys for this plant species were conducted in the summers of 1997 and 1998. The Nevin's barberry is detectable throughout the year, therefore since none was detected on-site during sensitive plant focused surveys, it is concluded that the Nevin's barberry is absent from the Project site.

SPECIAL INTEREST SPECIES

The results of the literature review indicated the potential occurrence of 71 special interest plant and animal species within the project vicinity. These species are recorded in Appendix B, *Special Interest Species Summary*, of Appendix 15.5, *Biological Assessment*. Appendix B provides short summaries of habitat requirements, legal protection status, and potential for occurrence in the Project area. Plan and animal species directly observed or otherwise detected by sign during the surveys of the Project area are listed in Appendix A, *List of Species Observed On-Site*, of Appendix 15.5, *Biological Assessment*.

Legal protection for sensitive species varies widely, from the comprehensive protection extended to listed threatened/endangered species to no legal status at present. The CDFG, USFWS (United States Fish and Wildlife Service), local agencies, and special interest groups, such as the CNPS, publish watch-lists of declining species. These lists often describe the general nature and perceived severity of the decline. In addition, recently published findings and preliminary results of ongoing research provide a basis for consideration of species that are candidates for State and/or Federal listing. Species may also be considered of "local interest" if they are clearly not rare or threatened statewide or regionally, but whose local populations are sparse, rapidly dwindling or otherwise unstable.

Inclusion in the sensitive species analysis of the Project area is based on the following criteria: (1) direct observation of the species or its sign in the Project area or immediate vicinity during surveys conducted for this study or reported in previous biological studies; (2) sighting by other qualified observers; (3) reported by the California Natural Diversity Data Base published by CDFG; (4) presence or location of specific species lists provided by private groups (e.g., CNPS); and/or (5) if study area lies within known distribution of a given species and contains appropriate habitat.

[2] Ibid., Page 9.

The following sensitive wildlife species are listed State or federally as threatened or endangered and potentially suitable habitat exists on the Project site:

- Least Bell's vireo (*Vireo bellii pusillus*);
- Southwestern willow flycatcher (*Empidonax traillii extimus*);
- California gnatcatcher (*Polioptila californica californica*);
- San Bernardino kangaroo rat (*Dopodomys merriami parvus*);
- Nevin's barberry (*Berberis nevinii*);
- Slender horned spineflower (*Dodecahema leptoceras*); and
- Santa Ana River woollystar (*Eriastrum densifolium* var. *sanctorum*).

Focused surveys were conducted for the least Bell's vireo and southwestern willow flycatcher in 1998; for the California gnatcatcher in 1997 and 2000; and for the San Bernardino kangaroo rat in 1998. Results from these surveys revealed that these species are not present on the Project site. However, due to the time lapse since the surveys were conducted and since these are mobile species, focused surveys for animal species have been or are currently being conducted in the spring and summer of 2002 to ensure that none of the species have subsequently occupied the site. No threatened or endangered species have been observed thus far. Since they were not identified during the site surveys, these threatened and endangered species are considered to be absent from the site. Plant surveys were conducted in the spring and summer of 1998. No threatened or endangered plant species were detected on-site; thus the above listed plant species are considered to be absent from the site.

Threatened and endangered species not potentially present on-site, but known within the vicinity of the project include the following species:

- Parish's meadowfoam (*Limnanthes gracilis* var. *parishii*);
- Quino checkerspot butterfly (*Euphydryas editha quino*);
- Delhi sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*);
- Santa Ana sucker (*Catastomus santaanae*);
- Swainson's hawk (*Buteo swainsoni*); and
- California yellow-billed cuckoo (*Coccyzus americanus occidentalis*).

OTHER SENSITIVE SPECIES

The remainder of the special interest species listed below and described in Appendix B, *Special Interest Species Summary*, of Appendix 15.5, *Biological Assessment*, have no official State or Federal listing. However, these species require consideration under the California Environmental Quality Act (CEQA). Other non-listed sensitive species identified in Appendix B as having a moderate to high potential for occurrence (or observed) on the site are the following:

- Intermediate mariposa lily (*Calochortus weedii* var. *intermedius*);
- Parry's spineflower (*Chorizanthe parryi* var. *parryi*);
- Mesa horkelia (*Horkelia cuneta* ssp. *puberula*);
- Robinson's peppergrass (*Lepidium virginicum* var. *robinsonii*);
- California spineflower (*Mucronea californica*);
- California muhly (*Muhlenbergia californica*);

- Coastal western whiptail (*Cnemidophorus tigris multiscutatus*);
- San Diego banded gecko (*Coleonyx variegatus abbottii*);
- San Diego horned lizard (*Phrynosoma coronatum blainvillei*);
- Silvery legless lizard (*Anniella pulchra pulchra*);
- Coastal rosy boa (*Lichanura trivirgata roseofusca*);
- Coast patch-nosed snake (*Salvadora hexalepis virgultea*);
- Loggerhead shrike (*Lanius ludovicianus*);
- Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*);
- Bell's sage sparrow (*Amphispiza bellii*);
- Cooper's hawk (*Accipiter cooperi*);
- California mastiff bat (*Eumops perotis californicus*);
- San Diego black-tailed jackrabbit (*Lepus californicus bennettii*);
- Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*);
- San Diego desert woodrat (*Neotoma lepida intermedia*); and
- American badger (*Taxidea taxus*).

These species are of limited distribution in Southern California and ongoing development in the region is further reducing their ranges and numbers. Appendix B of Appendix 15.5, *Biological Assessment*, describes in detail the potential for occurrence of these species, as well as other species identified in the literature review as occurring within a five to seven-mile radius of the proposed Project site.

Of the above sensitive species, the following were observed during focused surveys:

- Cooper's hawk;
- Bell's sage sparrow;
- San Diego black-tailed jackrabbit;
- northwestern San Diego pocket mouse; and
- San Diego desert woodrat.

WILDLIFE MOVEMENT CORRIDORS

Corridors facilitate wildlife movement in a number of ways. They connect areas of large habitat that may otherwise be separated and interconnect water, food, and cover availability, spatially linking these three resources with wildlife in different areas. Wildlife corridors provide for genetic exchange between populations, maintaining genetic variability and adaptability to respond to changing environmental conditions. This gene flow is especially critical for small populations subject to loss of variability from genetic drift. Movement of wildlife varies among different species. Some movement involves small groups, but movement of single individuals is more common.

Wildlife movement benefits plant species. Many pollinators are relatively sedentary, traveling only short distances between individual plants. Wildlife movement allows for dispersal of pollinators along the linkage, thereby increasing the potential for genetic exchange among different populations of plant species. Corridors directly help plants in that wind dispersed seeds and seeds that are dispersed by animals may either move through corridors or become established gradually throughout a linkage, colonizing different areas over time.

Past studies indicate that wide-ranging diurnal or nocturnal travel of animals through a given region occurs primarily along drainages and ridgelines. These topographic highs and lows generally provide routes that are easily accessed and traveled. Drainages provide additional advantages in the form of cover, water, and food sources, and so generally are believed to be used more frequently than ridgelines. Localized or daily movement of animals also occurs. This movement is generally associated with foraging behavior in localized habitat areas and is dictated by available food and water sources. This movement tends to be non-directional with regard to topographic changes.

The site is situated at the tip of a habitat peninsula extending down from the San Gabriel Mountains. Based on field surveys, it is apparent that large mammals regularly forage in and move through the Project site. Additionally, the Project site is an important local site for migrant passerines. However, given that the site is isolated from the foothills to the north due to the I-210 Freeway, it cannot function as a true wildlife corridor.[3]

SIGNIFICANT NATURAL AREAS

The Significant Natural Areas Program (SNAP) was established to identify high-priority sites for the conservation of California's biological diversity and to inform resource decision-makers about the importance of these sites. The project site lies within the southerly portion of the Significant Natural Area (SNA) LAX 33. SNA's are areas that contain important examples of California's biological diversity and are identified by the CDFG. These areas have been identified in order to provide a comprehensive inventory of California's important natural diversity and to guide conservation activities from a statewide perspective. It is noted that SNA's were established for educational purposes, and for addressing local issues within the areas. The CDFG does not have any additional authority over these areas. The program's goals, as directed by the Fish and Game Code (Sections 1930-1933), are to:

- Identify the most significant natural areas in California;
- Ensure the recognition of these areas;
- Seek the long-term perpetuation of these areas; and
- Provide coordinating services for other public agencies and private organizations interested in protecting natural areas.

SNAs areas are identified based only on two biological criteria, irrespective of any administrative or jurisdictional considerations: areas supporting extremely rare species or habitats; and areas supporting associations or concentrations of rare species or habitats.

The SNA works interactively with the CNDDB for the above information. These criteria are strictly biological and do not account for levels of protection or threat. Sites may or may not be well protected, as in a nature reserve, and they may face many or no threats. The purpose of identifying these areas is to draw the attention of planners and managers to these areas and to begin a discussion about each area's specific needs.

[3] Ibid., Page 12.

The rare species and elements designated within the SNA that the Project area lies within are also described in Appendix B, *Special Interest Species Summary*, of Appendix 15.5, *Biological Assessment*.

Exhibit 5.6-2, *Significant Natural Area*, illustrates the Project location within SNA LAX33. The most valuable elements within the CNDDB that most likely caused this area to be considered a SNA are Riversidean alluvial fan sage scrub and California gnatcatcher habitat. Impacts to these elements are discussed in following sections.

JURISDICTIONAL WATERS

The U.S. Army Corps of Engineers (Corps) regulates discharges of dredged or fill material into waters of the United States. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. The Corps regulatory jurisdiction pursuant to Section 404 of the Federal Clean Water Act is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct, through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce, or may be indirect, through a nexus identified in the Corps' regulations. In order to be considered a jurisdictional wetland under Section 404, an area must possess three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Each characteristic has a specific set of mandatory wetland criteria that must be satisfied in order for that particular wetland characteristic to be met.

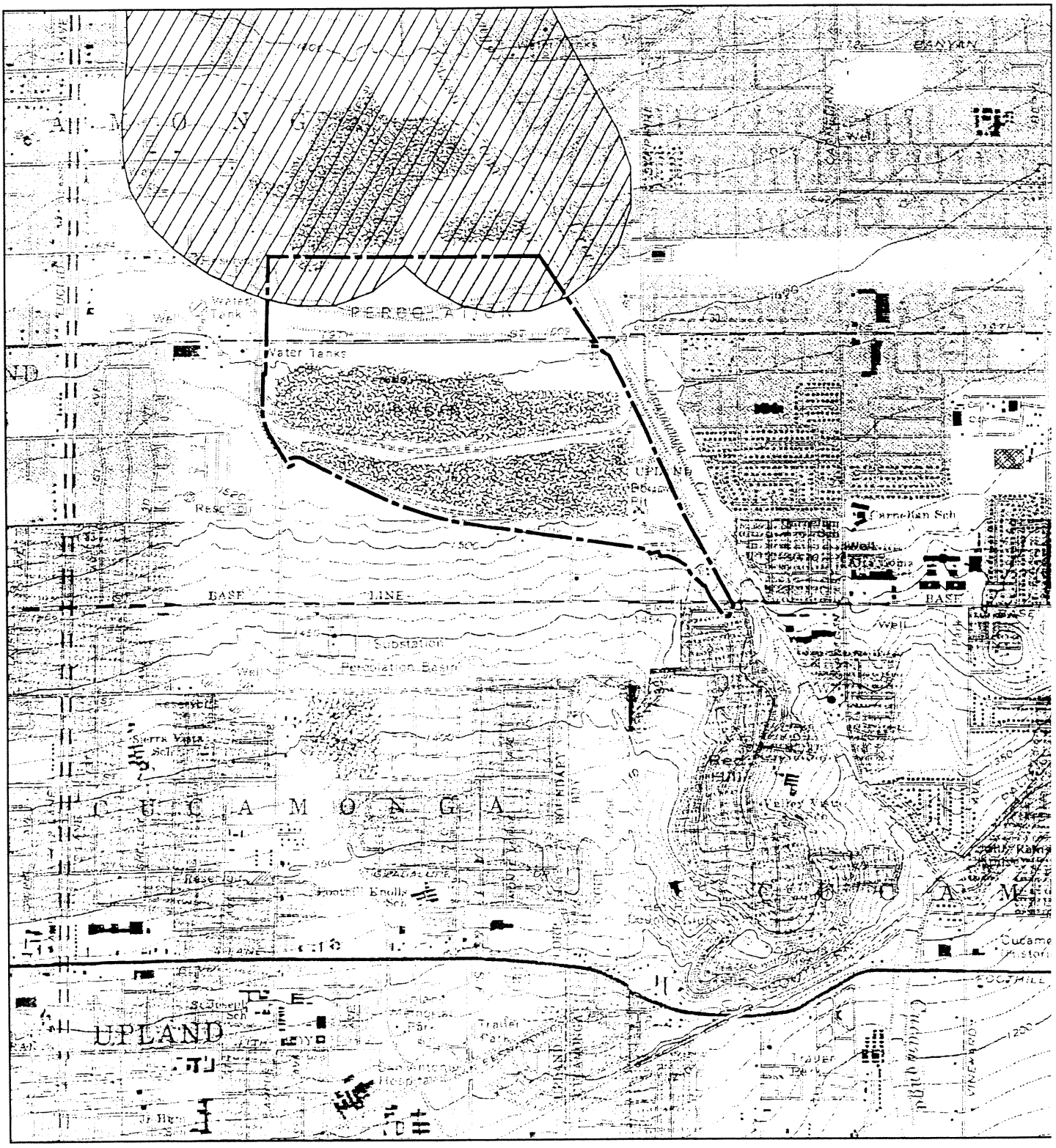
The CDFG, through provisions of the California Fish and Game Code (Sections 1601-1603), is empowered to issue agreements for any alteration of a river, stream or lake where fish or wildlife resources may be adversely affected. Streams (and rivers) are defined by the presence of a channel bed and banks, and at least an intermittent flow of water. CDFG regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by the CDFG.

The proposed Project site does not contain any drainages that would be considered jurisdictional by the Corps, subsequent to the Supreme Court ruling of the SWANCC decision in 2000. The ponded areas on-site are isolated water bodies, over which the Corps now has no jurisdiction.

The assessment of habitat types on the property identified woodland and scrub dominated by riparian species including willows (*Salix spp.*) and mulefat (*Baccharis salicifolia*). The area is within a large abandoned mining pit that is directly watered by two storm drain systems and a water diversion outfall.

SIGNIFICANCE CRITERIA

The LSA Associates Report evaluates impacts to approximately 328 acres within Phase II of the Project area and does not include impacts associated with Phase I or I-210 (Exhibit 5.6-1, *Vegetation Map*). Impacts associated with the stockpile areas in Phase II are assessed under the Mitigated Negative Declaration for the Placement of Excess Interstate 210 material and were found to be less than significant. Impacts associated with the fill of less than an acre of wetlands in the southern portion of



Source: LSA Associates, Inc.

- Project Boundary

- Significant Natural Area LAX 33

Not to Scale

CITY OF UPLAN

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMEN

Significant Natural Are

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

06/02

JN 10-101248

Exhibit 5.6

Phase II was authorized by Nationwide Permit 26 by the US Army Corps of Engineers (June 11, 1999). These impacts are included in the area designated as ruderal/disturbed (Exhibit 5.6-1, *Vegetation Map*).

The determination of impacts in this analysis is based on a comparison of maps depicting Project grading limits and maps of on-site biological resources. Unless noted above, all construction activities, including staging and equipment areas, are assumed to be contained within the limits of grading. Both direct and indirect impacts on biological resources have been evaluated. Direct impacts are those that involve the initial loss of habitats due to grading and construction. Indirect impacts are those that would be related to disturbance from construction activities (e.g., noise, dust) and use of the Project site.

Biological impacts associated with the proposed Project were evaluated with respect to the following special status 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 California Species of Special Concern or federal Species of Concern;
- Habitat, other than wetlands, considered special status 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 Project vicinity was correlated with the significance criteria outlined below to determine whether the impacts of the proposed Project on these resources would be considered significant.

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist form which includes questions relating to biological resources. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if one or more of the following occurs:

- If the project has a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Game and Wildlife Service (refer to Impact Statement 5.6-1).
- If the project has a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies,

regulations or by the California Department of Fish and Game or U.S. Fish and Game and Wildlife Service (refer to Section 5.6-2).

- If the project has a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pol, coastal, etc.) through direct removal, filling, hydrological interruption, or other means (refer to Section refer to Section 10.0, *Effects Found Not to be Significant*).

- If the project interferes substantially with the movement of any native or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites (refer to Impact Statement 5.6-3).

- If the project conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (refer to Section refer to Impact Statement 5.6-4).

- If the project conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (refer to Impact Statement 5.6-4).

Section 15065(a), *Mandatory Findings of Significance*, 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, 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 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.

The actual and potential occurrence of these resources within the project vicinity was correlated with the previously identified significance criteria to determine whether the impacts of the proposed project on these resources would be significant.

Potential impacts are grouped below according to topic. The numbered mitigation measures at the end of this section directly correspond with the numbered impact statements.

IMPACTS

SUMMARY OF PREVIOUS ENVIRONMENTAL DOCUMENTATION FOR THE COLONIES AT SAN ANTONIO

The EIR for the 1988 Specific Plan approval states that implementation of the San Antonio Lakes Specific Plan will necessitate the removal of vegetation and wildlife habitats on-site. Most significant among on-site resources is the on-site "lake" which serves as an overwintering area for migratory waterfowl. Replacement of this lake with a recreation, human-oriented lake will incrementally reduce suitable habitat within the Pomona Valley, which would conceivable contribute to a proportional reduction in populations of these species. The EIR concludes that impacts could not be mitigated to a less than significant level.

The 1998 Supplemental EIR states that changed circumstances include the fact that wetland areas are more prevalent within the site in 1998 than they were when the EIR was prepared in 1988. There was a wetland area within Planning Area 1 that did not exist at the time of the original EIR. In addition, the sensitivity of coastal sage scrub, which covered a large portion of Planning Area 1 and the rest of the site, was considered to be far more sensitive than it was at the time of the original EIR. At that time, it was common for a mix of chaparral and coastal sage scrub to be identified as chaparral, and its loss over a large area to be considered insignificant. Today, the on-site habitat is more precisely categorized as coastal sage in certain areas and chaparral in others. This more precise categorization is needed because the loss of coastal sage scrub is far more significant an impact than the loss of chaparral.
The 1998 Supplemental EIR concludes that the project would diminish habitat for wildlife and plants. Mitigation is provided to reduce the impacts to the extent feasible; however, since other measures were not feasible, this impact would remain significant and not fully mitigated.

SENSITIVE BIOLOGICAL RESOURCES

5.6-1 *The proposed project is not expected to impact threatened or endangered species since none were detected on-site during previous focused surveys. Should future focused surveys determine presence, mitigation measures would be required to offset impacts to a level less than significant.*

Based upon historical survey data and reference information for the subject site, it has been concluded that no significant impacts would occur to threatened or endangered species. As noted in the February 13, 2002 Biological Resources Study by LSA Associates, focused survey efforts have continued through the Spring 2002. That effort has been anticipated to confirm previous survey conclusions. The following discussion outlines the previous survey conclusions rendered for sensitive animal species and identifies potential mitigation requirements in the event that presence is determined for a species. In the event that a focused survey concludes presence and there is a significance finding, there may be a need to recirculate the Biological Resources EIR Section for additional public review. Otherwise, the focused survey conclusions will be incorporated into the EIR to confirm no presence.

Thus, the conclusions set forth in this Section would remain unchanged in the Final EIR.

Special Interest Wildlife Species

The proposed Project is not expected to impact threatened or endangered wildlife species since none were detected on-site during focused surveys. The following wildlife species were determined to be absent from the site since none were detected during focused surveys conducted within the past five years:

- California Gnatcatcher. Focused surveys were conducted between July and November in 1997 and between July and November in 2000, according to standard USFWS protocols. No California gnatcatchers have been detected on-site. However, there are a number of regional records for this species, including three individual California gnatcatchers reported from the vicinity of the Campus Avenue/19th Street intersection during the 1992 Claremont Christmas Bird Count. Although this species was noted within the project area, the observations were not recorded by individuals authorized by the USFWS to conduct focused surveys for the California gnatcatcher and were recorded 10 years ago. Within the three years that LSA ASSOCIATES has conducted focused surveys for this species, no California gnatcatchers have been observed on the site. Therefore it is concluded that the California gnatcatcher is absent from the Project site. No impact is anticipated in this regard.

- Least Bell's Vireo. Focused surveys were conducted between April and August 1998 and were started again in May 2002 and are to be completed in July 2002. No least Bell's vireos have been detected on-site. Therefore, it is concluded that the least Bell's vireo is absent from the Project site. No impact is anticipated in this regard.

- Southwestern Willow Flycatcher. Focused surveys were conducted between May and July 1998 and were started again in May 2002 and will be completed in July 2002. No southwestern willow flycatchers have been detected on-site. Therefore, it is concluded that the least Bell's vireo is absent from the Project site. No impact is anticipated in this regard.

- San Bernardino Kangaroo Rat. Focused surveys were conducted during the summer 1997 and again for five nights between April 8 and April 18, 2002. No San Bernardino kangaroo rats were detected on-site. Therefore, it is concluded that the San Bernardino kangaroo rat is absent from the Project site. No impact is anticipated in this regard.

- Foraging Habitat for State Threatened Swainson's Hawk. Indirect impacts to the Swainson's hawk include loss of potential foraging habitat, however, this species forages over a wide variety of habitats that are still present within the vicinity (including other coastal sage scrub and open fields). The Swainson's hawk nests in central California and is now mostly limited to spring and fall transient in southern California. This species is an extremely scarce migrant through the Inland Empire. Because there is a vast amount of foraging habitat along the Swainson's hawk migratory route and because Swainson's

hawks scarcely occur in the Inland Empire, the loss of Swainson's hawk foraging habitat is not considered to be significant.

- Other Special Interest Species. Of the 71 sensitive species identified in Appendix B, *Special Interest Species Summary*, of Appendix 15.5, *Biological Resources Report*, 19 species have a moderate to high probability of occurrence, and five non-listed sensitive species are present. The remaining species are considered to have a low probability of occurrence or are considered to be absent. Non-listed species are widespread, occupying a large range of habitats that continue to support these species. Although development of the proposed Project would result in an incremental loss of habitat for non-listed species, impacts to sensitive species are not considered significant since those species determined to be present or having a moderate to high potential of being present have a wide extent of suitable habitats and are not listed as threatened or endangered, loss of habitat or individual sensitive species is not considered significant.

In the event focused surveys suggest that these species are present, the following impacts would be considered potentially significant:

- Direct loss of habitat and/or individual threatened or endangered species during project construction; and/or

- Disturbance of nesting activities through project operations (i.e., grading or other activities in close proximity to occupied habitat of threatened or endangered species).

Implementation of the recommended mitigation requiring that vegetation be removed outside of the breeding season and replacement habitat would reduce impacts in this regard to a less than significant level.

RIPARIAN HABITAT

5.6-2 *The proposed Project could impact riparian habitat present on the Project site. Compliance with the California Department of Fish and Game's 1603 Streambed Alteration Agreement process would reduce impacts to a less than significant level.*

Construction of the project, including the open space area, would require grading the entire site. Thus, the existing riparian habitat would be lost. As mitigation for these impacts, 18 acres of riparian habitat would be created within the project site. The proposed project includes a 58-acre open space area that would provide multiple functions including groundwater recharge, flood control, passive recreation, and habitat values. The riparian habitat would be created within the 58-acre open space area and would be preserved in perpetuity. An enforceable restriction would be established to ensure the preservation of the riparian mitigation area. The restriction would ensure that the 18 acres would remain as riparian habitat in perpetuity and would not be developed, altered, nor used for any other purpose. Creation of the riparian habitat would be implemented as part of project construction. Long-term management of the 18 acres of riparian habitat would be the responsibility of and funded by an appropriate entity (a public agency or other entity charged with

management of the site). The management entity would retain a professional biologist to provide for management planning, direction, and oversight. It is intended that, following the initial period of establishment, the riparian mitigation area be a self-sustaining system. Thus, it is expected that long-term management activities would be minimal, such activities may include, but would not be limited to, access control, removal of invasive non-native plant species, and repair of interpretive elements.

As part of the passive recreation program for the open space area, interpretive elements would be incorporated in the 58-acre open space area. Interpretive elements would include a program to educate residents and visitors about the multiple functions of the 58-acre open space, how the habitat area functions within into the open space area, the specific biological values of the riparian mitigation area, and appropriate use of the open space area. Interpretive elements would include at least four signs located at various points along the hiking trail. The signs would be installed as part of project construction. Long-term maintenance of the signs would be the responsibility of the management entity.

As a result of an on-site meeting with the CDFG (February 8, 2002) followed by a meeting at CDFG offices (March 5, 2002), it was determined that up to 16 acres of riparian habitat on the site is subject to CDFG jurisdiction under Section 1603 of California Fish and Game Code. There are no threatened or endangered species that occur within the riparian habitat, however, since the CDFG considers the loss of riparian habitat as significant, the loss of up to 16 acres of riparian habitat would be considered to be significant.

At the meeting held on March 5, 2002, an agreement was reached that constituted preliminary concurrence on the jurisdictional determination and mitigation requirements that are to be addressed in the pending Section 1603 Streambed Alteration Agreement process. The Mitigation Plan would establish success criteria for the mitigation effort based on the growth and survival of the vegetation. The Plan is to include provisions for monitoring the planted areas over a three to five year period in order to document the results and to allow for the implementation for corrective measures as needed.

The CDFG shall require detailed information regarding the site conditions, including the results of updated surveys for threatened/endangered species, and specifics of the proposed project as part of the Section 1603 process. The 1603 Agreement would include terms and conditions to ensure that resource conservation issues are sufficiently addressed. With implementation of recommended mitigation, impacts would be reduced to a less than significant level.

SENSITIVE HABITAT COMMUNITY

5.6-3 *The proposed Project would impact sensitive alluvial fan sage scrub community present on the Project site. Compliance with recommended mitigation would reduce impacts to a less than significant level.*

Riversidean alluvial fan sage scrub is an early successional vegetation community and is considered to be a sensitive habitat by the CDFG. Approximately 224 acres of alluvial fan sage scrub and alluvial fan chaparral are located within the proposed

project site, however various activities within the proposed project site have isolated and disturbed the majority of alluvial fan sage scrub and alluvial chaparral on the site.

The construction of I-210 and the ongoing mining operation to the north of the site have isolated habitat within the site from large expanses of natural open space within the San Gabriel Mountains. Past mining operations on the subject property have fragmented habitat existing within the site. Construction of the Cucamonga Creek Channel has substantially altered the hydrologic regime by eliminating periodic flooding and scouring from the site (flooding and scouring are key processes in the natural cycles of ecological succession within alluvial fan sage scrub/chaparral). Since the area is no longer subject to key ecological processes (i.e., flooding and scouring) that are integral to the recurring cycle of disturbance-interrupted ecological succession, the functions associated with this ecological community, particularly the early successional stages, are therefore diminishing over time and certain functions will be lost as time progresses. Thus, the alluvial fan sage scrub and alluvial chaparral on the majority of the site are isolated from larger habitat areas, are fragmented within the site, and lack key ecological processes.

The site does not support threatened or endangered species and only the northernmost 29 acres are included within the SNAP. The 204 acres of alluvial fan sage scrub and alluvial chaparral south of I-210 are considered to be of low biological value. Therefore, impacts to the 204 acres of alluvial fan sage scrub south of I-210 are considered to be less than significant. The loss of 20 acres of alluvial fan sage scrub and chaparral north of the I-210 is considered a significant impact because it supports alluvial fan sage scrub and is contiguous with large expanses of undeveloped land to the north. Mitigation is recommended to reduce impacts to a less than significant level.

WILDLIFE MOVEMENT

5.6-4 *Analysis has concluded that project implementation would not interfere with the movement of a native resident or migratory wildlife species. Impacts are less than significant.*

Wildlife movement and habitat fragmentation are important issues in assessing impacts to wildlife. Habitat fragmentation occurs when a proposed action would result in a single, unified habitat area being divided into two or more areas, such that the division isolates the two new areas from each other. Isolation of habitats occurs when wildlife cannot move freely from one portion of the habitat to another, or from one habitat type to another. One example is the fragmentation of habitats within and around clustered residential development. Habitat fragmentation can also occur when a portion of one or more habitats is converted into another habitat, as when scrub habitats are converted into annual grassland habitat because frequent burning.

The result of fragmentation is that the amount of habitat available to local wildlife populations is reduced. A reduction in available habitat is followed by a reduction in wildlife populations. If the fragmentation is too great, wildlife populations will not be able to persist and some or all of the species in a habitat area will disappear. This can occur at a local or a regional scale, depending upon the degree and type of fragmentation occurring. Fragmentation is particularly critical for species dependent

on coastal sage scrub and alluvial scrub habitats, both of which have become scarce. If stands of scrub are too fragmented to provide sufficient continuous cover, or are too isolated from each other to provide free movement between them, that particular portion of the overall habitat may be lost to use by the California gnatcatcher or other sensitive species.

The proposed Project would not isolate or fragment habitats, or restrict a wildlife movement corridor. Although large mammals have regularly foraged and moved through the Project area, given that the site is isolated from the foothills to the north by the newly constructed I-210 and is surrounded by development to the east, west and south, it cannot function as a true wildlife movement corridor for this area. The site is visited by migrant passerines. However, many areas provide such values as "stopover points" for migrant passerines yet, due to isolation, do not function as corridors. Impacts to wildlife movement corridors are considered to be less than significant.

HABITAT CONSERVATION PLAN/ SIGNIFICANT NATURAL AREAS PROGRAM

5.6-5 *Analysis has concluded that Project implementation would not conflict with the provisions of the San Bernardino Habitat Conservation Plan but would result in a potentially significant impact to the Significant Natural Areas Program. Implementation of recommended mitigation would reduce impacts to a less than significant level.*

Habitat Conservation Plan

The San Bernardino Valley Habitat Conservation Plan (SBHCP) is in the formative stages of development. However, there is no HCP in effect that encompasses the proposed Project area. Given the lack of progress and lack of specific goals or objectives of the San Bernardino County HCP, an assessment of impacts to the HCP would only be speculative at this time. Such an assessment cannot be done until the HCP has been adopted or is close to adoption. Thus, as the HCP stands, the proposed project would not conflict with the provisions of the San Bernardino County HCP or any other HCP. Impacts from the proposed Project would not be considered significant.

Significant Natural Areas Program

The proposed project is located at the southern boundary of the SNA LAX 33. The project site exists within 29 acres of LAX33 (excluding 26.5 acres of LAX-33 within I-210 right-of-way) and is included within LAX33 because it is an area supporting extremely rare species or habitats or because it is in an area supporting associations or concentrations of rare species or habitats. The proposed project site does support an extremely rare habitat (i.e., Riversidean alluvial fan sage scrub), of which impacts to 20 acres are considered significant. The loss of 20 acres of LAX33 located north of the right-of-way for I-210 is considered a significant impact and mitigation previously identified in subsection 5.6-3 would reduce impacts to a less than significant level.

CUMULATIVE IMPACTS

5.6-6 *Cumulative development in the Project area could impact the area's biological resources. Analysis has concluded that Project implementation would result in potentially significant cumulative impacts to Riversidean Sage Scrub. Implementation of recommended mitigation would reduce impacts to a les than significant level.*

According to Section 15130 of the CEQA Guidelines, cumulative impacts refers to the incremental effects of an individual project when viewed in connection with the effects of past projects, current projects, and probable future projects. Although the proposed Project would contribute incrementally to loss of habitat as a result of ongoing development in the region, impacts to biological resources are not considered to be cumulatively significant because the native habitats on and in the vicinity of site are already considered to be isolated and fragmented on a regional scale as a result of encroaching development, particularly with the construction of I-210. Cumulative impacts to Riversidean sage scrub are considered significant and mitigation is recommended. Refer to Impact and Mitigation discussion 5.6-3.

MITIGATION MEASURES

This section directly corresponds to the identified Impact Statements in the impacts subsection.

SENSITIVE BIOLOGICAL RESOURCES

Special Interest Wildlife Species

5.6-1 In the event focused surveys indicate that threatened or endangered wildlife species are present on the Project site, the following measures shall be implemented prior to Grading Permit issuance and to the satisfaction of the City of Upland and applicable reviewing/permitting agencies:

- Vegetation removal shall be restricted to a time period outside of the breeding season; and
- Habitat of similar type and quality shall be acquired at a 1:1 replacement ratio; or
- Habitat shall be purchased through a mitigation bank (i.e., Team Arundo) at a 1:1 replacement ratio.

RIPARIAN HABITAT

5.6-2 The Project Applicant shall obtain approval of a Section 1603 Streambed Alteration Agreement pursuant to the requirements of the California Department of Fish and Game. The Agreement shall provide a Mitigation Plan which specifies terms, conditions, criteria and monitoring requirements.

SENSITIVE HABITAT COMMUNITY

5.6-3 Prior to Grading Permit issuance and to the satisfaction of the City of Upland and applicable reviewing/permitting agencies, the loss of 20 acres of Riversidean alluvial fan sage scrub and alluvial fan chaparral shall be mitigated by replacing habitat on and off-site at a 1:1 replacement ratio.

Land shall be acquired at an off-site location to provide for the preservation of 20 acres of alluvial chaparral or alluvial fan sage scrub. The land to be acquired shall be located along the southern slope of the San Gabriel Mountains either on the alluvial fan or within the foothills. Acquisition may consist of land purchase, establishment of an easement, or other appropriate vehicle that shall ensure the preservation of habitat values. The land shall be in a location that will facilitate the long-term preservation and management of the on-site habitat; for instance, the land shall be adjacent to National Forest lands, adjacent to an existing natural preserve, or adjacent to lands otherwise designated for preservation of biological values. A management entity shall be identified to receive the easement, title, or other appropriate control of the property. The management entity shall determine costs associated with management of the site and an endowment shall be established to fund the management of the site in perpetuity.

As an alternative to habitat acquisition, mitigation for impacts to 20 acres of alluvial fan sage scrub and alluvial chaparral shall be achieved by acquisition of 20 acres in a mitigation bank that would provide for the preservation and management of alluvial fan sage scrub and/or alluvial chaparral.

WILDLIFE MOVEMENT

5.6-4 No mitigation measures are recommended.

HABITAT CONSERVATION PLAN/ SIGNIFICANT NATURAL AREAS PROGRAM

5.6-5 Refer to Mitigation Measure No. 5.6-3. No additional mitigation measures are recommended.

CUMULATIVE IMPACTS

5.6-6 Refer to Mitigation Measure 5.6-3. No additional mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

No significant impacts to Biological Resources have been identified following implementation of mitigation measures referenced in this Section.

5.7 GEOLOGY AND SOILS

The purpose of this Section is to describe the geologic, soil and seismic setting of the Project area, identify potential impacts associated with the proposed Project, and recommend mitigation measures to reduce the significance of such impacts. Information in this Section is based primarily on the Review of Major Geotechnical and Geologic Constraints (February 15, 2002) prepared by the RMA Group. The Report is included in Appendix 15.6, *Geology/Soils Assessment*.

EXISTING CONDITIONS

BACKGROUND

Aerial photographs indicate that by the 1930's the site had been modified by the construction of a number of flood control levees and berms. U.S. Geological Survey quadrangle maps indicate that the areas upslope of the levees and berms were used as percolation basins. In the 1950's quarrying for sand and gravel began at the site. This land use continued until about the early 1980's. Concurrent with, and following the mining operations, quarries were partly backfilled with fine-grained soils separated from the mined sand and gravel, and with soil and other materials brought into the site. In the mid-1970's, the MWD water pipeline was constructed through the site. Following quarry excavation, a storm drain outlet was constructed in the northern basin on the western part of the site (referred to as Quarry No. 1 in the RMA Group February, 2002 Report). In the past year, stockpiles of excess soils generated from grading of the I-210 extension and the Colonies Phase I residential tracts were placed in the eastern portion of the site.

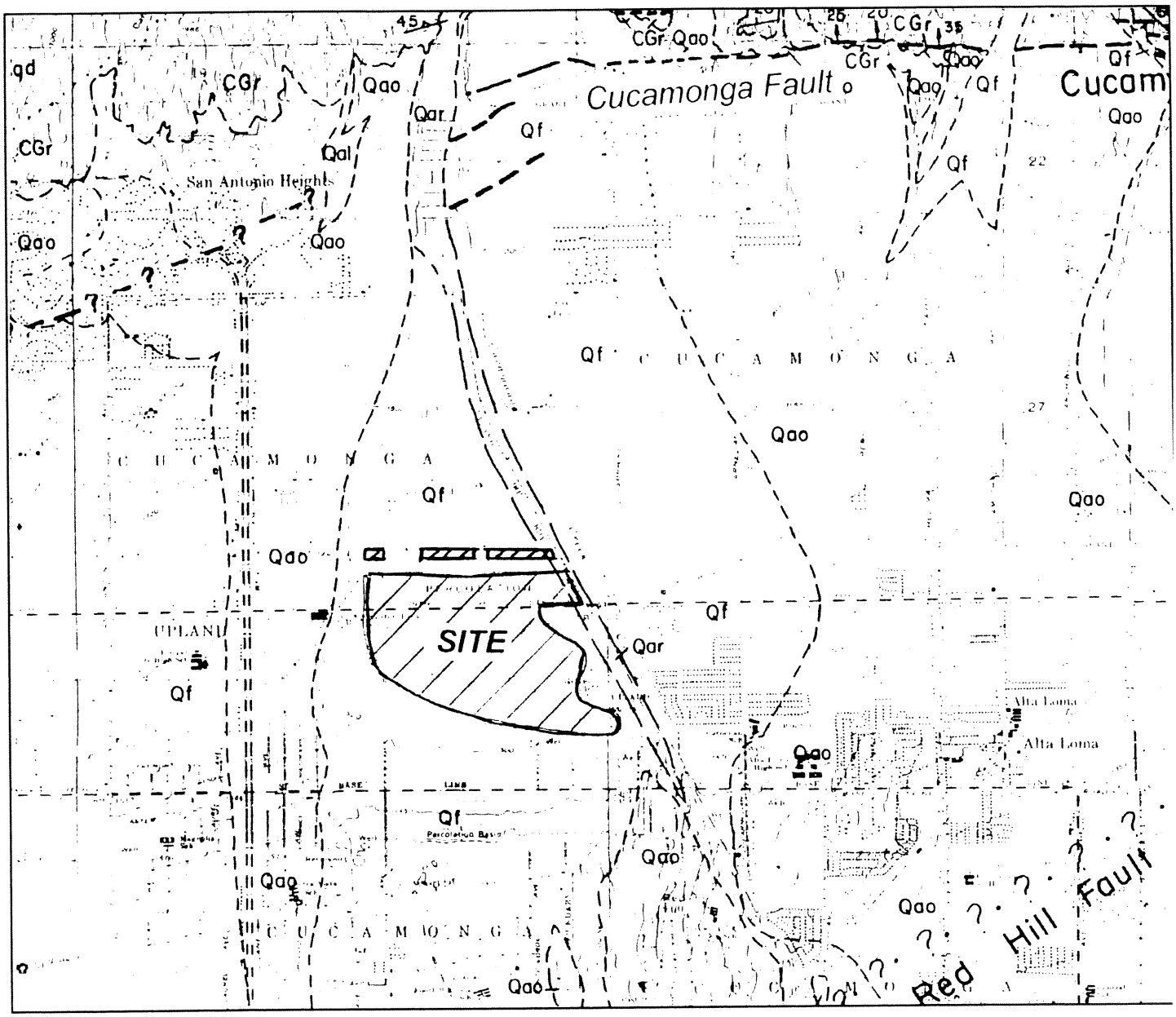
GEOLOGIC SETTING

The site is located on a broad, coalescing alluvial fan that emanates from Cucamonga Canyon and the San Gabriel Mountains to the north. These sediments fill the northern portion of a deep structural depression known as the upper Santa Ana River Valley. The alluvial deposits beneath the site are approximately 1,000 feet thick and ultimately rest on a basement of crystalline bedrock.

The upper Santa Ana River Valley is bordered by the San Gabriel Mountains and the active Cucamonga fault to the north, and the Puente Hills and potentially active Chino fault to the west. To the south are the Jurupa Mountains and other resistant granitic and metamorphic hills. The eastern boundary of the valley is the San Bernardino Mountains and the active San Andreas fault. The general geologic setting of the site is illustrated on Exhibit 5.7-1, *Regional Geologic Map*.

EARTH MATERIALS

Earth materials underlying the site consist of two basic geologic units: artificial fill and alluvium. The fills were placed at different times and for different purposes, and vary in thickness and composition. For purposes of this analysis, the fill has been classified into eight categories. These categories identify the major fills for the purpose of reviewing major geologic and geotechnical constraints. Other more



Source: RMA Group, February 15, 2002.

PARTIAL LEGEND

Qf - Alluvial Fan Deposits

Qao - Older alluvium

CGr - Metamorphic Bedrock

Not to Scale

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

06/02

JN 10-101248

CITY OF UPLAN

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMEN

Regional Geologic Ma

Exhibit 5.7

localized, smaller and thinner fills are present which could not be practically delineated at the scale of map used in this analysis. Aside from local changes in color, density and texture, the alluvial soils are relatively uniform. Thus, only a single alluvial unit has been designated for this analysis.

The description of soils encountered during prior subsurface investigations of the site are presented in Appendix A, *Logs of Prior Subsurface Exploration*, of Appendix 15.6, *Geology/Soils Assessment*. The locations of prior exploratory excavations and contacts between the various soil units are illustrated in Appendix 15.6, *Geology/Soils Assessment*. Fill and alluvial soils on-site are described briefly below.

COBBLE AND BOULDER STOCKPILES

At several locations, cobbles and boulders generated by recent grading and construction have been stockpiled on the site. These materials are composed of intrusive granitic and metamorphic gneissic and schistose rock types typical of outwash from Cucamonga Canyon.

STOCKPILE FILL - PHASE I GRADING

Excess soils generated from grading of the I-210 Freeway extension and the adjacent residential subdivisions have been placed in two stockpiles in the eastern part of the site. Stockpile soils were derived from younger and older alluvium and generally consist of gravelly sand and gravelly, silty sand with cobbles and some boulders. Placement of these fills were observed and tested by RMA Group to approximately elevations 1,560 to 1,570 in the northern stockpile and approximately 1,530 to 1,540 in the southern stockpile.

ENGINEERED FILL - PHASE I GRADING

During the past year, engineered (compacted) fill was placed in the Phase I area of the Colonies Project to the east. Placement of the fill was observed and tested by RMA Group. The fill is composed of soil derived from younger and older alluvium, and consists principally of gravelly sands and gravelly, silty sands with cobbles. The fill also contains widely scattered boulders and a few areas of silts and clays.

MISCELLANEOUS FILL

Scattered throughout the property are non-engineered fills of miscellaneous composition, thickness and lateral extent. Typically the fills are composed of granular soils and in many locations contain varying amounts of man-made debris. Many of these fills were imported onto the site.

QUARRY BOTTOM FILL

Quarry No. 4, as referenced in the RMA Group February 2002 Report, has been partially backfilled with fine-grained soils derived from screening operations during past sand and gravel processing operations. Prior subsurface exploration indicates that this non-engineered fill is approximately 30 feet thick. However, additional explorations and evaluation are required to estimate the quantity of the fill in this basin.

QUARRY SIDE SLOPE FILL

Following the excavation of the quarries, soils were dumped over some of the quarry side slopes. Most of these non-engineered fills were imported into the site, thus their composition is variable. Typically the quarry side slope fill is composed of granular soils that, in many locations, contain man-made materials and organic matter.

PIPELINE BACKFILL - WATER AQUEDUCT

Trench backfill has been placed over an MWD pipeline that crosses the northwest corner of the site. According to the MWD, the pipeline that follows the southeast side of proposed Planning Area 18 was backfilled with select material and sandy soil within the pipe zone which extends at least six inches above and below the pipe. This material was reportedly compacted to at least 95% relative compaction below pipe and at least 90% relative compaction within the remainder of the pipe zone. The remainder of the trench backfill consists of the local native soils.

BERM AND LEVEE FILL

Numerous berms and levees have been constructed on the property. Surface observations and past subsurface exploration suggests that these fills were likely derived from on-site native soils. These fills were placed more than 60 years ago and are therefore considered to be non-engineered.

QUARRY BOTTOM FILL AND ALLUVIUM, UNDIFFERENTIATED

The bottoms of Quarries 1, 2 and 3, as referenced in the RMA Group February 2002 Report, contain thin fill, moderately thick fill and alluvium. Where feasible, thicker fills, on the order of 5 to 10 feet thick, have been identified as miscellaneous fill (afm). In many areas, thin fills cannot be distinguished from alluvium without subsurface exploration, as the materials are of similar composition. Thus most of the bottoms of Quarries 1, 2 and 3 have been designated as undifferentiated fill and alluvium.

ALLUVIUM

The alluvium underlying the site consists of gray-white and reddish brown gravelly sand and gravelly, silty sand with cobbles and boulders. The gray white deposits occur near the surface and are underlain by reddish brown deposits. The reddish brown color is indicative of older deposits. According to regional geologic mapping, near surface alluvium is Holocene in age and is underlain by Pleistocene age older alluvium.

LANDSLIDES

The site was originally a gentle slope alluvial fan, and thus not prone to landsliding. The base of the San Gabriel Mountains is located approximately two miles north of the site. Thus, landsliding originating from the San Gabriel Mountains is not expected to impact the site. Quarry excavations and backfilling have created many steep and potentially unstable slopes that require remedial grading to stabilize.

SURFACE AND GROUNDWATER CONDITIONS

Standing water was present in Quarry No. 1 at the time of the RMA Group Study. The sources of this water are a storm drain outlet in the western part of the site and local runoff within the property. Varying amounts of surface water have been present within this quarry for many years and surface water is expected to be present in the future. The approximate limits of the standing water at the time of the RMA Group Study are shown in Appendix 15.6, *Geology/Soils Assessment*. Other localized areas of standing water were noted within the site related to a temporary water storage tower used to fill water trucks and recent rain. These areas are small and not excepted to be persistent.

According to the California Department of Water Resources and the California Division of Mines and Geology, the historic depth to groundwater beneath the site has been approximately 400 to 500 feet. The minimum depth to groundwater beneath the site from 1973 to 1979 ranged from approximately 50 to 200 feet (refer to Exhibit 5.7-2, *Regional Ground Contour Water Map*).

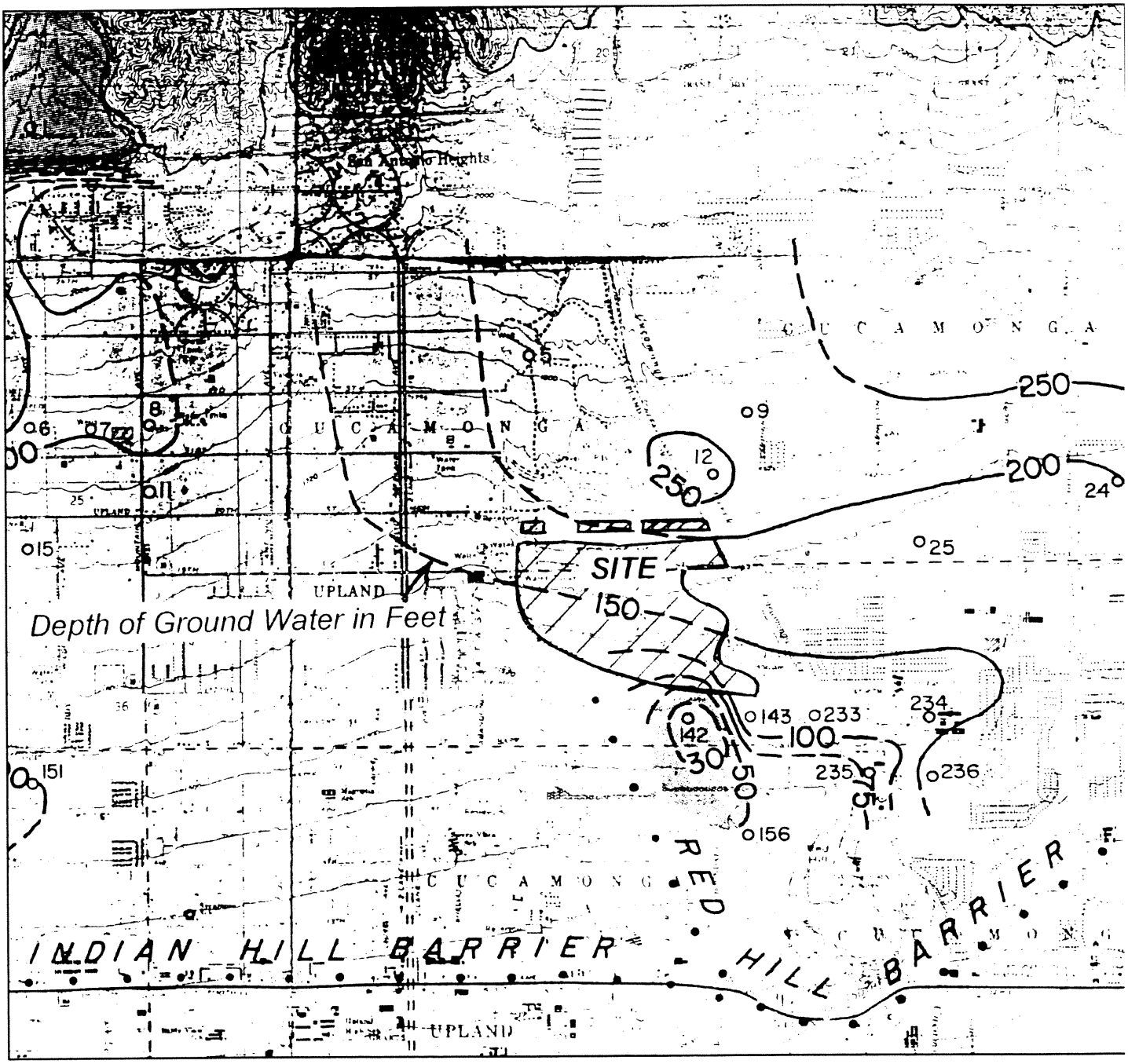
FAULTS

The site is not located within the boundaries of an Earthquake Fault Zone for fault-rupture hazard as defined by the Alquist-Priolo Earthquake Fault Zoning Act or within a City of Upland designated fault hazard zone. The nearest Earthquake Fault Zone is located approximately 1.5 miles to the northwest along the Cucamonga fault (Exhibit 5.7-3, *Earthquake Fault Zone Map*). The two most prominent faults in proximity of the site are the Red Hill and Cucamonga faults.

RED HILL FAULT

The Red Hill fault is a postulated fault believed responsible for uplift of Red Hill, which is located approximately 1.3 miles south of the site. It has also been postulated that the Red Hill fault extends northwest and northeast from Red Hill as a subsurface groundwater barrier. The earthquake potential of the Red Hill fault is unknown.

Regional geologic and groundwater contour maps, the California Department of Water Resources, and the Chino Basin Water Master Plan show the Red Hill fault curving northwest from Red Hill either toward or through the site. However, other regional geologic maps do not show a northerly curve of the Red Hill fault projecting toward or though the site (Exhibit 5.7-1, *Regional Geologic Map*). The possibility of the Red Hill fault passing through the site was investigated by Richard Mills Associates and Ryland and Associates in 1987. Their investigation included examination of aerial photographs for lineaments suggestive of faulting, a geophysical survey consisting of 7,800 feet of seismic refraction lines and 6,000 feet of magnetometer lines, and examination of a trench excavated along a photo lineament and a geophysical anomaly. The studies by Ryland and Mills did not detect any features attributable to the Red Hill fault.



Source: RMA Group, February 15, 2002.

Note: Minimum depth to groundwater, 1973-1979.

Not to Scale

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

06/02

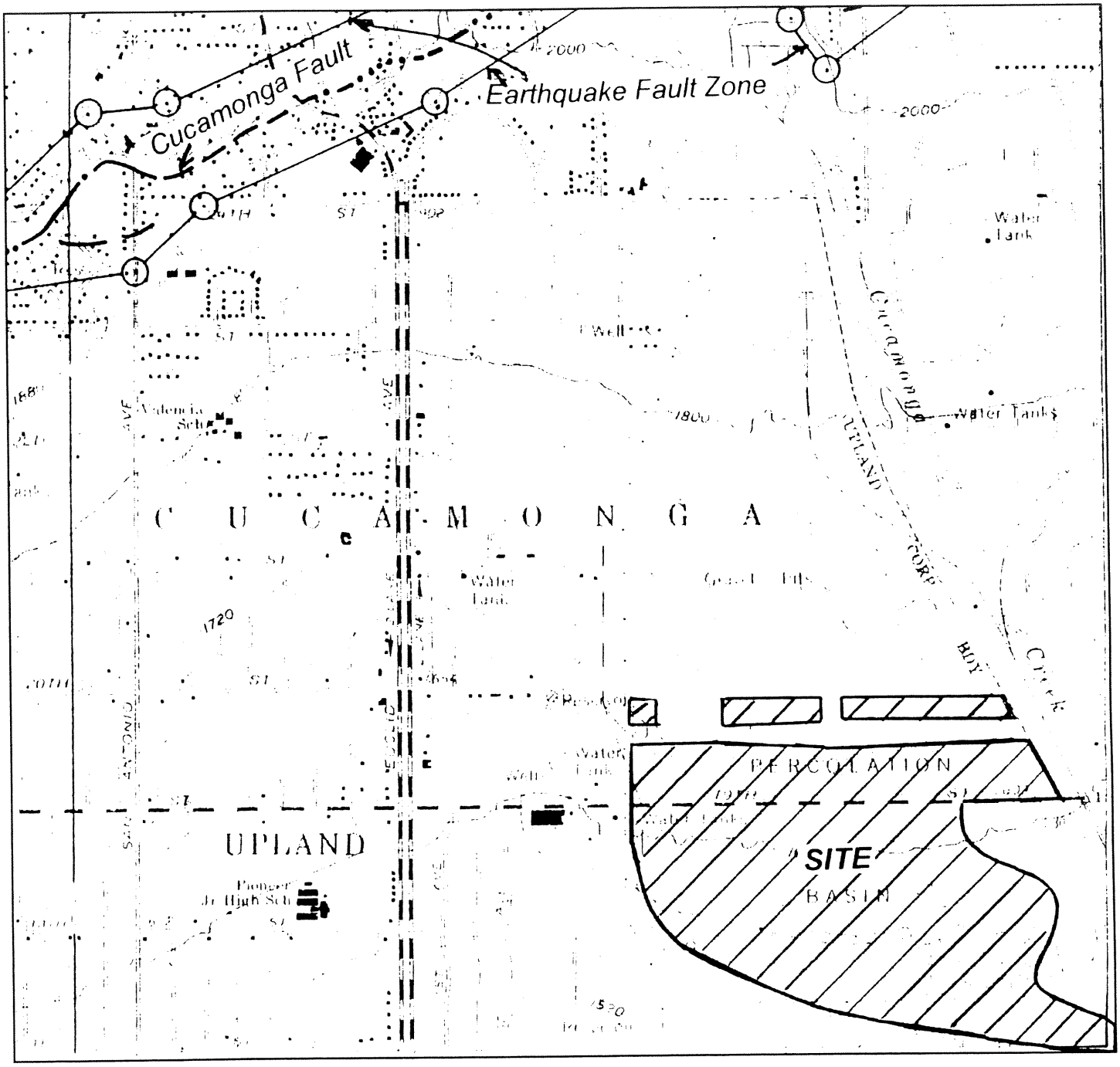
JN 10-101248

CITY OF UPLAN

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMEN

Regional Groundwater Contour Ma

Exhibit 5.7



Source: RMA Group, February 15, 2002.

Not to Scale

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

06/02

JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Earthquake Fault Zone Map

Exhibit 5.7-3

Regional maps cited above show the postulated northeasterly extension of the Red Hill fault continuing to a fault located approximately six miles east-northeast of the site. However, the most recent detailed mapping of the area has identified the fault east of the site as a separate feature named the Etiwanda Avenue fault. Numerous subsurface investigations along the postulated trace of the Red Hill fault between the Etiwanda Avenue fault and Red Hill have not detected any evidence of near surface faulting.

CUCAMONGA FAULT

The most prominent potential seismic source in the vicinity of the site is the Cucamonga fault, which is located approximately 1.5 miles northwest of the site at its nearest point (refer to Exhibit 5.7-1, *Regional Geologic Map*, and Exhibit 5.7-2, *Earthquake Fault Zone Map*). The Cucamonga fault is the primary fault along the southern front of the eastern San Gabriel Mountains. This north dipping thrust fault separates the crystalline bedrock of the San Gabriel Mountains and valley alluvium. The Cucamonga fault is thought to be capable of generating earthquakes as large as magnitude 7.0 with intervals between ground rupturing events being in the range of 150 to 700 years. Typical ground rupture during major earthquakes along the Cucamonga fault has been estimated to be approximately two meters.

OTHER FAULTS

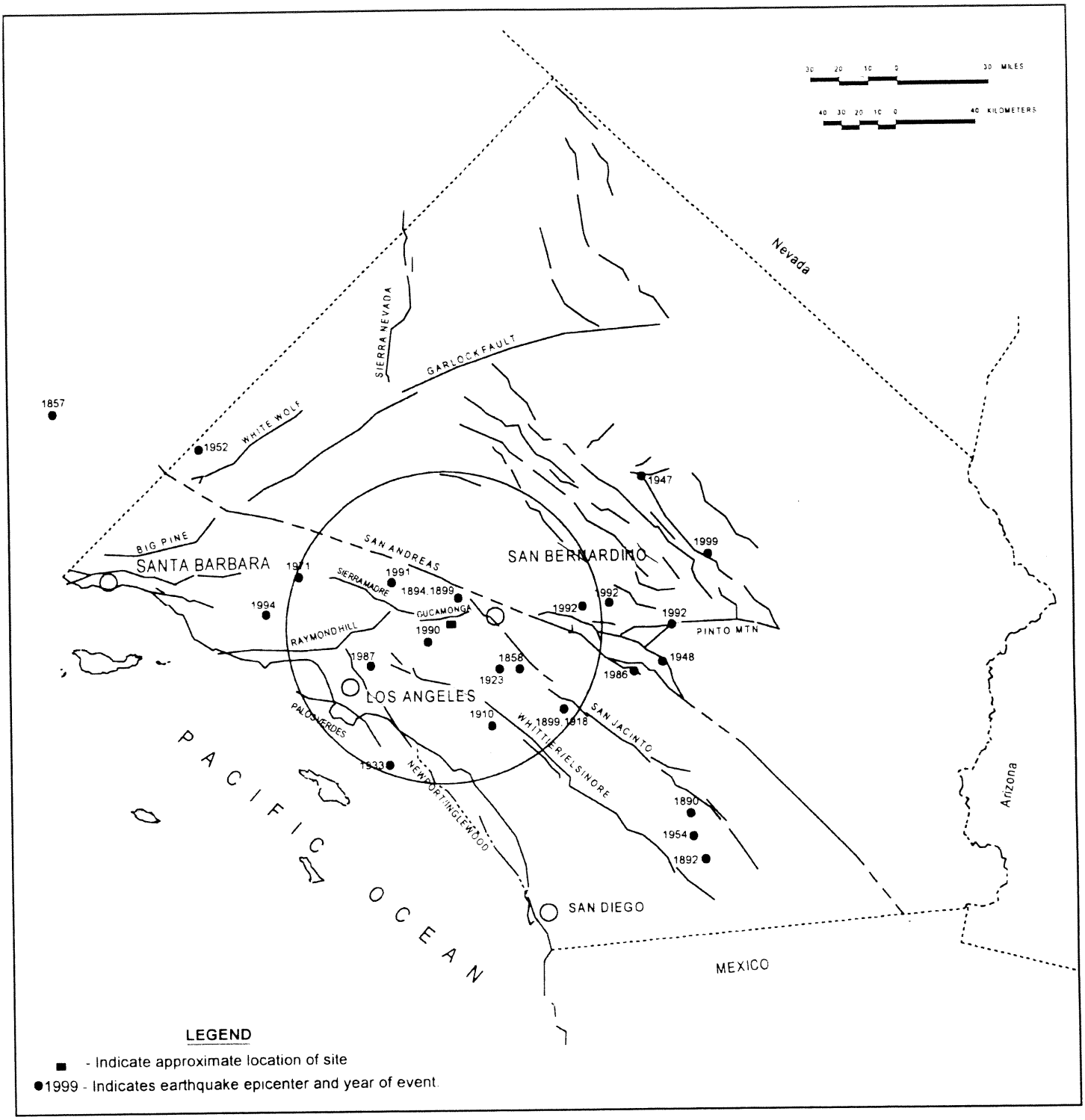
There are many other faults in Southern California that could produce earthquakes that would affect the site. Exhibit 5.7-4, *Fault and Earthquake Epicenter Map,* illustrates the location of the site with respect to major faults in the region. The distance to notable faults within 100 kilometers of the site is detailed on Table 5.7-1, *Notable Faults Within 100 Kilometers.*

SEISMICITY

The site is located in a seismically active area, as is the case throughout Southern California. Presently, it is not possible to state with certainty when and where future large magnitude earthquakes will occur, or what the magnitude and intensity of these events will be. However, estimates can be made based on the tectonic data and seismic history. The seismic setting of the site has been evaluated by review of historic seismicity, by deterministic methods, by probabilistic methods and by code procedures.

HISTORIC EARTHQUAKES

Strong earthquakes that have occurred in this region in historic time are summarized in Table 5.7-2, *Historic Strong Earthquakes.* The nearest of these historic earthquakes was the magnitude 5.5 Upland Earthquake of 1990. It was epicentered approximately four miles to the west. Estimated peak horizontal ground accelerations at the site from the historic strong earthquakes listed in Table 5.7-2 are estimated to have ranged from about 0.07g to 0.34g.



Source: RMA Group, February 15, 2002.

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

06/02 JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Fault and Earthquake Epicenter Map

Exhibit 5.7-4

Table 5.7-1
Notable Faults Within 100 Kilometers

Fault Zone & Geometry	Distance (km)	Distance (mi.)	Maximum Moment Magnitude
Chino-Central Ave. (ri-r-o)	15	9	6.7
Clamshell-Sawpit (r)	23	14	6.5
Cleghom (ll-ss)	26	16	6.5
Compton Thrust (r)	49	30	6.8
Cucamonga (r)	2.3	1.4	7.0
Elsinore (ri-ss)	31	19	6.8
Elysian Park (r)	30	19	6.7
Helendale (ri-ss)	69	43	7.1
Hollywood (ll-r-o)	55	34	6.4
Holser (r)	90	56	6.5
Johnson Valley (ri-ss)	98	61	6.7
Lenwood-Lockhart (ri-ss)	93	58	7.3
Malibu Coast (ll-r-o)	84	52	6.7
Newport-Inglewood (ri-ss)	60	37	6.9
North Frontal (r)	38	24	7.0
Northridge (r)	73	45	6.9
Palos Verde (ri-ss)	72	45	7.1
Pinto Mountain (ll-ss)	84	52	7.0
Raymond (ll-r-o)	34	21	6.5
San Andreas (ri-ss)	22	14	7.4
San Gabriel (ri-ss)	63	39	7.0
San Jacinto (ri-ss)	17	11	6.7
San Jose (ll0r-o)	6	4	6.5
Santa Monica (ll-r-o)	72	45	6.6
Santa Susana (r)	82	51	6.6
Sierra Madre (r)	10	6	7.0
San Fernando (r)	63	39	6.7
Verdugo (r)	48	30	6.7
Whittier (ri-ss)	28	17	6.8

Notes:
Fault geometry – (ss) strike slip, (r) reverse, (n) normal, (rl) right lateral, (lll) left lateral, (o) oblique
Fault and Seismic Data – California Division of Mines and Geology, 19996 and 1998
Attenuation relationship – Boore, D.M., Joyner, W.B and Fumal, T.E, 1997, Soil Site (Acceleration values at distance > 50 miles are approximate)

Table 5.7-2
Historic Strong Earthquakes

Date	Event	Causitive Fault	Magnitude	Epicentral Distance (miles)	Estimated Site Acceleration (g)
Dec. 12, 1812	Wrightwood	San Andreas?	7.0	16	0.34
Jan. 9, 1857	Fort Tejon	San Andreas	7.6	151	0.13
Dec. 16, 1858	San Bernardino Area	Uncertain	6.0	22	0.17
Feb. 9, 1890	San Jacinto	Uncertain	6.3	93	0.08
May 28, 1892	San Jacinto	Uncertain	6.3	94	0.07
July 30, 1894	Lytle Creek	Uncertain	6.0	12	0.24
July 22, 1899	Cajon Pass	Uncertain	6.4	14	0.22
Dec. 25, 1899	San Jacinto	San Jacinto	6.6	44	0.13
Sept. 20, 1907	San Bernardino Area	Uncertain	5.3	44	0.08
May 15, 1910	Elsinore	Elsinore	6.0	33	0.13
April 21, 1918	Hemet	San Jacinto	6.6	44	0.16
July 23, 1923	San Bernardino	San Jacinto	6.0	22	0.17
March 11, 1933	Long Beach	Newport-Inglewood	6.3	40	0.13
April 10, 1947	Manix	Manix	6.4	87	0.08
Dec. 4, 1948	Desert Hot Springs	San Andreas or Banning	6.5	75	0.09
July 21, 1952	Wheeler Ridge	White Wolf	7.7	101	0.13
Feb. 9, 1971	San Fernando	San Fernando	6.6	49	0.13
July 8, 1986	North Palm Springs	Banning or Garnet Hills	5.6	61	0.06
Oct. 1, 1987	Whittier Narrows	Puente Hills Thrust	5.9	27	0.14
Feb. 28, 1990	Upland	San Jose	5.5	4	0.26
June 28, 1991	Sierra Madre	Clamshell Sawpit	5.8	23	0.15
April 22, 1992	Joshua Tree	Eureka Peak	6.1	79	0.07
June 28, 1992	Landers	Johnson Valley & others	7.3	71	0.14
June 28, 1992	Big Bear	Uncertain	6.2	45	0.11
Jan 17, 1994	Northridge	Northridge Thrust	6.7	54	0.13
Oct. 16, 1999	Hector Mine	Livic Lake	7.1	87	0.11

Notes:
Earthquake data: U.S. Geological Survey P.P. 1515 & online data and Southern California Earthquake Center
Magnitudes prior to 1932 are estimated from intensity.
Magnitudes after 1932 are moment, local or surface wave magnitudes.
Attenuation relationship – Boore et al., 1997 (mean values) values at distances > 50 miles are approximate

Site Location:
Site Longitude: 117.635
Site Latitude: 34,134

DETERMINISTIC EVALUATION

The California Division of Mines and Geology has compiled earthquake parameters related to faults in California. The information represents a consensus of many scientists and an interpretation of earthquake hazard parameters most accepted within the greater earth-science community. Activity of faults with reported displacement during latest Pliestocene and Holocene time was evaluated using slip rates and recurrence intervals from paleoseismic investigations. Postulated maximum earthquake magnitudes were assigned to each fault based on rupture of an entire fault segment, or in the case of Class "A" faults, rupture of multiple segments. Lengths and geometry of faults, along with other information, were also compiled. The geometries, magnitudes, slip rates and recurrence intervals for faults within 100 kilometers of the site are summarized in Table 5.7-1. Anticipated peak horizontal ground accelerations for the postulated maximum moment magnitude earthquake of each fault are also present in Table 5.7-1. Using deterministic methods, it is anticipated that the most intense ground shaking at the site would result from a nearby large magnitude earthquake along the Cucamonga fault. Should a magnitude 7.0 earthquake occur along the Cucamonga fault at a point near the site, it is estimated that the peak horizontal ground acceleration at the site could range from 0.65g to more than 1g.

PROBABILISTIC EVALUATION

A probabilistic analysis was performed by the RMA Group. Results of such an analysis are dependent upon a number of factors, including the attenuation relationship, soil characteristics, and fault data. This analysis indicates a mean peak horizontal ground acceleration of 0.70g for a 10 percent probability of occurrence in 50 years.

SEISMIC COEFFICIENTS AND NEAR SOURCE FACTORS

The 1997 Uniform Building Code presents seismic data in terms of seismic zones, factors, sources and coefficients, and soil profiles. The following parameters may be used to determine 1997 UBC seismic coefficients (Ca and Cv) and near-source factors (Na and Nv) for the Project Site:

Uniform Building Code Seismic Parameters

Closest Distance to Known Seismic Source:	<2 km
Seismic Source and Type:	Cucamonga Fault, Type A
Seismic Zone:	4
Seismic Zone Factor:	0.4
Soil Profile:	SD

SECONDARY EARTHQUAKE HAZARDS

Potential secondary seismic hazards that can affect land development projects include liquefaction, tsunamis, seiches, seismically induced settlement, lurching, seismically induced flooding and seismically induced landsliding. The following subsections address the potential for these hazards to occur on-site.

LIQUEFACTION

Liquefaction is a phenomenon where earthquake induced ground vibrations increase the pore pressure in saturated, granular soils until it is equal to the confining, overburden pressure. When this occurs, the soil can completely lose its shear strength and enter a liquefied state. The possibility of liquefaction is dependent upon grain size, relative density, confining pressure, saturation of the soils, strength of the ground motion and duration of ground shaking. In order for liquefaction to occur, three criteria must be met: underlying loose, coarse-grained (sandy) soils, a groundwater depth of less than about 50 feet and a nearby large magnitude earthquake.

Regional data indicates the depth to groundwater beneath the site is in excess of 50 feet, and thus liquefaction is unlikely. Standing water is locally present within Quarry No. 1 and thus localized shallow groundwater is likely present. Because of the gravelly, cobbly nature of the underlying soils and the probable Pleistocene age of the deposits, the potential for liquefaction in this area appears to be low.

SEISMICALLY INDUCED SETTLEMENT AND LURCHING

Seismically induced settlement occurs most frequently in areas underlain by loose, granular sediments. Damage as a result of seismically induced settlement is most dramatic when differential settlement occurs in areas with large variations in the thickness of sediments. The California Division of Mines and Geology has prepared a map of the base of fresh water bearing alluvium for southwest San Bernardino County. The map indicates that the site is underlain by about 1,000 feet of alluvium of relatively uniform thickness. Alluvial soils in the Rancho Cucamonga area are fairly dense. Considering this and the anticipated recompaction of any loose surficial soils and non-engineered fill, the potential for significant seismically induced differential settlement is considered to be low.

Lurching is cracking and fissuring not associated with fault rupture that occurs during earthquakes. It occurs most frequently in areas underlain by loose, granular soils and high groundwater or in close proximity of faults. The potential for lurching on the Project site is limited to the area within and near the standing water in Quarry 1.

SEISMICALLY INDUCED FLOODING

The site is located in the vicinity of the Cucamonga Canyon spreading grounds and adjacent to the Cucamonga Creek Wash (a concrete lined drainage course). There are also two large water storage tanks located west of the site, north of 19th Street and west of Campus Avenue. The site could potentially experience seismically induced flooding in the event of failure of these structures, however, the potential for such failures is considered to be low. The runoff direction from the tanks is expected to be to the south, generally away from the site, although some runoff may be directed into Quarry 1 via an existing storm drain system.

SEISMICALLY INDUCED LANDSLIDING

Slope stability, or the potential for mudslides and landslides, is a minor problem in the City of Upland and occurs primarily only in areas with slopes greater than two

percent. The potential for seismically induced landsliding exists on the Project site due to the presence of potentially unstable slopes.

REGIONAL LAND SUBSIDENCE

According to the City of Upland General Plan, the area has experienced historic, regional land subsidence due to removal of groundwater. However, as stated in the Upland General Plan, in the 1970's, the County of San Bernardino instituted a program to recharge groundwater. The General Plan contains no further updates, suggesting that ongoing, significant subsidence has not been noticeable.

SIGNIFICANCE CRITERIA

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist form used during preparation of the Project Initial Study as contained in Appendix 15.1 of this EIR. The Initial Study includes questions relating to geology, soils and mineral resources. The issues presented in the Initial Study Checklist have been utilized as thresholds for significance in this Section. Accordingly, a project may create a significant environmental impact if one or more of the following occurs:

Geology and Soils

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Impact Statement 5.7-1);
  - Strong seismic ground shaking (refer to Impact Statement 5.7-2);
  - Seismic-related ground failure, including liquefaction (refer to Impact Statement 5.7-3);
  - Landslides (refer to Impact Statement 5.7-4);
- Result in substantial soil erosion or the loss of topsoil (refer to Impact Statement 5.7-5);
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse (refer to Impact Statements 5.7-6);
- Be located on expansive soils, as defined in Table 18-1 B of the Uniform Building Code (1994), creating substantial risks to life or property (refer to Impact Statement 5.7-6); and/or
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for

the disposal of wastewater (refer to Section 10.0, *Effects Found Not to be Significant*).

Mineral Resources

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State (refer to Impact Statement 5.7-7); and/or
- Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local General Plan, specific plan or other land use plan (refer to Impact Statement 5.7-7).

Potential impacts associated with the Project area's topography, soils, and the region's seismic activity is identified below. Mitigation measures are provided to reduce the significance of impacts.

IMPACTS

SUMMARY OF PREVIOUS ENVIRONMENTAL DOCUMENTATION FOR THE COLONIES AT SAN ANTONIO

TOPOGRAPHY

The EIR for the 1988 Specific Plan states that implementation of the Project would alter the landforms on-site. However, it was determined that as the Project site's topography has been extensively altered by past mining activities, a less than significant impact would occur. Additionally, implementation of the mitigation measures specified in the 1988 EIR would further reduce potential impacts. The 1998 Supplemental EIR rendered similar conclusions.

GEOLOGY AND SOILS

The EIR for the 1988 Specific Plan concluded that with incorporation of recommended mitigation measures, potentially significant impacts associated with geology and soils within the Project site would be reduced to less than significant levels. The 1998 EIR rendered similar conclusions.

SEISMICITY

The EIR for the 1988 Specific Plan indicated that strong ground shaking from nearby faults is anticipated within the Project area; however, with the incorporation of recommended mitigation measures outlined within required geotechnical studies for the Project, the significance of impacts would be reduced. Additionally, it was concluded that no fault traces exist on-site, and that surface rupture is not anticipated to occur on-site during a seismic event. The EIR also concluded that the Project site is not subject to secondary seismic impacts such as slope stability, liquefaction, subsidence and inundation from dam failure. The 1998 Supplemental EIR rendered similar conclusions.

MINERAL RESOURCES

The EIR for the 1988 Specific Plan concluded that project implementation would preclude any future use of the Project site for mining of mineral resources. However, the site was not planned for long-term mineral resource use and is not within a resource conservation area or an area designated by the City of Upland for consideration of mineral extraction in the future. Further, to mitigate any potential land use compatibility issues with existing sand and gravel mining operations north of the Project site, the EIR identified mitigation measures to reduce the impact to less than significant levels. The 1998 Supplemental EIR rendered similar conclusions.

SEISMICITY

RUPTURE OF A KNOWN EARTHQUAKE FAULT

5.7-1 *Development of the proposed Project would not expose people/structures to effects associated with rupture of a known earthquake fault. Analysis has concluded, based on the available data, that a less than significant impact would occur in this regard. Project compliance with the City Municipal Code, the Uniform Building Code, and recommended mitigation, would confirm that impacts are less than significant.*

Implementation of the proposed Project is anticipated to result in a less than significant impact regarding the exposure of people/structures to potential substantial adverse effects associated with rupture of an earthquake fault. This conclusion is based on the Project site not being located within the boundaries of an Earthquake Fault Zone for fault rupture hazard as defined by the Alquist-Priolo Earthquake Fault Zoning Act of 1972. This conclusion is also based on the studies of Ryland and Mills that did not detect any features attributable to the Red Hill fault. Consequently, no mitigation for potential surface fault rupture along the postulated trace of the Red Hill fault was deemed necessary. The potential for future surface fault rupture within the site is considered unlikely and establishment of fault setback zones is not needed. However, the RMA Group Report recommends geologic mapping during grading to verify the findings of the earlier studies.

Numerous controls would be imposed on the proposed Project through the engineering review and permitting process. In general, the City regulates land development projects under the requirements of the Uniform Building Code, the Alquist-Priolo Special Studies Zone Act, local land use policies and zoning, and project-specific mitigation measures. The Project would be subject to compliance with the City's Municipal Code, including but not limited to Section 8, *Building Regulations*. Also, mitigation has been specified which requires that geologic mapping be conducted to verify the previous findings. A less than significant impact would be confirmed in this regard following compliance with the recommended mitigation and applicable City and State standards.

GROUND SHAKING

5.7-2 *Development of the proposed Project would increase the number of people/structures exposed to potential effects associated with seismically induced ground shaking. Implementation of the recommended mitigation*

and compliance with the City Municipal Code and the Uniform Building Code would reduce this potential impact to a less than significant level.

Overall, the intensity of future seismic activity at the proposed Project site is expected to be no greater than for other sites in the immediate area. The Project site is expected to experience ground shaking as a result of regional seismic activity. Such ground shaking could be substantial due to the Project site's proximity to the Cucamonga fault, as well as other fault zones in the region. Impacts associated with seismically induced ground shaking are considered potentially significant. To ensure public safety, future development is required to be designed in accordance with the minimum Earthquake Regulations of the Uniform Building Code (UBC), including Chapter 23, as it provides for earthquake-resistant design, and Chapter 70, which addresses excavation and grading.[1] In order to provide the adequate level of information to properly design and engineer future development, mitigation has also been specified recommending that an engineering geologist perform additional design-level geotechnical studies, and that a report be prepared/submitted for City approval, for each specific planning area. Compliance with the recommended mitigation and UBC Standards would reduce potential impacts associated with seismic affects to a less than significant level.

OTHER SEISMIC HAZARDS

5.7-3 *Analysis has concluded that based on the available data, a less than significant impact would occur in association with other seismic hazards. Project compliance with the recommended mitigation, City Municipal Code, and the Uniform Building Code would confirm that potential impacts at less than significant levels.*

Liquefaction

Regional data indicates the depth to groundwater beneath the site is in excess of 50 feet, and thus, liquefaction is unlikely. Standing water is locally present within Quarry No. 1 and thus, localized shallow groundwater is likely present. Because of the gravelly, cobbly nature of the underlying soils and the probable Pleistocene age of the deposits, the potential for liquefaction in this area appears to be low. However, the RMA Group has recommended that the potential for liquefaction be confirmed during future geotechnical investigation. Mitigation has been recommended to confirm the absence of conditions inductive to liquefaction.

Considering the depth to groundwater and the permeability of the underlying soils, it is expected that installation of canyon subdrains would not be required. However, backdrains/weep holes would be required for retaining walls. Backdrains may be required for slopes descending into Quarry No. 1, which would continue to be used as infiltration basins for surface runoff. Mitigation has been recommended requiring that additional geotechnical evaluations be conducted for each Planning Area to determine the need for backdrains.

[1] It should be noted that Section 8101.010 of the Upland Municipal Code, *Uniform Building Code*, adopts the Uniform Building Code in its entirety as the Building Code of the City of Upland.

Potential impacts associated with liquefaction would be further reduced through compliance with the minimum Earthquake Regulations of the UBC (Chapters 23 and 70). Compliance with the Code would reduce potential impacts associated with liquefaction to less than significant levels.

Seismically Induced Settlement and Lurching

As previously noted, the Project site is underlain by approximately 1,000 feet of alluvium of relatively uniform thickness that is not inducive to seismically induced settlement. As a result, the potential for significant seismically induced differential settlement is considered to be low on the Project site. The potential for settlement would be further minimized following compliance with the recommended mitigation requiring that loose surficial soils and non-engineered fill on the Project site be removed and recompacted during future grading.

The potential for lurching is expected to be limited to the area within and near the standing water in Quarry 1. Recommended mitigation for settlement would reduce the potential for lurching to less than significant.

Seismically Induced Landsliding

According to referenced geotechnical investigations, landslides would not occur on the Project site due to the site's generally low gradient upon completion of grading. This condition would be maintained at a less than significant level following compliance with mitigation recommending that manufactured slopes be properly constructed and stabilized. Furthermore, the Project site is not on or in the path of any known, mapped, or potential landslide area.

According the RMA Group Report, existing potentially unstable slopes require further consideration. It is expected that stable slopes can be created provided that the slopes are properly keyed, benched and compacted, and provided that the slopes are inclined no steeper than 2:1 (horizontal to vertical). Specific slope stability calculations, analysis and design of slopes are required during future geotechnical studies for each Planning Area.

Pursuant to referenced geotechnical investigations, the existing steep pit walls are required to be sloped to provide a stable earth mass where failure may cause damage to persons or property. Additionally, review of Grading Plans is required by an engineering geologist to evaluate any potential adverse impacts on-site. Further, the Project would be subject to compliance with the City's Municipal Code.

Overall, potential impacts associated with liquefaction, seismically induced settlement/lurching, and seismically induced landsliding are concluded as less than significant following compliance with recommended mitigation, the City Municipal Code, Earthquake Regulations of the UBC (Chapters 23 and 70) and standard engineering practices and design criteria.

SOILS

EROSION

5.7-4 *Development of the proposed Project could result in substantial soil erosion. Project compliance with the City Municipal Code, the Uniform Building Code, and the recommended mitigation measures would reduce impacts to a less than significant level.*

Runoff is channeled by sheet flow and natural drainages to the east and Cucamonga Creek. The proposed Project would not impact this drainage. No unprotected drainage ways are proposed and the increased area of impervious surfaces would be drained along a series of curb and gutters to the existing storm drain system.

Development of the proposed Project would require approximately 5.0 million cubic yards of excavation (cut) and approximately 4.7 million cubic yards of embankment (fill). Required fill material to balance the on-site grading operation is anticipated to be provided from the construction of the I-210 Freeway that is currently underway. The site would be rough-graded in two general phases, corresponding to the proposed general phasing referenced in the Specific Plan Addendum documentation. The most extensive cut operations would be required for excavation of the proposed central open space and flood control corridor. The excavated soils would be relocated to the adjacent low sloping areas. Proposed development would be subject to compliance with the City Municipal Code and the UBC. In addition to City standards and UBC requirements, mitigation has been recommended requiring a Soil Erosion and Sedimentation Plan that outlines necessary erosion control measures for each area of development.

All earthwork is required to be performed in accordance with applicable City, County, Regional and State agency requirements. Earthwork would also be performed in conformance with approved grading plans and any applicable geotechnical reports.

Potential impacts associated with erosion would be less than significant following compliance with the City Municipal Code, the UBC, and the recommended mitigation.

UNSTABLE GEOLOGIC UNITS AND EXPANSIVE SOILS

5.7-5 *Development of the proposed Project may increase the number of people/structures exposed to significant effects associated with geologic units that are unstable and/or located on expansive soils. Project compliance with the City Municipal Code, the Uniform Building Code, and the recommended mitigation would reduce potential impacts to a less than significant levels.*

As previously noted, ongoing, significant subsidence has not been noticeable in the City. In addition, the infiltration basin that is to remain on-site should further minimize the potential for significant regional land subsidence due to groundwater extraction.

Based on review of surface observations, logs of prior subsurface exploration and RMA Group experience in the area, soils are generally expected to be granular with

very low expansion and low to moderate corrosion potentials. However, fine-grained fill soils placed in Quarry No. 4 and a few other areas of the site may be more expansive and corrosive. Compliance with mitigation recommending further evaluation of these soil properties during individual Planning Area geotechnical studies and during rough grading of the site would reduce impacts in this regard to less than significant levels.

MINERAL RESOURCES

5.7-6 *Development of the proposed Project may result in the loss of availability of a known mineral resource. Analysis has concluded that a less than significant impact would occur in this regard.*

The Project site has been historically mined for sand and gravel. Remnants of mining operations exist on the southern portion of the site in the form of pits and large holes that have filled with water. Currently, Holliday Rock Sand and Gravel Company operations occur at the northwestern corner of the site, near the intersection of Campus Avenue and 20th Street. The Holiday Rock Company had in the past expressed concern that the portion of the proposed Project that lies north of the proposed SR-210 freeway would constrain on-going mining activities north of 20th Street. It is their concern that resource recovery operations would be restricted with respect to increased traffic congestion, rain water runoff problems, and potential noise level exposure. The Project proposes 12.66 acres of highway commercial uses for the area south of 20th Street (Planning Area 20), adjacent to the Holiday Rock Company facility. Future construction and implementation of 20th Street would create a physical barrier and transition area from proposed commercial uses in this area and would minimize land use conflicts with continued mineral resource recovery operations.

The Project site is not a State designated Mineral Resource Zone, nor is it within an area designated to contain significant mineral resources, or zoned for long-term mineral resource use. A less than significant impact would occur in this regard.

CUMULATIVE IMPACTS

5.7-7 *The proposed Project, combined with future development, could result in increased short-term impacts such as erosion and increased sedimentation, as well as long-term seismic and mineral resource impacts within the area. Mitigation is to be incorporated on a project-by-project basis to reduce impacts to a less than significant level in areas deemed suitable for development.*

Soils and geological conditions in the Project vicinity may vary. Short-term cumulative impacts such as erosion and sedimentation would occur. The only cumulative long-term impact related to geology is the exposure of people and property in the vicinity of the Cucamonga fault zone to the potential for seismically induced ground shaking. Implementation of the cumulative projects would incrementally increase the number of people and structures potentially subject to a seismic event. However, such exposure would be minimized through strict engineering guidelines for development at each respective site. The cumulative effects of increased seismic risk would be mitigated to a less than significant level.

MITIGATION MEASURES

This section directly corresponds to the identified Impact Statements in the impacts subsection.

SEISMICITY

RUPTURE OF A KNOWN EARTHQUAKE FAULT

5.7-1 Geologic mapping shall be performed during grading to verify the findings of the Ryland and Mills studies (i.e., to confirm features attributable to the Red Hill fault are not present on the Project site).

GROUND SHAKING

5.7-2a Prior to Grading Permit issuance, additional design-level geotechnical studies shall be performed to provide the adequate level of information to properly design and engineer the Project. The Applicant shall submit a Geotechnical Report for review and approval by the City's Geotechnical Consultant which further analyzes on-site soil conditions and includes appropriate measures to control erosion and dust.

5.7-2b Engineering design for all structures shall be based on the probability that the Project area will be subjected to strong ground motion during the lifetime of development. Construction plans shall be subject to the City of Upland Municipal Code and shall include applicable standards, which address seismic design parameters.

5.7-2c For each specific Planning Area of development, mitigation of earthquake ground shaking shall be incorporated into design and construction in accordance with Uniform Building Code requirements and site specific design. The Cucamonga fault shall be considered the seismic source for the Project site and specified design parameters shall be used.

5.7-2d The potential damaging effects of regional earthquake activity shall be considered in the design of each structure. The preliminary seismic evaluation shall be based on basic data including the Uniform Building Code Seismic Parameters and the RMA Report's exhibits and tables. Structural design criteria shall be determined in consideration of building types, occupancy category, seismic importance factors and possibly other factors. A determination of seismic factors for each individual Planning Area of development shall be conducted. The Cucamonga fault shall be considered the seismic source for the Project site and specified design parameters shall be used.

5.7-2e Geologic and geotechnical studies shall be submitted to the City of Upland for development of each planning area in order to verify the findings, conclusions and recommendations of the RMA Group Report, and to develop specific design parameters. Studies shall be reviewed for approval of Plans prior to issuance of Building Permits.

OTHER SEISMIC HAZARDS

Liquefaction

5.7-3a Prior to Grading Permit issuance, geotechnical investigations for Planning Areas shall confirm that conditions favorable to liquefaction are not present on-site. The results of the studies shall be reviewed by the City's Geotechnical Engineer. A Grading Permit shall not be issued until the City deems conditions and/or remedial actions acceptable to reduce the significance of potential impacts from liquefaction..

5.7-3b Backdrains/weep holes shall be provided for retaining walls. Backdrains may be required for slopes descending into Quarry No. 1, as referenced in the RMA's Report Group February, 2002, which would continue to be used as infiltration basins for surface runoff. Further evaluation shall be conducted during geotechnical studies for each Planning Area to determine the need for backdrains.

Seismically Induced Settlement and Lurching

5.7-3c Loose surficial soils and non-engineered fill on the Project site shall be removed and recompacted during future grading.

Seismically Induced Landslides

5.7-3d To ensure stability, created slopes shall be inclined no steeper than 2:1 (horizontal to vertical) and shall be keyed, benched and compacted to the satisfaction of the City Engineer. Specific slope stability calculations, analysis and design of slopes shall be conducted during future geotechnical studies for each Planning Area.

5.7-3e The existing steep pit walls shall be sloped to provide a stable earth mass where failure may cause damage to persons or property.

SOILS

Erosion

5.7-4a Project grading shall comply with the following requirements:

- All grading shall occur in conformance with City engineering guidelines and shall, whenever possible, be balanced on-site.

- Prior to any development within Planning Areas of the Specific Plan, an overall conceptual grading plan for the portion in process shall be submitted to the Engineering Department of the City of Upland for approval. The grading plan for each such area shall be used as a guideline for subsequent detailed grading plans for individual stages of development within that area, and shall include techniques utilized to prevent erosion and sedimentation during and after the grading

process; approximate time frames for grading; and preliminary pad and roadway elevations.

- Prior to initial grading activities, a soils report and geotechnical study shall be completed that further analyzes on-site soil conditions and includes appropriate measures to be implemented to control erosion and dust.

- Where cut and fill slopes are created higher than 10 feet in vertical height and exceeding a 5:1 slope, slope erosion control plans shall be submitted to the City of Upland Community Development Department.

- The overall shape, height and grade of any cut and fill slope shall be developed in concert with the existing natural contours and scale of the natural terrain of a particular site. The graded form shall reflect the natural, rounded terrain, where possible. All cut and fill slopes shall be constructed at inclinations of no steeper than 2:1. Exceptions for steeper slopes can be included, if supported by technical analysis and approved by the City Engineer. The grading plan shall reflect a contouring and landscaping program intended to control erosion.

- The toes and tops of all slopes higher than 10 feet in vertical height (except freeway slopes) shall be rounded with curves with radii designed in proportion to the total height of the slope, where drainage and stability permit such rounding.

- Potential brow ditches, terrace drains or other minor swales determined necessary at future stages of project review shall be lined with natural erosion control materials or concrete.

- The applicant shall be responsible for maintenance and upkeep of all planting and irrigation systems until those operations become the responsibility of other parties.

- MWD guidelines are to be followed for grading within the existing 200-foot-wide MWD right-of-way extending northeast-southwest across the Project site.

5.7-4b Non-engineered fill shall be over-excavated to competent natural ground or approved engineered fill. Over-excavation shall encompass cobble and boulder stockpiles, any non-engineered fill in the soil stockpile area created during the Phase I grading, miscellaneous fill, quarry bottom fill, quarry side slope fill, and berm and levee fill.

5.7-4c Loose surficial natural soils shall be over-excavated to competent alluvium. The quantity of over-excavation shall be determined based upon the performance of additional geotechnical study and when grading plans are being finalized. Excavated soils may be utilized for engineered fill provided they are free of deleterious organic matter and deleterious man-made materials.

5.7-4d Prior to Grading Permit issuance, the Project Applicant shall prepare a Soil Erosion and Sedimentation Plan for submittal and approval by the City Engineer.

Also, refer to Section 5.4, *Air Quality*, and Section 5.8, *Hydrology and Drainage*.

UNSTABLE GEOLOGIC UNITS AND EXPANSIVE SOILS

5.7-5 Further evaluation of the soil properties of the fine-grained fill soils placed in Quarry No. 4 (as referenced in the RMA Group's February 2002 Report) and other areas of the site shall be conducted during future geotechnical studies for each Planning Area and during rough grading of the site.

MINERAL RESOURCES

5.7-6 No mitigation measures are recommended.

CUMULATIVE

5.7-7 No mitigation measures are recommended.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

No significant impacts related to Geology and Soils have been identified following implementation of mitigation measures and/or compliance with applicable standards, policies and/or City of Upland Municipal Code.

5.8 HYDROLOGY AND DRAINAGE

This Section analyzes potential impacts on existing drainage patterns and flood control facilities in the project area, as well as the potential effects on the groundwater supply and water quality. Mitigation measures are recommended to reduce potential impacts to a less than significant level. Information in this Section is based in part on the Drainage System Study for the Colonies at San Antonio (April, 2002) by Associated Engineering, the Draft Colonies at San Antonio Specific Plan Amendment (January, 2002) by LSA Associates, the Open Space Preliminary Design Documents (February, 2002) by Natural Systems International data provided by Ray Wellington, P.E., General Manager of San Antonio Water Company; NPDES No. CAS618036 (Order No. R8-2002-0012) (April 26, 2002); The Colonies at San Antonio Supplemental Impact Report (August 5, 1998 and responses to comments October 8, 1998) prepared for the Amended Specific Plan for Phase 1 of the project; Soils Report for Phase Two of the Colonies prepared by RMA Group (February 15, 2002); Report to San Bernardino County Department of Public Works by Upland Deputy City Engineer Rosemary Hoerning, P.E., (February 4, 2002); Water Recharge Report for San Antonio Lakes (October 1990) prepared by BNS/Lowry, Engineers & Planners; and the San Antonio Lake Specific Plan EIR (1988); and the San Antonio Lake Specific Plan EIR (1988). These documents are on file with the City of Upland.

EXISTING CONDITIONS

THE HYDROLOGIC SETTING

The proposed project is located on the southern portion of the Cucamonga Creek alluvial fan in an undeveloped area in northeastern Upland, near the Upland/Rancho Cucamonga boundary. The fan overlies the Cucamonga Groundwater Basin, which covers approximately 12,200 surface acres. The alluvial fan has been used historically to conserve water. At various times the fan has been improved with flood control facilities and with artificial weirs to allow for spreading and conservation of flood water by the San Bernardino County Flood Control District. The fan is also used by public and private water purveyors for the artificial recharge of water imported from other watersheds for spreading into the aquifer for later extraction and sale as drinking water.

The Project area is bounded on the south, west and east by existing and proposed residential uses. West of Campus Avenue is the Southern California Edison north/south transmission line and easement. West of the Edison easement are low density single family residences and two City reservoirs between 19th and 20th streets. The site is bounded on the east by Cucamonga Creek, which is now confined to the Cucamonga Creek Channel, a concrete lined flood control channel constructed by the U.S. Army Corps of Engineers in 1976.

A significant feature of the site is that over time, commercial sand and gravel extractions created a series of pits, which are commonly referred to as "Basin 6". An active sand and gravel operation is ongoing north of the site. That operation is the Holiday Rock Company's sand and gravel extraction operation.

WATERSHED DRAINAGE

The proposed project watershed (Cucamonga Canyon) encompasses a total of 2,563 acres. Flows from over 1,755 acres are conveyed to the project site via the County's recently completed 20th Street Storm Drain. Runoff from approximately 343 off-site acres are conveyed to the site via the 19th Street Storm Drain.

Interstate 210 (Section Two), which is currently under construction, will extend through the northern portion of the project site, intercepting flows from a total of 73 acres and contributing freeway drainage to the water drained to Basin 6. Intercepted flows are discharged to the 20th Street Storm Drain, a new storm drain in Campus Avenue and a new culvert near the east boundary of the site. According to the Federal Emergency Management Agency (FEMA), the site is not located within the boundaries of a 100-year flood zone.

Approximately 270 acres in the Cucamonga Spreading Grounds below a debris dam and above 20th Street drain naturally to the south into an existing mining pit. The pit is generally considered large enough to contain storm runoff from this area. Urban drainage from the portion of the City of Upland, generally east of Mountain Avenue and north of 19th Street, is directed into the subject area by the existing 19th Street Storm Drain and recently completed 20th Street storm drain. The San Bernardino Flood Control District is responsible for flood control and monitoring of drainage control facilities within and surrounding the project site.[1]

THE USE OF THE PROJECT SITE FOR WATER CONSERVATION AND DETENTION OF FLOOD FLOWS

Storm water and drainage flows are diverted to the Project site from other areas by the San Bernardino County Flood Control District and the City of Upland, where they are detained in Basin 6. The detained flows evaporate, gradually sink into the ground, or overflow during storm events into the Cucamonga Creek Channel.

The design of the Cucamonga Creek Channel allows for the addition of only 658 cubic feet per second between 20th Street and Baseline Road from the west side of the channel. The City of Upland's storm drain plan proposes these flows be delivered to Basin 6. Thus, Basin 6 is relied on by the County and City to detain the water until it can be discharged from the Project site and carried away by the Cucamonga Creek Channel. The diversion of storm flows and drainage to the Project site serves to protect off-site property owners from flooding. It also serves to conserve some flows so that they can percolate into the aquifer for extraction at a later time, and from other points in the aquifer, by water purveyors.

San Antonio Water Company discharges water it imports from the San Antonio Canyon to Basin No. 6 pursuant to a permit issued to it by the San Bernardino County Flood Control District. The water is discharged to Basin No. 6 through the 20th Street storm drain owned by the Flood Control District. San Antonio Water Company percolates water it imports from San Antonio Canyon, north of the Project site, at a sand and gravel removal site operated by Holiday Rock.

[1] San Antonio Lakes Specific Plan/EIR. Prepared by Turrini and Brink, 1988. Amended by LSA Associates, 1998. Page 316.

WATER QUALITY

The subject site is currently not expected to produce a significant amount of storm water pollution. The most likely storm water pollutant associated with the existing condition is sediment generated from on-site erosion.

SIGNIFICANCE CRITERIA

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist form used during preparation of the project Initial Study, which is contained in Appendix 15.1, *IS/NOP/Correspondence*, of this EIR. The Initial Study includes questions relating to hydrology, drainage and water quality. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Violation of any water quality standards or waste discharge requirements (refer to Impact Statements 5.8-1, 5.8-4 and 5.8-5);

- Substantial depletion of groundwater supplies or substantial interference with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted) (refer to Impact Statement 5.8-2);

- Substantial alteration of the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site (refer to Impact Statements 5.8-2 and 5.8-3);

- Substantial alteration of the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site (refer to Impact Statements 5.8-2 and 5.8-3);

- Creation or contribution of runoff water which would exceed the capacity of existing or planned storm water drainage systems or provision of substantial additional sources of polluted runoff (refer to Impact Statements 5.8-2, 5.8-3, 5.8-4 and 5.8-5);

- Otherwise substantial degradation of water quality (refer to Impact Statements 5.8-1, 5.8-4 and 5.8-5);

- Housing placement within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map (refer to Section 10.0, *Effects Found Not to be Significant*);

- Placement within a 100-year flood hazard area structures which would impede or redirect flood flows (refer to Section 10.0, *Effects Found Not to be Significant*); and/or

- Exposure of people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam (refer to Impact Statements 5.8-2 and 5.8-3).

Potential impacts associated with drainage and water quality are categorized below according to topic. Mitigation measures at the end of this Section directly correspond to the impact statements below.

SUMMARY OF PREVIOUS ENVIRONMENTAL DOCUMENTATION FOR THE COLONIES AT SAN ANTONIO

Development of the Specific Plan, as analyzed by EIR No. 800, would remove 440 acres from the San Bernardino County Flood Control District's spreading grounds. Basin 6 would be replaced with a recreational lake resulting in a loss of 2,300 acre-feet of flood storage capacity.

At the time of the study for EIR No. 800, the allowable discharge from the project area to the Cucamonga Creek Channel was 500 cubic feet per second (cfs). The projected combined on-site and runoff entering the site would be approximately 5,000 cfs. Flows would be regulated by the proposed lake to limit the off-site flows to Cucamonga Creek Channel to 500 cfs. The lake would store peak flows and act as a detention basin. An emergency spillway and clear watercourse would be provided on-site.

The 1998 Supplemental EIR states that Planning Areas 1, a portion of 18, and 19 will not affect the "lake". The first increment of development, as proposed, would provide a storm water detention basin in Planning Areas 18 and 19, which is included in the approved Specific Plan. The basin in the southeast portion of the project site (Planning Area 19) had capacity of 42 acre-feet. For a 100-year storm, the entire site generates a maximum volume of 36 acre-feet to that basin utilizing an outlet pipe into the core channel of 48-inch diameter. The maximum Q into the channel from the basin was calculated at approximately 250 cfs. All of these figures are based on a watershed tributary on-site area of approximately 366 acres. The Southeast Basin was determined to be adequate to handle drainage, since the basin has been sized to handle flows from the entire built out condition of the entire project.

Surface water drainage, sedimentation, storm water flows, and drainage infrastructure impacts associated with the development of the San Antonio Lakes Specific Plan were anticipated, designed, and mitigated by the analysis and mitigation undertaken for and analyzed in EIR No. 800. No additional impacts and/or mitigation was identified in the 1998 Supplemental EIR.

IMPACTS

WATER QUALITY - CONSTRUCTION

5.8-1 *Grading, excavation and construction activities associated with the proposed project may impact water quality due to sheet erosion of exposed soils and subsequent deposition of particles and pollutants in drainage areas. Impacts would be reduced to a less than significant level with incorporation of NPDES and SWPPP requirements.*

Construction controls are separated from typical water quality management programming because the measures are temporary and specific to the type of construction. The discharge of materials other than storm water from a particular site is prohibited. Pollutants of concern, as they relate to land development projects, would include silt and sediment, oil and grease, floatable trash, nutrients (such as fertilizers), heavy metals, pathogens (such as coliform bacteria) and other substances. These are referred to as "controlled pollutants," and their discharge into waters of the United States, including Cucamonga Creek, are prohibited.

The RWQCB by Order No. R8-2002-0012 on April 26, 2002 adopted a new General Permit for San Bernardino County and its incorporated cities including Upland. The new permit includes programs and policies the permittees are proposing to implement during the third term permit. The 2000 management plan and other requirements specified in the Order have been adopted to protect beneficial uses of all receiving waters. Treatment of storm water runoff according to volume-based calculations, or flow-rate based calculations, is not a requirement for new development. However, meeting the storm water discharge requirements may require some form of treatment controls to be employed in new development projects, on the basis of requiring Best Available Technology (BAT) and Best Conventional Technology (BCT).

During construction, soil loss could occur due to sheet erosion of exposed soils with the highest probability of this occurring along freshly-graded slopes. In anticipation of construction-related impacts, the State Water Resources Control Board adopted a Final General Construction Permit that requires the Applicant of any project over 5 acres to file for a National Pollution Discharge Elimination System (NPDES) Permit and abide by its conditions. The purpose of the NPDES Permit is to ensure the project area will eliminate/reduce construction-borne sediments and pollutants in storm water runoff. Construction sediment erosion can be adequately controlled through the application of standard construction Best Management Practices (BMPs).

During planned construction activities on site, a number of BMPs are proposed to be employed to control the discharge of sediment in storm water runoff, the primary pollutant of concern to be managed during construction. BMP selection would be guided by the California Storm Water Best Management Practice Handbooks for Construction Activity and the ASCE Urban Runoff Quality Management, WEF Manual of Practice No. 23 and 87. The BMPs would include placement of sandbag barriers, stabilized construction entrances, storm drain inlet protection (filters), desilting basins, and dust controls such as wetting of soil. A SWPPP would be

prepared for the various projects to take place within the Project Area and a Notice of Intent would be required to be filed with the SWRCB.

During construction, sandbag barriers are typically placed around the perimeter of an area being graded to prevent dirt and sediment laden storm runoff from exiting a site. Sandbags are also placed along swales, at the toe of slopes, and around storm drain inlets to reduce the erosive velocity of storm runoff and to promote the settling of sediment out of the flow. Storm runoff is directed to inlets that are protected by filter fabrics to screen out sediment before it enters the storm drain system. For larger areas of disturbed earth, a sediment basin may be installed in which the storm runoff ponds allow for settlement of the sediment to occur. An outlet pipe is set at the top of the ponded water for discharge of clean storm water. A stabilized construction entrance usually consists of a layer of heavy gravel that drains well to prevent mud conditions and helps to knock mud off the construction vehicle tires as they exit the site. A wheel wash may also be installed to remove mud from tires.

As part of its compliance the NPDES requirements, a Notice of Intent (NOI) would be prepared and submitted to the Regional Water Quality Control Board providing notification and intent to comply with the State of California general permit. Prior to construction, completion of a Storm Water Pollution Prevention Plan (SWPPP) is required for the construction activities on-site. A copy of the SWPPP is required to be available and implemented at the construction site at all times. The SWPPP is to outline the source control and/or treatment control BMPs that would avoid or mitigate runoff pollutants at a construction site to the "maximum extent practicable".

The goal of BMPs is to capture and treat "first flush" storm water run-off generated by surrounding and on-site watersheds. Water quality management BMPs for grading and construction scenarios may include the use of sand bags and straw bales for run-off diversion and velocity reduction, mulch topping, hydro-seeding and siltation fencing to prevent soil loss and measures to minimize vehicular leaking and spilling. Implementation of the specified requirements (i.e., compliance with the NPDES requirements and completion of a SWPPP) would reduce construction-related impacts to water quality to a less than significant level.

PROJECT DEVELOPMENT STORM FLOWS/PERCOLATION

5.8-2 *Development of the proposed project could interfere with groundwater recharge, such that there would be a substantial reduction in aquifer capacity, or a substantial lowering of the local groundwater table (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses. Impacts would be reduced to a less than significant level with the adoption of the Open Space Design Concept, and implementation of recommended mitigation measures.*

The Project area overlies a portion of the Cucamonga groundwater basin. The City of Upland, San Antonio Water Company, the Cucamonga County Water District, and others pump water from the basin, which is supplied by the subsurface flow of Cucamonga Creek, precipitation, and water imported by San Antonio Water Company from San Antonio Canyon. San Antonio Water Company deliberately applies the imported water to land surface in both the Project area and elsewhere,

from which it sinks into the groundwater basin. Based on estimates supplied by San Antonio Water Company for a 19-year period, it has imported and spread an average of 4,000 acre-feet annually.

The Project has been designed to accommodate the local purveyor's request to maintain the groundwater basin as a long-term water storage facility, and to offset any groundwater basin recharge losses. The central design feature of the Project is a landscaped and engineered Open Space, which restores approximately 62 acres of the spent gravel pit. The Open Space has been designed to provide surface water recharge areas to accommodate San Antonio Water Company's groundwater recharge requirements, flood control, passive recreation, storm water treatment, water conservation, and a riparian habitat area (refer to Exhibit 5.8-1, *Open Space Concept*).

The Open Space has been designed around the flood water detention system. The flood detention basin system is divided into three sub-elements – labeled Basin A1, A2, and A3 (refer to Exhibit 5.8-2, *Planning Area 16*). In order to develop a model that simulates the hydrology of the basin, assumptions have to be made about water inflow and outflow:

Inflow Assumptions

There are three sources of water flow into the flood detention basin. They are:

- Storm events from the 19th and 20th street storm drains – seasonal and random. Storm events are based on average annual rainfall and drainage basins of 220 acres and 2,140 acres respectively.

- San Antonio Water Company – continuous flow with seasonal component. Average water flow is based on SAWCO data and represents a 19-year average of 4,000 acre-feet. High and low flow years are also modeled.

- Nuisance flow – excess water from irrigation of residential and commercial landscapes; seasonal flow, continuous during irrigation season from April to October. Nuisance flow is assumed to reach a 6 cf/acre/day. Total area is 2,140 + 220 = 2,360 acres.

Outflow Assumptions

There are three uses of water. They are:

- Evapo-transpiration (ET) – water use by plants. There are three evapo-transpiration rates assumed; riparian/wetlands, grasslands, and Southern California natives.

- Percolation – ground water recharge in the three basins. The rates for each basin are 120, 120, and 30 minutes/inch, respectively for basins A1, A2 and A3. In addition, Basin A3 has been modeled with a percolation rate of 15 minutes/inch. Basin A3 requires the removal of accumulated sediments to maintain an average of 30 (or 15) minutes/inch. Underlying soils have

considerably faster percolation rates (1-2 minutes/inch), but accumulated sediments have greatly affected current percolation rates.

- Outflow – some water would leave the flood control basin. Periodically, rainfall events generate a surplus of water which will leave the basin but only when the inflow exceeds the storage capacity of Basin A3 which is 23.7 acre-feet.

Summary of Modeling Results

To summarize the results which are based on average yearly inflows, low flow and high flow are presented in the Table 5.8-1, *Inflow/Outflow Calculations*.

In addition, the model also predicts the following:

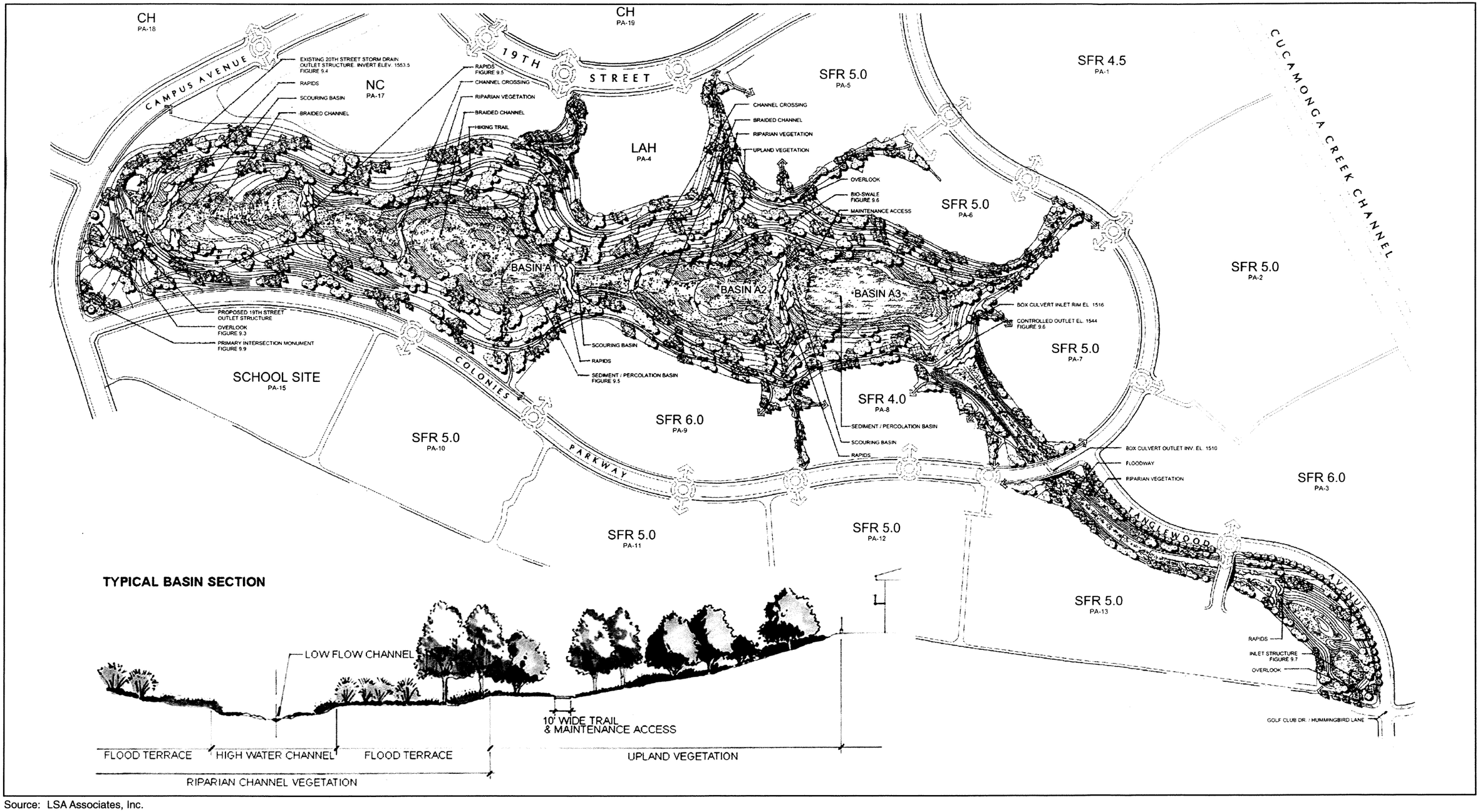
- During the rainy season (November to April), each basin would have standing water, and the connecting creek will vary in flow from 5 to 60 cfs.

- During the dry season, May to November, the creek connecting the A2 and A3 basins would most likely be dry. The amount of standing water in the first basin would likely average 50 percent of the rainy season. The A2 and A3 basins are likely to be dry or have significantly smaller areas of standing water.

Table 5.8-1
Inflow/Outflow Calculations

Description of Flow	Inflow (acre-feet)	Recharge (acre-feet)	Outflow (acre-feet)
Average Flow, A3 percolation = 30 minutes/inch	6,941	4,739	2,177
Average Flow, A3 percolation = 15 minutes/inch	6,941	5,692	1,223
Low Flow, A3 percolation = 30 minutes/inch	1,445	1,271	162
High Flow, A3 percolation = 15 minutes/inch	16,568	10,548	6,015
Source: Drainage System Study by Associated Engineering, April 2002.			

The effects of rainfall are the most difficult to predict because of the random nature of storms, and the highly variable year-to-year rainfall. The model is able to redirect flow through the basin using drought, average and wet years. Rainfall is reflected in the sharp peaks of each graph. San Antonio Creek flow is reflected in the step-like pattern. The data used are for the period 1982 through 2001 (courtesy of SAWCO). The third source of water is nuisance water which is estimated to be six cfs per acre of drainage basin. The model has a peaking component with the beginning and ends of the irrigation season less than the peak summer months. Evapo-transpiration varies according to the type of plants used.



Source: LSA Associates, Inc.

Not to Scale

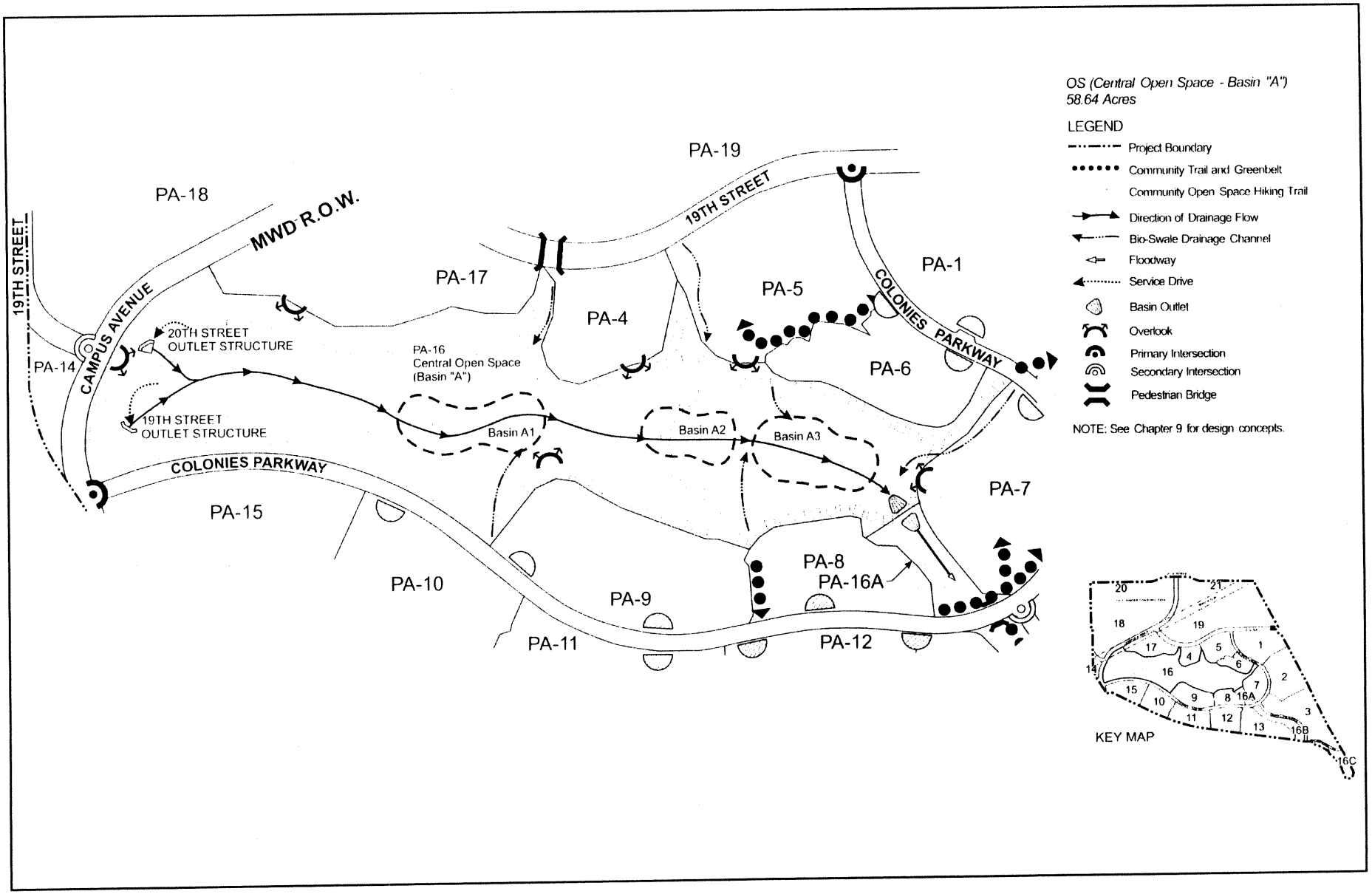
RBF CONSULTING PLANNING ■ DESIGN ■ CONSTRUCTION

06/02 JN 10-101248

CITY OF UPLAND
THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Open Space Concept

Exhibit 5.8-1



Source: LSA Associates, Inc.

Not to Scale

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

06/02

JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Planning Area 16

Exhibit 5.8-2

The percolation rate is a significant factor in determining the total amount of recharge. As Table 5.8-1 demonstrates, changing the percolation rate from 30 minutes/inch to 15 minutes/inch in Basin A3 results in a 14 percent increase in water recharging the basin. According to the April 2002 Associated Engineering Report, although these numbers are within values expected for the underlying sand and gravel, they must be assumed to be approximate until an actual basin test is performed. The model takes into account the possibility of a decreasing percolation rate as water rises on the adjacent slopes, i.e., the percolation on the sloped surfaces is less than that of the actual basin, and declines when moving up slope. The rate of change of percolation rate is a variable in the model. Intuitively, it is expected that the percolation rate to change for several reasons including presence of vegetation, slope, and failing hydraulic head.

Basins A1, A2, and A3 can be designed to have percolation rates as indicated in the model by manipulation of the soils, i.e., mixing of accumulated sediments and subsequent compaction. Selecting the various rates is also important in the type of vegetation that can be grown in each basin. Cattails will not grow in the proposed Basin A3 with a percolation rate of 30 minutes/inch. Appropriate vegetation on the slopes of Basin A3 must be selected that reflects the soils. Finally, Basin A3 would have to be maintained. This would require the periodic removal of accumulated sediments that are deposited after storm events. A Basin Maintenance Agreement is required between the Applicant and all other applicable entities to mitigate this impact.

Outflow is primarily dependent on storm flow. The larger the storm event, the greater the outflow. The model can be used to predict the outflow due to average, low and high rainfall. Basin A1, A2, and A3 have percolation rates and an ET rate for each plant group. The ET component is highly seasonal. Flow into and out of each basin is calculated by subtracting the ET losses and the percolation from the inflow. Percolation is area dependent, and although Basin A3 is listed with an area of 2.2 acres, the actual percolation area would change as Basin A3 fills with water. The maximum area at the overflow elevation is 3.88 acres in A3 with an additional 6 acres of Basin A2 also flooded. Since the additional depth of water in A2 would be 0.8 feet when A3 overflows, and since this occurs only approximately 15 times per year, this additional small contribution has not been included in the model. The percolation rate in Basin A3 is assumed to decline as water levels rise to reflect differing soil and vegetation conditions on the slopes.

Although based on preliminary design, impacts are not anticipated to be significant, a Detention Basin Study based upon Final Development Plans shall be required. In addition, a Revegetation Plan for the basins shall be required which accounts for optimal percolation rates and in accordance with treatment levels for storm water. The finalized Vegetation Treatment System shall be subject to agreement and approval by the affected agencies. Finally, a Basin Maintenance Agreement shall be required. Implementation of recommended mitigation measures would reduce impacts to a less than significant level.

Maintenance of Basin "A" and its associated flood control improvements is the subject of negotiations between the City of Upland, the San Bernardino County Flood Control District, San Antonio Water Company, Cucamonga County Water District, and the Project Proponent. By letter dated May 1, 2002 addressed to the Project

applicant, the General Manager and CEO of Cucamonga County Water District offered his agency's willingness to assume the maintenance and operational responsibility for basin A3 for recharge purposes, and agreed to coordinate maintenance activities with the San Bernardino County Flood Control District.

FLOODING IMPACTS

5.8-3 *The proposed project could result in flood control deficiencies to on- and off-site infrastructure facilities. Impacts would be reduced to a less than significant level with implementation of recommended mitigation measures.*

The proposed Project's on-site watershed covers a total of 465 acres. Included in this on-site total is the I-210 freeway currently under construction. Off-site drainage flows enter the project via the 20th Street Storm Drain and the 19th Street Storm Drain. Upon completion of the I-210's drainage system, these two (2) facilities will bring 100-year storm flows on-site from a total of 2,098 acres of watershed. While, the 20th Street Storm Drain (completed last year) is sized to handle all 100-year flows from its upstream watershed, the existing 19th Street Storm Drain is not.

Combining on-site and off-site watersheds, the total area tributary to The Colonies project is 2,563 acres. The project watershed was divided into eleven (11) Drainage System Service Areas (DSSA) based on the (1) the tributary areas of the proposed storm drains and (2) areas previously identified in drainage reports from the 19th and 20th Street storm drains and for the I-210 Freeway drainage improvements.

Phase I development in accordance with the 1998 Specific Plan Amendment, included several elements to the proposed storm drain concept. These elements, which are now completed or under construction, are shown as existing in Exhibit 5.8-3, *Proposed Storm Drain Concept*. The areas covered by the Phase I construction is shown in gray.

Current land uses proposed with the Specific Plan Amendment have been utilized and hydrology models were prepared to provide sizing of the drainage elements proposed to convey 100-year storm flows. In-tract storm drain facilities are speculative and would be addressed with each tract as they are designed. As previously noted, models have been structured to provide time of concentration and other hydrologic data for design of the detention basin system.

The proposed Specific Plan Amendment land uses, as well as development in accordance with the 1998 Specific Plan Amendment (currently under construction), fall into one of six different hydrologic cover types. These cover types, taken from the San Bernardino County Hydrology Manual describe the land use's tendency to generate runoff. Cover types vary in percentages of impervious area (pavement, building etc.) and condition of pervious areas (landscaped, barren etc). The six hydrologic cover types that are applicable to the proposed project existing and planned land uses are as follows:

Type I: (NC) Neighborhood Commercial, (CH) Commercial Highway zone, Freeway and (CF) Community Fire station – these land uses are

nearly entirely covered by pavement and buildings with an average of 10% of their acreage landscaped.

Type 7: Residential (R5) – densities are in the range of 5 to 7 dwelling units per acre with an average of 50% of their acreage landscaped.

Type 8: Residential (R4) – densities are in the range of 3 to 4 dwelling units per acre and are modeled as having 60% of their acreage landscaped.

Type 12: School – similar to Type 8 with 60% landscaping.

Basin A: 10% paved roads/structures/trails and 90% maintained landscaping.

Floodway: 15% paved roads/structures/trails and 85% maintained landscaping.

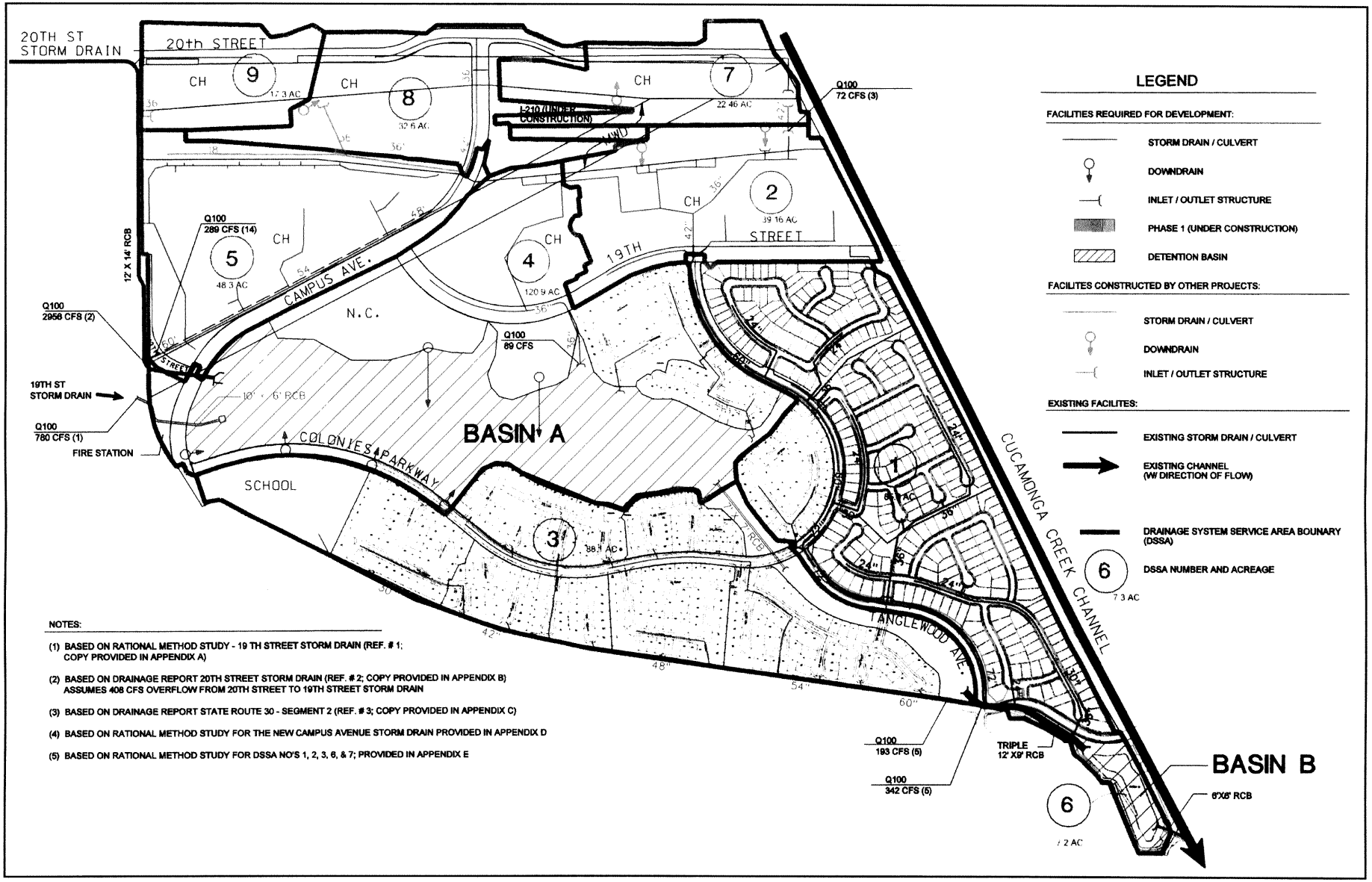
Basin B: 100% paved roads/structures/slope protection ~~and 90% landscaping~~.

Storm Drain System Concept

The proposed Project storm drain system concept divides runoff from the project watershed into two (2) detention basins designated as Basin A and Basin B. Basin B (now completed) has a small storage capacity of just over 35 acre-feet. This basin outlets to the Cucamonga Creek Channel located on the east property line. The peak rate of discharge from Basin B is limited by the Corps of Engineers to a maximum of 658 cfs during a 100-year storm. This limit was previously reviewed and approved as part of the 1998 Specific Plan Amendment (Phase I of The Colonies). To ensure that this limit is not exceeded, a majority of the project watershed must be directed into Basin A.

Retention of water within Basin A would also increase the amount of percolation that can occur. Storm flows up to a 100-year event would be discharged through a reinforced concrete box (RCB) out letting into the floodway south of Colonies Parkway. Storm flows in excess of a 100-year storm event would exit Basin A over a different controlled outlet, discharging into Planning Area 16A.

As stated in the April 2002 Drainage System Study by Associated Engineering, a computer model simulating the hydrology of the open space basin (consisting of sub-basins A1, A2, and A3 within Basin A) predicts that total groundwater recharge could be as high as 10,548 acre-feet but could average 5,692 acre-feet. Total outflow of water leaving the open space basin could be as high as 6,015 acre-feet but could average 1,223 acre-feet. (This model relies upon several assumptions to make its final calculations; therefore, if any of the quantities assumed vary significantly, the numbers generated by the model will vary. Thus, these quantities are meant to be informational only, relying on the best information available at the writing of the Specific Plan.) During the rainy season (November through April), each of the three sub-basins within the open space basin is predicted to have standing water, with the water flow between basins varying from five to 60 cfs. During the dry season (May through October), the amount of standing water in the first basin is predicted to average half of the rainy season level. The second and third basins are predicted



Source: Associated Engineers Inc., April 2002.

Not to Scale

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

06/02 JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Proposed Storm Drain Concept

Exhibit 5.8-3

to be dry or have significantly smaller amounts of standing water. The water flow path between the second and third basin would most likely be dry during the dry season.

When 100-year storm flows overtop the basin outlet, they would be conveyed via an outlet channel through the floodway drainage path, to a box culvert at the intersection of Tanglewood Avenue and Hummingbird Lane. The channel would be planted with native riparian vegetation. The flood waters would be directed through the box culvert beneath Tanglewood Avenue and Hummingbird Lane and channeled down toward detention Basin B (in Planning Area 16C) and would then be metered into Cucamonga Creek Channel.

Considered in the design of the storm drain concept layout is the collection and safe discharge of 100-year storm flows from the 19th Street Storm Drain, 20th Street Storm Drain and drainage infrastructure constructed as part of the I-210 project. The proposed Project storm drain and retention basin system would ultimately serve a watershed covering 2,563 acres. Dividing this watershed by storm drain system and/or points of discharge results in 11 service areas. These Drainage System Service Areas (DSSA) were further subdivided to provide sub-areas of a single coverage type and point of discharge. The drainage system service areas and sub-areas located within the project area are shown in Exhibit 5.8-3, *Proposed Storm Drain Concept*. Descriptions of the 11 DSSA's are presented below:

- DSSA No. 1. This drainage system service area includes all tracts developed in Phase I plus the 9.1-acre future residential tract north of the intersection of Tanglewood Avenue and Colonies Parkway. Flows from this service area are tributary to the Phase I storm drain system and Basin B.

- DSSA No. 2. This drainage system service area also drains to the Phase I storm drain system and Basin B. Some surface flows off I-210 and the discharges from downdrains and a freeway culvert are conveyed southerly through this service area. Flows are discharged into the Phase I storm drain at 19th Street and Colonies Parkway.

- DSSA No. 3. This drainage system service area also drains to the Phase I storm drain system and Basin B. Discharges from this service area are directed to the inlet of the triple 12'x9' RCB located at northwest of the intersection of Tanglewood Avenue and Hummingbird Lane. This culvert is referred to in this study as the "Hummingbird Culvert". The sub-areas within DSSA 3 total 88.10 acres.

- DSSA No. 4. This drainage system service area drains to Basin A. In addition to outlet structures for 19th Street Storm Drain and 20th Street Storm Drain, it is anticipated that five (5) additional culvert outlets would discharge flows from tracts on the north side of Basin A. Also, overside drains are anticipated to be necessary at the west end of Basin A to dewater portions of Colonies Parkway and Campus Avenue. A storm drain crossing 19th Street would be necessary to convey 100 years flows from the commercial site Planning Area 19C (PA-19C). All outlets and down drains would discharge onto slope protection and/or an energy dissipation pads. These erosion protection improvements would be designed in accordance with the overall

landscaping concept. Slope protection in ravines would be extended to the bottom of the basin. DSSA No. 4's sub-area 4J (2.20 AC) is anticipated to drain into the 19th Street Storm Drain then to Basin A. The remaining 118.70 acres of DSSAS No. 4 also drains to Basin A.

- DSSA No. 5. This drainage system service area delineates this tributary area of the new Campus Avenue storm drain south of the I-210 Freeway. Flows from this facility are discharged into the 20th Street Storm Drain. The combined flows from DSSA Nos. 5, 8, 9 and 10 are discharged into Basin A via the 20th Street Storm Drain and outlet structure.

- DSSA No. 6. This drainage system service area includes areas within and immediately adjacent to Basin B.

- DSSA No. 7. This drainage system service area drains to the culvert under State Route 210. Flows from this service area are conveyed through DSSA No. 23 into the Phase I storm drain system and Basin B. DSSA No. 7 contains 3 sub-areas totaling 22.46 acres. Flows from DSSA Nos. 1, 2 and 7 all discharge to the Hummingbird culvert via sidedrains. These drainage areas plus Basin B total 154.42 acres. Together with DSSA No. 3, the total area directly tributary to Basin B is 242.52 acres.

- DSSA No. 8. This drainage system service area drains to the new Campus Avenue storm drain. Flows from this service area are conveyed through the new Campus Avenue storm drain to the 20th Street Storm Drain and then into Basin A. DSSA No. 8 contains 19 sub-areas totaling 32.60 acres. Together DSSA Nos. 5 and 8 cover the entire watershed of the new Campus Avenue storm drain and total 80.90 acres.

- DSSA No. 9. DSSA is north of Interstate 210, extending to DSSA 5. Overflows at these locations during a 100-year storm would be 70 CFS and 339 CFS respectively. The watershed of the 20th Street Storm Drain totals 1755.00 acres.

- DSSA No. 10 (Off-Site Drainage). Together these drainage system service areas make up the watershed of the 20th Street Storm Drain. Flows from these service areas are conveyed by the 20th Street Storm Drain into Basin A. 20th Street at San Antonio and the "Farmer's Ditch System" (located east of Euclid) does not have the capacity to intercept 100% of 100 year storm flows. These overflows will be picked up by the storm system drain in the freeway depressed section and conveyed to Basin A via the 19th Street Storm Drain.

- DSSA No. 11. This drainage system service area consists of the watershed of the 19th Street Storm Drain. Flows from this service area are discharged directly to Basin A.

Hydrology Models

Hydrology models were prepared in order to project peak 100-year storm flows tributary to the major components of this conceptual storm drain and detention basin system. While preliminary sizing of these storm drains has been calculated by the

hydrology models, adjustments were made where necessary to match the upstream storm drain diameter and to utilize commonly manufactured sizes.

Hydraulic Grade Line Analysis

The proposed major storm drain elements are described below by Drainage System Service Area in which they are located.

- DSSA No. 1: completed
- DSSA No. 2: On-site extension of the I-210 culvert
  - 948 LF of 36" RCP
  - 266 LF of 42" RCP
- DSSA No. 3: Collector along southern boundary of the Colonies
  - 994 LF of 30" RCP
  - 582 LF of 42" RCP
  - 1,063 LF of 48" RCP
  - 467 LF of 54" RCP
  - 552 LF of 54" RCP
  - 632 LF of 60" RCP and outlet structure
- DSSA No. 4: Collector in 19th Street west of Colonies Parkway (for PA-19C)
  - 302 LF of 36" RCP
  - 421 LF of 36" RCP and outlet structure
- DSSA No. 5: Collector in new Campus Avenue north of Colonies Parkway
  - 135 LF of 42" RCP
  - 907 LF of 48" RCP
  - 999 LF of 54" RCP
  - 293 LF of 60" RCP
- DSSA No. 6: completed
- DSSA No. 7, 8 & 9: 100-year facilities now under construction
- DSSA No. 10: the 20th Street Storm Drain and outlet structure has been completed
- DSSA No. 11: On-site extension of the 19th Street Storm Drain
  - 621 LF of 10' x6' RCB

Not listed above are 100-year facilities that may be required to de-water in-tract sump areas. These include downdrains discharging into Basin A from adjacent tracts and roadways as well as several short connections from cul-de-sacs in DSSA 3.

Potential locations for in-tract storm drain lines within the future phases of the proposed project are depicted in Exhibit 5.8-3. This layout was used to established the limits and discharge points of the drainage system service areas. Sizing of these in-tract systems is speculative and would be subject to revisions based on actual

grading plans developed. The location of both the 100-year and in-tract facilities will need to be coordinated with landscaping plans in order to avoid placement of trees over a storm drain.

Ownership and Maintenance

Due to the regional function of some of the drainage facilities within the Project, assignment of responsibility for on-going maintenance, including compliance with storm water permits, is an important issue. These regional facilities include the following:

- 19th Street Storm Drain extension and outlet structure
- 20th Street Storm Drain – 12' x 14' RBC and outlet structure
- Basin A & 7' x 7' RCP outlet
- Floodway downstream of Basin A
- New Campus Avenue Storm Drain
- 36" RCP carrying Planning Area 19C flows to Basin A
- 36" and 42" RCP carrying Route 210 downdrain and culvert flows to Phase I storm drain
- 30" thru 60" RCP collector line on south boundary
- Phase I storm drain in Colonies Parkway and Tanglewood avenue
- Triple 12' x 9' RCB culvert under Hummingbird Lane
- Basin B and 6' x 6' RCB outlet

Ownership and operation of these facilities have not been determined and are subject to current discussions. Dedication or acquisition of rights-of-way would be required for the construction of drainage infrastructure on private property.

With respect to flood control protection, the proposed Detention Basins A and B and their associated inlet and outlet structures can be designed to pass two back-to-back 100-year storms over a five day period (a storm event required by the County of San Bernardino for these types of detention basin facilities). As such, the Colonies Master Drainage Report demonstrates that the storm drain facilities can be designed to provide 100-year storm protection to the areas to be developed within the subject site.

SAWCO Discharges

San Antonio Water Company (SAWCO) has historically discharged water into the project site for purposes of groundwater recharge. While the design of Basin A would incorporate features intended to facilitate groundwater recharge (dead storage), no agreement as yet has been reached with SAWCO for its use.

San Bernardino County Drainage Easements

The ~~County of~~ San Bernardino <u>County Flood Control District</u> currently holds a total of 7 easements relating to the operation and maintenance of flood control works within the project site. Construction of the project site would require review and possible modification to reflect ownership and maintenance agreements reached for the proposed detention basin system.

Drainage Right-of-Way Dedications

Right-of-way dedications would be required for private property occupied by drainage infrastructure. The nature of these dedications would be dependent upon the outcome of the ownership/maintenance agreement and final designs for tracts.

Based upon the preliminary design, impacts are anticipated to be less than significant. Given that the parameters of the drainage analysis are based upon preliminary and speculative data, mitigation measures are recommended to confirm the adequacy of drainage facilities. Mitigation includes adequate sizing and design in accordance with the approving/permitting agency requirements. Implementation of recommended mitigation measures would confirm that impacts would be less than significant.

STORM WATER QUALITY – PROJECT BUILDOUT

5.8-4 *Development of the proposed project may result in a long-term impacts to the quality of storm water and urban runoff, subsequently impacting water quality. Impacts would be reduced to less than significant levels with incorporation of recommended mitigation measures and State, County, and City Standards and Code requirements.*

Discharge from the project area through storm water drainages and structures would include runoff from development areas and open space. Storm water quality is generally affected by the length of time since last rainfall, rainfall intensity, land uses within the area, and the quantity of transported sediment. Typical urban water quality pollutants usually result from motor vehicle operations, oil and grease residues, fertilizer/pesticide uses, human/animal littering, careless material storage and handling, and poor property management. A majority of pollutant loads are usually washed away during the first flush of the storm occurring after the dry-season period.

Street surfaces are the primary source of pollution in urban areas. The street-generated pollutants typically contain atmospheric pollution, tire-wear residues, petroleum products, oil and grease, fertilizer and pesticide washoffs, chemical spills, as well as animal droppings and litter types of wastes. The pollutants are washed from street surfaces by a rainfall adequate enough to produce sufficient runoff. On-site and off-site drainage courses and riparian areas including creeks, streams, rivers and surface water bodies such as ponds and lakes are not anticipated to be negatively affected by development of the project. The proposed project is required to incorporate post-development measures and devices of which are designed to minimize pollutants, debris and sediments.

The proposed project's central landscape feature would consist of approximately 59 acres of restored open space. In addition to providing a major open space amenity and a visual focus, the proposed Specific Plan Amendment states that central open space area would allow for passive recreation, provide storm water treatment, flood control and water conservation, and function as a riparian habitat area (refer to Exhibit 5.8-1, *Open Space Concept*). During peak storm water runoff periods, the open space amenity would be closed and secured to provide for pedestrian safety.

The open space area is proposed to accommodate local and regional storm water flows which currently run through the site to ensure that the capacity of the adjacent Cucamonga Creek Channel is not be exceeded. Substantial flood flow from off-site areas would be discharged into the central open space area from the 19th Street and 20th Street drainage structures, as well as from other adjacent developments. A controlled outlet and a percolation/sediment basin would be constructed at the downstream end of the basin to detain low-volume flows thereby increasing the "treatment time" for wetland vegetation to remove urban contaminants in storm water runoff. This supplements the pre-treatment of drainage and runoff required by law under the NPDES Permit issued by the California Regional Water Quality Control Board. The controlled outlet would be constructed of local rock, or of artificial rock, to blend with the setting while providing structural functions.

The existing basin, which resulted from past sand and gravel extraction activities, is proposed to be graded and re-contoured to provide the necessary capacity for flood control purposes, and to establish suitable areas for the land uses that are to surround the basin. Drop structures consisting of rock ledges to create waterfalls or "rapids" would be established at four locations at generally equal intervals along the (east-west) axis of the basin floor. The drop structures would be constructed of local rock, or of artificial rock, to blend with the setting while providing structural functions. The drop structures are anticipated to reduce the velocity of flood flows entering the basin, and allow for low volume flows to spread laterally and support riparian vegetation. Below the waterfalls, an engineered basin would reduce the velocity of flood flows, and spread the water through the braided channels to increase the effectiveness of uptake and removal of water-borne contaminants from the upstream storm water runoff by riparian vegetation. The braided, sand-bottom channel would be constructed in the basin floor to convey low-volume storm flows and nuisance flows. The sand channel would be a suitable substrate for percolation to improve groundwater recharge. Additionally, the sand channel and adjacent vegetation would function as a "bio-filter", removing contaminants from first-flush storm flows and from nuisance flows. Sediment and percolation basins would be established below the braided channels where reduced flow velocities would allow sediments to drop out of suspension and groundwater recharge to take place.

Tributary "bio-swales" would be graded to drain into the basin from the surrounding planning areas. The swales would convey runoff from commercial and residential areas and roadways. The swales would be designed and constructed to remove certain contaminants by water filtration and bio-accumulation (uptake of water through native vegetation). The swales would be constructed of either rip-rap or interlocking erosion control pavers, which allow the infiltration of water into the soil. Native grass vegetation would be planted between the rip-rap or interlocking erosion control pavers, creating water uptake through the plants.

Project grading and development would change the existing site drainage, run-off and erosion characteristics. However, project development is anticipated to improve the site's drainage, runoff and erosion characteristics through implementation of the County's current drainage standards. Mud flow potential within the project area would be reduced with the implementation of slope stabilization and remediation. Additionally, the improvements to the conveyance flows to reduce first flush flow would improve run-off and drainage characteristics by implementing a design which allows storm water to percolate into the ground. Percolation of storm water would

act as a filter for contaminants, but could also contribute to sedimentation at the drainage output. This potential impact may be reduced by applying sediment traps into the drainage system prior to conveyance off-site.

Storm water runoff generated from within the Project would be managed in accordance with existing laws and regulations established under the National Pollutant Discharge Elimination System (NPDES) Program of the Clean Water Act (CWA), Section 402; the State of California NPDES General Permit adopted by the State Water Resources Control Board (SWRCB) under Water Quality Order No. 99-08-DWQ; the San Bernardino County NPDES General Permit No. CAS618036 adopted April 26, 2002 by the California Regional Water Quality Control Board, Santa Ana Region (RWQCB) with the City of Upland and the County as co-permittees, under Order No. R8-2002-0012; the associated San Bernardino County Municipal Storm Water Management Program (MSWMP) (formerly known as the Drainage Area Management Plan); and the City of Upland Municipal Code, Sanitation and Health Chapter, Section 5880.8.

Storm water runoff generated from outside of the Project site will be managed in accordance with the same laws and permits as affect all of the water which is discharged to the Project site. The California Department of Transportation is subject to its own NPDES General Permit issued by the SWRCB for storm water management pursuant to its Order No. 99-06-DWQ.

STORM WATER QUALITY IN BASIN "A"

The pits at the site receive off-site storm runoff from the City of Upland and the undeveloped on-site area of 465 acres. Basin "A" within the Project Area is proposed to have multiple functions. Among these is a storm drain detention basin for flood control purposes, a ground water recharging area for the local water agencies, and a recreational/open space area. Basin "A" would receive off-site storm runoff from approximately 2,098 acres within the City of Upland and the County as well as from the proposed Interstate 210. The areas within the Project Area that drain into Basin "A" are as follows:

Commercial area north of Freeway	29.0	acres
Commercial / Residential south of Freeway	121.4	acres
State Route 30 / I-210 Freeway	24.1	acres
Basin "A" Open Space Area	61.7	acres

The developed area of the Project that drains into Basin "A," not including the freeway or the basin, is 150.4 acres. The total watershed that drains into Basin "A," including Basin "A" itself, is 2,334 acres. Using these figures, the developed area of the Project Area that drains into Basin "A" represents only 6.4 percent of the total watershed. Since the project has no control over 90 percent of the watershed, it has no ability or obligation to improve the storm water quality from these areas. Given that the Applicant for a grading permit would be required install Best Management Practices to satisfy NPDES storm water discharge requirements, the impact to water quality within Basin "A" is expected to be less than significant.

STORM WATER QUALITY IN BASIN "B"

The remaining 228.8 acres of on-site development would drain to the 5.55 acre smaller Basin "B" located at the southeast corner of the project area. Storm runoff here is detained and released into Cucamonga Creek Channel during storm events, in accordance with criteria established by the Army Corps of Engineers.

WATER QUALITY REQUIREMENTS

A Water Quality Management Plan (WQMP) would be required pursuant to the County MSWMP. The WQMP would outline the BMPs to be used to satisfy storm water discharge criteria for the post-construction or operational phase of the project or projects. BMP selection is based on using Best Available Technology (BAT) that is economically feasible to achieve the goal of pollutant reduction to the maximum extent practicable. BMP selection would be guided by the California Storm Water Best Management Practice Handbooks for Commercial/Industrial projects and Municipal projects. The County of San Bernardino also has a publication entitled "Guidelines For New Development and Redevelopment" which presents information on BMPs and preparation of a Water Quality Management Plan.

Under the current San Bernardino County's NPDES General Permit, no numeric effluent limitations are being applied to storm water discharges and no sampling or monitoring programs are required by the owner/developer. Current regulations do not require the treatment of storm water runoff before it enters a public storm drain system. However, under specific land uses such as retail gasoline outlets, treatment of storm water flow is required as discussed in the County's MSWMP.

The City of Upland has adopted Municipal Code Section 5880.8, which makes certain discharges unlawful. The Municipal Code exempts certain types of discharges from prohibition. Those discharges which are exempt include landscape irrigation and lawn watering, foundation and footing drains, air conditioning condensation, individual residential car washings, and flows from riparian habitats and wetlands.

A number of Structural and Non-Structural BMPs would be employed within the Project Area to achieve the storm water quality objectives. Non-Structural BMPs may include guidelines for outdoor loading/unloading of materials, building and grounds maintenance, waste handling and disposal, solid waste management, employee training, and catch basin stenciling with messages such as "No Dumping – Drains to Ocean."

Structural or Treatment Control BMPs are a class of physical structures designed to remove pollutants of concern from storm water runoff. In general, these devices target silt and sediment, oil and grease, and floatable trash. Where considered appropriate, these devices may be installed within a Project Area to meet the NPDES objectives and requirements of the local agencies. Examples of Treatment Control BMPs include Infiltration, Wet Ponds, Biofilters such as turf-lined swales, Oil/ Water Separators, and Media Filtration such as catch basin inserts (Fossil Filter or Triton Filter brands), centrifugal force units (CDS or Stormceptor brands) and sand filters. These BMPs are considered the best available technologies for the removal of storm water pollutants. The flood control detention basin itself constitutes a

Treatment Control BMP for the purpose of meeting NDPES regulations since the basin can remove pollutants of concern before being discharged into the downstream receiving waters by employing sedimentation, infiltration and wet pond features.

Most Treatment Control BMPs are designed to handle only low flows which are known to carry the most pollutants. The "First Flush" approach involves treating the initial storm runoff. When storm runoff exceeds the ability of the devices to treat the flow, bypass features allow the higher flow to move on for flood protection purposes. Storm water pollutant flows are highest at the beginning of the rainy season, after light rains, and during dry weather when nuisance water is carried in the storm drain systems.

BMPs to address coliform levels would need to focus on source controls to reduce the exposure of fecal matter to storm runoff. This would involve education on the part of property owners and perhaps the passing of local ordinances or CC&R provisions for the picking up of animal feces in yards and in street parkways in residential areas. The Project would contribute to pathogen reduction by using sanitary sewer systems that convey sanitary waste to a treatment plant. No septic systems would be used in the Project.

NON-POINT SOURCE POLLUTANTS – PROJECT BUILDOUT

5.8-5 *Development of the proposed project may result in long-term increases in non-point source pollutant levels. Impacts would be reduced to less than significant levels with incorporation of recommended mitigation measures and State, County and City Standards and Code Requirements.*

A net effect of urbanization can be to increase pollutant export over naturally occurring conditions. The impact of the higher export can be on the adjacent streams and also on the downstream receiving waters. However, an important consideration in evaluating storm water quality from the project is to assess if it impairs the beneficial use to the receiving waters. The receiving water is Cucamonga Creek. The reach of Cucamonga Creek which could be adversely impacted has been listed on the Regional Water Quality Control Board's Section 303d list as an impaired water body. Total maximum daily load for coliform has been established for the reach of Cucamonga Creek.

Non-point source pollutants have been characterized by the following major *categories* in order to assist in determining the pertinent data and its use. Receiving waters can assimilate a limited quantity of various constituent elements, but there are thresholds beyond which the measured amount becomes a pollutant and results in an undesirable impact. Background of these standard water quality categories provide understanding of typical urbanization impacts.

Sediment. Sediment is made up of tiny soil particles that are washed or blown into surface waters. It is the major pollutant by volume in surface water. Suspended soil particles can cause the water to look cloudy or turbid. The fine sediment particles also act as a vehicle to transport other pollutants including nutrients, trace metals, and hydrocarbons. Construction sites are the largest source of sediment for urban areas under development. Another major source of sediment is streambank erosion,

which may be accelerated by increases in peak rates and volumes of runoff due to urbanization.

Nutrients. Nutrients are a major concern for surface water quality, especially phosphorous and nitrogen, can cause algal blooms and excessive vegetative growth. Of the two, phosphorus is usually the limiting nutrient that controls the growth of algae in lakes. The orthophosphorous form of phosphorus is readily available for plant growth. The ammonium form of nitrogen can also have severe effects on surface water quality. The ammonium is converted to nitrate and nitrite forms of nitrogen in a process called nitrification. This process consumes large amounts of oxygen which can impair the dissolved oxygen levels in water. The nitrate form of nitrogen is very soluble and is found naturally at low levels in water. When nitrogen fertilizer is applied to lawns or other areas in excess of plant needs, nitrates can leach below the root zone, eventually reaching ground water. Orthophosphate from auto emissions also contributes phosphorus in areas with heavy automobile traffic. As a general *rule of thumb*, nutrient export is greatest from development sites with the most impervious areas. Other problems resulting from excess nutrients are 1) surface algal scums, 2) water discolorations, 3) odors, 4) toxic releases, and 5) overgrowth of plants. Common measures for nutrients are total nitrogen, organic nitrogen, total Kjeldahl nitrogen (TKN), nitrate, ammonia, total phosphate, and total organic carbon (TOC).

Trace Metals. Trace metals are primarily a concern because of their toxic effects on aquatic life, and their potential to contaminate drinking water supplies. The most common trace metals found in urban runoff are lead, zinc, and copper. Fallout from automobile emissions is also a major source of lead in urban areas. A large fraction of the trace metals in urban runoff are attached to sediment and this effectively reduces the level which is immediately available for biological uptake and subsequent bioaccumulation. Metals associated with the sediment settle out rapidly and accumulate in the soils. Also, urban runoff events typically occur over a shorter duration which reduces the amount of exposure which could be toxic to the aquatic environment. The toxicity of trace metals in runoff varies with the hardness of the receiving water. As total hardness of the water increases, the threshold concentration levels for adverse effects increases.

Oxygen-Demanding Substances. Aquatic life is dependent on the dissolved oxygen in the water and when organic matter is consumed by microorganisms then dissolved oxygen is consumed in the process. A rainfall event can deposit large quantities of oxygen demanding substance in lakes and streams. The biochemical oxygen demand of typical urban runoff is on the same order of magnitude as the effluent from an effective secondary wastewater treatment plant. A problem from low oxygen results when the rate of oxygen-demanding material exceeds the rate of replenishment. Oxygen demand is estimated by direct measure of oxygen and indirect measures such as biochemical oxygen demand (BOD), chemical oxygen demand (COD), oils and greases, and total organic carbon (TOC).

Bacteria. Bacteria levels in undiluted urban runoff exceed public health standards for water contact recreation almost without exception. Studies have found that total coliform counts exceeded EPA water quality criteria at almost every site and almost every time it rained. The coliform bacteria that are detected may not be a health risk in themselves, but are often associated with human pathogens.

Oil and Grease. Oil and grease contain a wide variety of hydrocarbons some of which could be toxic to aquatic life in low concentrations. These materials initially float on water and create the familiar rainbow-colored film. Hydrocarbons have a strong affinity for sediment and quickly become absorbed to it. The major source of hydrocarbons in urban runoff is through leakage of crankcase oil and other lubricating agents from automobiles. Hydrocarbon levels are highest in the runoff from parking lots, roads, and service stations. Residential land uses generate less hydrocarbons export, although illegal disposal of waste oil into storm waters can be a local problem.

Other Toxic Chemicals. Priority pollutants are generally related to hazardous wastes or toxic chemicals and can be sometimes detected in storm water. *Priority pollutant scans* have been conducted in previous studies of urban runoff which evaluated the presence of over 120 toxic chemicals and compounds. The scans rarely revealed toxins that exceeded the current safety criteria. The urban runoff scans were primarily conducted in suburban areas not expected to have many sources of toxic pollutants (with the possible exception of illegally disposed or applied household hazardous wastes). Measures of priority pollutants in storm water include: 1) phthalate (plasticizer compound), 2) phenols and creosols (wood preservatives), 3) pesticides and herbicides, 4) oils and greases, 5) metals.

Street surfaces are the primary source of pollution in urban areas. The street-generated pollutants typically contain atmospheric pollution, tire-wear residues, petroleum products, oil and grease fertilizer and pesticide washoffs, chemical spills as well as animal droppings and litter types of wastes. The pollutants are washed from street surfaces by a rainfall adequate enough to produce sufficient runoff. On-site and off-site drainage courses and riparian areas including creeks, streams, rivers and surface water bodies such as ponds and lakes are not anticipated to be negatively affected by development of the project. The proposed project is required to incorporate measures and devices which are designed to minimize pollutants, debris and sediments.

Project design and implementation would include operational BMPs for the purpose of minimizing pollutants, debris and sediment output. The proposed project drainage system would include debris and detention basins for sediment settling, catch basins for debris filtration, in-line storm water filters and fossil filters for pollutant filtration and separation.[2] California Title 22 regulations include pollutant concentration thresholds for storm water quality. The proposed project's storm water management system would be required to be designed to reduce the typical waterborne pollutant concentrations to below the Title 22 thresholds.

Implementation of recommended mitigation, which includes a SWPPP and implementation of structural and non-structural BMPs, impacts would be reduced to a less than significant level.

[2] Low flows are treated with a technology referred to as Continuous Deflective Separation (CDS). Flows enter into the units main chamber and continue in a circular motion through a separation screen. Pollutants swirl to the center of the chamber and settle into a central sump. Absorbent materials located in another chamber known as the separation chamber are expected to capture up to 90% of oil and grease. Maintenance of the treatment units must occur up to 3 times a year.

CUMULATIVE IMPACTS

5.8-6 *The proposed project along with cumulative projects may result in increased drainage and water quality impacts. Impacts are evaluated and mitigated to a less than significant level on a project-by-project basis.*

Although several cumulative projects would be located in areas that have been previously disturbed or developed, cumulative development could contribute to higher runoff volumes and water quality affects. Development projects are required to mitigate potential impacts to less than significant levels on a project-by-project basis. No substantial changes in absorption rates, drainage patterns, surface runoff, surface and groundwater quality, groundwater flow and the quantity of groundwater are anticipated to occur as a result of implementation of the cumulative projects.

MITIGATION MEASURES

This section directly corresponds to the identified Impact Statements in the impacts subsection.

WATER QUALITY – CONSTRUCTION

5.8-1a Prior to issuance of any grading permit, a General Construction Activity Storm Water Permit shall be obtained from the State Water Resources Control Board. Such permits are required for specific (or a series of related) construction activities which exceed five acres in size and include provisions to eliminate or reduce off-site discharges through implementation of a Storm Water Pollution Prevention Plan (SWPPP). Specific SWPPP provisions include requirements for erosion and sediment control, as well as monitoring requirements both during and after construction. Pollution-control measures also require the use of best available technology, best conventional pollutant control technology, and/or best management practices to prevent or reduce pollutant discharge (pursuant to definitions and direction).

5.8-1b Prior to issuance of any building permit, specified vehicle fueling and maintenance procedures and hazardous materials storage areas shall be designated to preclude the discharge of hazardous materials used during construction (e.g., fuels, lubricants and solvents). Such designations shall include specific measures to preclude spills or contain hazardous materials, including proper handling and disposal techniques and use of temporary impervious liners to prevent soil and water contamination.

5.8-1c Concurrent with grading permit application submittal, the Applicant shall submit a Storm Water Pollution Prevention Plan (SWPPP), subject to approval by the Regional Water Quality Control Board, which would include the following BMPs:

- Development of temporary stream crossings to minimize potential increases in sediment transport and wetlands impacts.

- Construction road utilizing aggregate over geotextile fabric stabilization to minimize erosion.
- Utilization of sand bags, straw bales and silt fences to divert and slow storm water run-off.
- Utilization of temporary earth dikes, drains and swales as a form of spill protection and storm water run-off control.
- Development of a maintenance plan for grading equipment.
- Development of a Spill Prevention and Control Plan for construction-related substances.
- Development of a Use and Disposal Plan for hazardous materials.

PROJECT DEVELOPMENT STORMFLOWS/PERCOLATION

5.8-2a Prior to issuance of grading permits, a Detention Basin Study shall be prepared and submitted to the City of Upland for review and approval to confirm adequacy of the proposed detention system. The Detention Basin Study should account for optimal percolation rates in accordance with established standards for storm water treatment.

5.8-2b A finalized and approved Vegetation System Plan which accounts for optimal percolation rates in accordance with established standards for storm water treatment shall be approved by the City and applicable agencies prior to issuance of grading permits.

5.8-2c A Basin Maintenance Agreement is required between the Project Applicant and all other applicable agencies for operation and maintenance of the basin system and drainage facilities. The Agreement shall confirm ownership and operation of facilities.

FLOODING IMPACTS

5.8-3a Drainage systems within or crossing 19th, 20th, the new Campus Avenue and along the southern boundary of the site shall be sized to collect and convey 100-year storm flows.

5.8-3b Due to the preliminary nature of in-tract storm drain facilities, individual tract maps shall be further reviewed by the City of Upland, based upon final grading plans to confirm design, sizing and facilities to meet required standards.

5.8-3c Tracts north of Basin A shall be designed to dewater in-tract sump areas for 100-year storm surface flows.

5.8-3d Existing easements held by the ~~County of~~ San Bernardino County Flood Control District for on-site flood control shall be reviewed in consideration of ownership and maintenance agreements that are to be established.

5.8-3e Prior to Grading Permit issuance, the Final Hydrology and Hydraulic Study shall be approved by the County of San Bernardino.

WATER QUALITY – PROJECT BUILDOUT

5.8-4a The project applicant shall prepare a Storm Water Pollution Prevention Plan (SWPPP), subject to approval by the Regional Water Quality Control Board, which shall cite water quality control measures for the project. The approved SWPPP shall be submitted concurrent with grading permit application to the City Engineer. The SWPPP may include the following components:

- Description of significant potential sources of pollutants in storm water discharges.
- A listing of all chemicals which may contact storm water and estimates of concentrations.
- An estimate of the area of impervious surfaces.
- Source controls.
- Isolation/separation of hazardous from non-hazardous pollutant sources.
- Treatment/conveyance structures and their impacts on groundwater quality.
- Design criteria for the structures/ conveyances.
- Maintenance schedules.
- Erosion control measures.
- An estimate of pollutant reduction levels expected from implementing the controls.
- Establishment of internal record keeping and internal reporting procedures.
- Eliminate illicit discharges of storm water to storm water system.
- Develop and implement a storm water monitoring, sampling, testing, and reporting program.
- Develop a special management plan for loading dock areas and vehicle refueling and maintenance areas.
- Installation and maintenance of oil/water separators for all parking lot areas.

5.8-4b Non-structural BMPs shall be incorporated into the project, to the satisfaction of the Regional Water Quality Control Board. The applicable BMPs include:

- Plant materials that require fertilization and pest control shall be maintained in accordance with San Bernardino County Management Guidelines for Use of Fertilizers and Pesticides.

- BMP structures and facilities shall be cleaned and maintained on a scheduled basis by a City-appointed person.

- All hazardous wastes shall be handled in accordance with Title 22 of the California Code of Regulations and relevant sections of the

California Health and Safety Code regarding hazardous waste management.

5.8-4c Routine structural BMPs shall be incorporated into the proposed project design to facilitate future water quality measures, to the satisfaction of the City Engineer, prior to issuance of grading permits.

NON-POINT SOURCE POLLUTANTS – PROJECT BUILDOUT

5.8-5 Refer to Mitigation Measures 5.8-4a, 5.8-4b and 5.8-4c. No additional mitigation measures are recommended.

CUMULATIVE IMPACTS

5.8-6 No mitigation measures are recommended.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

No significant impacts related to hydrology, drainage, water quality or groundwater resources have been identified following implementation of mitigation measures and/or compliance with applicable policies and standards.

5.9 PUBLIC SERVICES AND UTILITIES

Information in this Section was obtained from correspondence from public service and utility agencies (refer to Appendix 15.1, *Initial Study/Notice of Preparation/ Correspondence*). Other references include The Colonies at San Antonio Water Evaluation prepared by RBF Consulting (December, 2001), and The Colonies at San Antonio Sewer Study by Associated Engineers, Inc. (April, 2002). Public services include fire protection, police protection, schools, libraries, recreation and roadway maintenance. Utilities and service systems include water, wastewater, solid waste, electricity and natural gas services.

This Section includes an Existing Conditions discussion that provides background information necessary to understand potential impacts of the proposed Project. The criteria by which an impact may be considered potentially significant is provided along with a discussion of impacts pursuant to Appendix G of the CEQA Guidelines. Mitigation measures are identified in an effort to reduce potential impacts to less than significant levels.

EXISTING CONDITIONS

FIRE PROTECTION

The City of Upland Fire Department (UFD) provides fire protection and emergency medical services to the Project area from three local stations. Table 5.9-1, *Fire Protection Facilities*, describes the location, equipment/personnel and response time for each station.

Table 5.9-1
Fire Protection Facilities

Facility	Location	Equipment/Personnel	Response Time
Station No. 161	475 North 2nd Avenue	1 Pumper Unit; 3 Personnel; and Basic Life Support EMS	7-10 minutes
Station No. 162	2046 N. San Antonio Avenue	1 Pumper Unit; 3 Personnel; and Basic Life Support EMS	5-7 minutes
Station No. 163	Benson Avenue/13th Street	2 Fire Engines (1 Front Line/1 Reserve) 3 Personnel; and Basic Life Support EMS	10-12 minutes

EMS = Emergency Medical Staff

The Fire Department operates under automatic aid agreements with the Cities of Ontario, Montclair, and Rancho Cucamonga. These agreements are to provide first-response in the event additional equipment and manpower is necessary during a multi-alarm fire or in the event these stations could provide first alarm response with the closest available equipment.

The Insurance Service Organization (ISO) is a private insurance research group that periodically assesses the degree to which fire threatens geographic areas. This rating is based on the type of vegetation or structures present, climate, and the availability of fire protection services. The ISO uses a scale of I (best protection or lowest threat) to X (least protection or higher threat). Presently, the City of Upland has an ISO rating of II.

POLICE PROTECTION

Police protection to the Project site for both crime and traffic services is provided by the City of Upland Police Department. The Police Station is located at 1499 West 13th Street in Upland, approximately 4.8 miles southwest of the Project site. The Police Department is currently staffed by a total of 112 full-time personnel, including 76 sworn and 35 support (non-sworn) personnel.[1]

The City is divided into four quadrants at the intersection of Foothill Boulevard and Euclid Avenue. Each quadrant is designated as a patrol beat (i.e., Beat No. 1 through Beat No. 4). The Project area is located in the northeast section of Beat No. 3. One officer in one vehicle patrols Beat No. 3 each 8-hour shift, which amounts to three shifts patrolling Beat No. 3, 24-hours a day, seven days a week. The Police Department's median response times citywide are as follows:

- Priority 1 call (highest priority): 4 minutes - 49 seconds;
- Priority 2 call (including non-emergency calls): 14 minutes - 53 seconds; and
- Priority 3 call (including minor reports): 33 minutes - 47 seconds.

The response time from the Police Station to the Project site is approximately ten minutes.

Service Ratio

Officer-to-population ratios are an indication of the number of law enforcement officers available to service a given population. The Police Department has identified a target staffing level of 1.5 sworn officers per 1,000 population.[2] This target staffing level was based on a survey of the surrounding Cities' Police Departments conducted by the Police Department. Assuming a City population of 70,112 persons[3] and the availability of 76 sworn officers, the City's existing officer to

[1] The 76 sworn personnel estimate was extrapolated based on data provided in correspondence from Captain John Cannon, Operations Commander, City of Upland Police Department (June 4, 2001) and the Upland Police Department Impact Report - The Colonies at San Antonio (prepared by Martin E. Thouvenell, Chief of Police).

[2] Upland Police Department Impact Report, The Colonies at San Antonio, prepared by Martin E. Thouvenell, Chief of Police, No Date, Page 2.

[3] Report E-5, *City and County Population and Housing Estimates*, California State Department of Finance, January 2001.

population ratio is 1.08 officers per 1,000 population, which is below the Department's target ratio (1.5 officers per 1,000 population).

SCHOOLS

The Project site is situated within the Upland Unified School District (UUSD). The UUSD provides education for grades Kindergarten through 12. Table 5.9-2, *Upland Unified School District Facilities*, details the UUSD schools serving the Project site and includes current enrollment and maximum capacity. As indicated in Table 5.9-2, several schools within the UUSD are presently at or above maximum capacity. In order to meet the existing need, portable classrooms have been located on these school campuses.

Table 5.9-2
Upland Unified School District Facilities

School	Grade Level	Current Enrollment	Maximum Capacity
Foothill Knolls Elementary / Veterans Court/13th Avenue	K-6	526	490
Sierra Vista Elementary / East 14th Street	K-6	550	608
Valencia Elementary / West 22nd Street	K-6	726	712
Magnolia Elementary / West 15th Street	K-6	612	622
Upland Junior High / West 11th Street	7-8	1,008	909
Pioneer Junior High / 245 W. 18th Street	7-8	1,010	945
Upland High School / 569 W. 11th Street	9-12	3,571	3,375

Senate Bill (SB) 50

The major source of school construction and modernization had been the State School Construction Program until the passage of SB 50, School Facility Program. SB 50 authorized a $9.2 billion K-12 school and higher education bond to be presented to the State's voters on November 3, 1998. In addition, SB 50 revised developer fee and mitigation procedures for school facility purposes and reformed the State program that distributes State bond funds to K-12 school districts. On November 3, 1998, State voters approved Proposition 1A, a $9.2 billion bond measure, which provides funding for higher education facilities, K-12 facilities, modernization of older schools, additional funding for districts in hardship situations and funding for class size reduction. With the passage of Proposition 1A, the Mira powers[4] of local governments were suspended on November 4, 1998 until 2006, which is the length of time the State bond money would be available to local school

[4] The *Mira, Hart and Murrieta* court cases held that the provisions of the 1986 School Facilities Act limiting developer school fees to an initial amount of $1.50 per square foot are only applicable to adjudicative or quasi-judicial acts (such as tentative tract maps or conditional use permit approvals) and do not apply to legislative acts (such as general plan amendments, specific plan adoption or amendment or zoning amendments). The Mira, Hart and Murrieta decisions provided school districts and local agencies the legal authority under CEQA to require new development to fully mitigate school impacts in connection with legislative approvals, and allowed a City Council or Board of Supervisors to deny or refuse to approve a project based upon impacts to school facilities.

districts. As a result of this, school districts would continue to levy a school fee under existing rules (Government Code Section 65995, 65995.5 and 65995.7), which is currently up to $1.93 per square foot for residential construction and $0.31 per square foot for commercial and industrial development. SB 50 also established three levels of school fees: Level One, Level Two, and Level Three Fees. Level One Fees are the statutory fees of $1.93 per square foot for residential projects and $0.31 per square foot for commercial and industrial projects, which can be adjusted for inflation every two years beginning in 2000. Level Two Fees allow school districts to impose fees beyond the base statutory cap, under specific circumstances. Level Three Fees come into play if the State runs out of bond funds after 2006, which would allow school districts to impose 100 percent of the cost of the school facility or mitigation minus any local dedicated school monies. The school fee amounts provided for in Government Code Sections 65995, 65995.5 and 65995.7 would constitute full and complete mitigation for school facilities.

School Facilities Funding and Mitigation Agreement

On August 11, 2001, the Upland Unified School District (District) and The Colonies Partners (Developer) entered into the first amendment to the School Facilities Funding and Mitigation Agreement. The District and Developer originally entered into an agreement in October 1998. Pursuant to the agreement, the Developer agreed to make certain payments (Mitigation Payment) and take certain actions to mitigate the impact on the District of the proposed Project. The agreement provides for a portion of the Mitigation Payment to be paid upon recordation of the Parcel Map for Phase 1, with the remainder payable no later than June 30, 2000. In 2001, the Developer had not yet begun construction of Phase 1 and requested an extension of time to pay the Mitigation Payment for Phase 1. The agreement also provides for credit to be applied to the Mitigation Payment in the event that "Alternative Funding" for the costs of the necessary school facilities is obtained by the District. In consideration for the District's agreement to extend the time of payment of the Phase 1 Mitigation Payment, the Developer agreed to make other changes to the agreement desired by the District. The August 2001 first amendment includes modified text for: 1) Phase 1 Mitigation Payment, 2) Phase 2 Mitigation Payments, 3) Timing of Payments, and 4) Alternative Funding.

Phase 1 Mitigation Payment

Per the agreement, the Developer shall pay the District an amount of $7,175 for each of the 305 dwelling units in Phase 1 (currently under construction), which represents the full amount of mitigation for this phase. Additional wording is included in the amended agreement about changes in the fee limits set forth in Government Code 65995(b)(a).

Specific Plan Amendment Mitigation Payments

Per the agreement, the Developer shall pay the District the amount authorized pursuant to Government Code 65995(b), or a successor statute, per square foot of "assessable" space for each dwelling unit constructed in the current Specific Plan Amendment. The amended agreement includes language regarding the conditions that apply if the total assessable space is greater than or less than 1,067,500 square feet.

ROADWAY MAINTENANCE

The City of Upland Public Works Department currently provides roadway maintenance in the Project area. Additionally, maintenance and repair of the sidewalk areas, bikeways, traffic signals and street signage within the incorporated City limits are the responsibility of the City.

LIBRARIES

The Project area is serviced by the Upland Public Library located at 450 North Euclid Avenue. Upland Public Library services are divided into two categories, public services and materials collection services. Public services includes the following:

- Reference services for adults and children (either in person or by phone);
- Programs (story hours, literary and cultural programs, literacy services, etc.); and
- Electronic reference sources (electronic information databases, Internet, etc.).

The materials collection services include books, periodicals, and audio-visual materials.

RECREATION

Table 5.9-3, *Recreation Facilities*, outlines and describes the public parks located nearest to the Project site. The City of Upland maintains these facilities.

Table 5.9-3
Recreation Facilities

Facility	Location	Size	Park Amenities
Memorial Park	Foothill Boulevard (Hospital Way / Grove Avenue)	40 acres	Upland YMCA; Tiny Tots; Community Building; Baseball fields; 1 Softball field, picnic areas, play areas, rose gardens
Sierra Vista Park	15th Street and 2nd Avenue	7 acres	A picnic area; 2 baseball fields; and 2 play areas.
13th Street Reservoir Park	13th Street and Campus Avenue	+/- 3 acres	Grass area; and 1 basketball court
Magnolia Park	15th Street (San Antonio Avenue/ Euclid Avenue)	7 acres	Picnic areas; Play areas; 1 Recreation Center
Source: City of Upland Recreation, http://www.ci.upland.ca.us/rec/parks.htm, February 15, 2001.			

WASTEWATER

The Inland Empire Utilities Agency (IEUA), formerly Chino Basin Municipal Water District, would provide regional sanitary sewer services to the site. The Agency owns and operates four regional wastewater treatment facilities that treat approximately 53 million gallons of wastewater per day. In addition, the Agency owns and operates several domestic trunk and interceptor sewer lines.

The City of Upland provides municipal wastewater collection services within the City. Wastewater conveyance is provided through local City sewers to the Agency's nearest trunk sewers: the Grove Avenue Trunk, Freeway Trunk and Upland Interceptors. These existing Agency facilities are described in Table 5.9-4, *Existing Wastewater Facilities.*

Wastewater treatment is provided at Regional Water Recycling Facility No. 1 (RP-1). RP-1 is located in the City of Ontario and has a capacity of 44 million gallons per day (MGD). Currently, this facility handles 37.5 MGD of wastewater. As RP-1 reaches its capacity of 44 MGD, expansion to 58 MGD is programmed for completion by fiscal year 2010/2011.[5] RP-1 is planned for an ultimate capacity of 98 MGD.

Table 5.9-4
Existing Wastewater Facilities

Facility	Location	Capacity (Range in Diameter)
Grove Avenue Trunk	In Grove Avenue (Arrow Highway to San Bernardino Freeway. (I-10))	18" – 30"
Freeway Trunk	Along northerly side of San Bernardino Freeway (I-10) (Grove Ave. to Imperial Ave.)	18" – 33"
Upland Interceptors (including Upland Relief Interceptor)	Imperial Avenue (Mission Blvd. To Carlos Ave.)	15" – 21"

A Sewer Study prepared by Associated Engineers, Inc. (April, 2002) evaluates the existing sewage facilities in the Project area and sewage allocations to wastewater treatment facilities. According to the Study, the City-owned sewer joins the Upland/Ontario Interceptor owned by IEUA at Grove Avenue/Eighth Street. Each member agency is responsible for providing IEUA with current projections of flows to the Interceptor. Based on the City's projections, the current RP-1 allocation for the City for fiscal year 2001/2002 is 350 Equivalent Dwelling Unit (EDU). Pursuant to Municipal Code Section 5840.3, an EDU is defined as follows:

> *"One (1) EDU unit is the flow equivalent in quantity and strength of the average daily flow of a single family residential household for which the quantity is estimated to be 270 (270) gallons per day (gpd) and the characteristic strength is estimated to have a biochemical oxygen demand (BOD) of two hundred thirty units and to have suspended solids (SS) of two hundred twenty (220) units. EDUs for commercial units (except schools), shall be determined by multiplying that portion of the metered water usage*

[5] Correspondence: Inland Empire Utilities Agency, Rose Hess. May 31, 2001.

during the two (2) month billing period . . . by the appropriate category factor from Table I, EDU Determination for Commercial Categories."

The allocations for the City for fiscal years 2002/2003 and 2003/2004 are 260 EDU's and 250 EDU's, respectively. The IEUA is currently working on future relief sewers for the Upland/Ontario Interceptor in anticipation of future growth in the Upland/ Ontario area.[6]

It should be noted that since the time of the City's projections noted above, the City constructed the Westside Interceptor that now diverts approximately 300 residences away from RP-1. As a result, current flow projections to RP-1 have decreased from prior estimates.

WATER

The Project site lies within the water service jurisdiction of the City of Upland. The City's sources of water include the following:

- City wells;
- San Antonio Water Company (SAWCO) wells;
- West End Consolidated Water Company (West End) wells;
- San Antonio Canyon Surface Water Treatment Plant (SACWTP);
- Water Facilities Agency/Joint Powers Authority (WFA/JPA); and
- Transfers between different pressure zones within the City.

RBF Consulting prepared the Colonies at San Antonio Water Supply Evaluation (November 6, 2001). According to this evaluation, the City has been able to produce 30 to 40 percent of its total annual water demands in the recent years. In past drought years, the Metropolitan Water District of Southern California (MWDSC) has significantly reduced supplies to the City (and other southern California agencies) for an extended period of time. As a result, the City does not consider imported supplies as dependable as local supplies and has developed a policy of reducing their dependency on imported water.

The City tracks total water production and total population on an annual basis, which is used to project water production requirements based on future population trends. In recent years, this has calculated to up to 300 gallons per capita per day.[7] This includes residential and non-residential water production. City staff provided figures that show 7.3 billion gallons of total water produced during the year 2000, 4.2 billion gallons for residential uses and 3.1 billion gallons for non-residential uses. A residential consumption factor was derived using this ratio and calculates to approximately 170 gallons per capita per day.

The project site is located within Pressure Zone III. The City is currently deficient in Zone III storage volume. Zone III pumping capacities are in the form of direct-supply wells and booster pump stations.

[6] Sewer Study, The Colonies at San Antonio, Associated Engineers, Inc., April 2002, Page 2.

[7] Colonies at San Antonio Water Supply Evaluation, RBF Consulting, November 6, 2001, Page 3.

Senate Bills 221 and 610

Senate Bills 221 and 610 were signed into law by Governor Davis in 2001 and took effect January 1, 2002. The two senate bills amended State law to better link information on water supply availability to certain land use decisions by cities and counties. The two companion bills provide a regulatory forum that requires more collaborative planning between local water suppliers and cities and counties. All SB 610 and 221 reports are generated and adopted by the public water supplier.

Senate Bill (SB) 610 requires a detailed report regarding water availability and planning for additional water supplies that is included with the environmental document for specified projects. Under SB 610, water supply assessments are required to be included in environmental documentation for certain projects, as defined in Water Code 10912[a], subject to CEQA. Under SB 221, approval by a city or county of certain residential subdivisions requires a written verification of sufficient water supply. A Water Supply Assessment is to be incorporated in the Final EIR.

SOLID WASTE

The City has a franchise agreement with Burrtec Waste Industries (BWI) to provide disposal service for solid waste generated within the City. This agreement guarantees the City disposal capacity through the term of the agreement which ends in 2011.[8] The City's refuse and recyclables are taken to the BWI owned and operated West Valley Material Recovery Facility (MRF) for processing. Following processing, transfer trucks transport the refuse to the Olinda Alpha Landfill and the greenwaste to California Biomass.

The West Valley Material Recovery Facility is located in Fontana and is owned/ operated by BWI. This MRF is permitted to accept up to 5,000 tons/day under its Solid Waste Facility permit and currently receives an average of approximately 3,000 tons of solid waste per day.[9]

The Olinda Alpha Landfill is permitted to receive a daily maximum of 8,000 tons of solid waste per day. Currently, the landfill is scheduled to close in December 2013. The Integrated Waste Management Board is conducting a study that may extend the life and disposal capacity of the landfill.[10]

The California Integrated Waste Management Act, AB 939, required cities to divert 50 percent of the wastestream away from land disposal by the year 2000. If the 50 percent goal were not met by the end of year 2000, the City would be required to submit a petition for a goal extension to the Integrated Waste Management Board (IWMB). The City's IWMB-approved diversion rate in 1999 was 38 percent.[11] The City's diversion rate in 2000 was 41 percent (pending IWMB approval). The City submitted their petition for a goal extension on December 28, 2001.

[8] Correspondence: Roberta Knighten, Management Analyst, City of Upland Public Works Department. December 28, 2001.

[9] Telecon: Mr. Richard Crockett, General Manager, Burrtec Waste Industries, April 10, 2002.

[10] Olinda Alpha Landfill Website: www.oc.ca.gov/iwmd/olindaalpha.htm.

[11] Telecon: Ms. Roberta Knighten, City of Upland, March 27, 2002.

In response to AB 939, the City has prepared a Source Reduction and Recycling Element (SRRE) (September 1992). The intent of this Element is to establish goals and policies for the City regarding source reduction, recycling and composting, and environmentally safe solid waste management alternatives to land disposal.

The California Integrated Waste Management Board is still focused on assisting local officials throughout the State in meeting the 50 percent diversion requirement set for 2000. As of May 2002, neither the California Integrated Waste Management Board nor the State Legislature have introduced new legislation to set diversion requirements beyond 2000.

ELECTRICITY

The Project site is located within the service territory of the Southern California Edison Company (SCE), including electrical service to the City. A variety of sources provide electricity to SCE, including coal, nuclear, and hydroelectric plants throughout the western states. High voltage (66 kV) electrical lines are typically utilized to transmit power to an area. This power subsequently passes through a substation from which it is distributed to the individual consumers via lower voltage lines. Along the western and eastern boundaries of the Project site, immediately west of Campus Avenue and west of the Cucamonga Creek Channel, respectively, are SCE north/south transmission lines. Existing overhead and underground electrical lines are located on the Project site.

NATURAL GAS

The Project site is located entirely within the Southern California Gas Company utility service territory, including natural gas service to the City. SCG imports natural gas to the area via its interstate system. Gas lines are located in the Project vicinity.

SIGNIFICANCE CRITERIA

Pursuant to Appendix G, Environmental Checklist of the California Environmental Quality Act (CEQA) Guidelines, a Project would normally have a significant adverse impact on public services and utilities if it results in any of the following:

PUBLIC SERVICES

- If the Project would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services. (refer to Impact Statements 5.9-1, 5.9-2, 5.9-3, 5.9-4 and 5.9-5).

RECREATION

- If the project would increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated (refer to Impact Statement 5.13-1);

- If the project would include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment (refer to Impact Statement 5.13-2; refer to the Impact discussions in Sections 5.1 through 5.12 for analyses of the project's effects on the environment from the proposed recreational facilities); and

- If the Project would conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect (refer to Impact Statements 5.13-3 through 5.13-7).

UTILITIES AND SERVICE SYSTEMS

- If the Project exceeds wastewater treatment requirements of the applicable Regional Water Quality Control Board (see Impact Statement 5.9-6);

- If the project requires or results in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects (see Impact Statement 5.9-6 and 5.9-7);

- If the project requires or results in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects (refer to Section 5.8, *Hydrology and Drainage*);

- If the project has insufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed (see Impact Statement 5.9-7);

- If the project results in a determination by the wastewater treatment provider which serves or may serve the Project that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments (see Impact Statement 5.9-6);

- If the project is not served by a landfill with insufficient permitted capacity to accommodate the Project's solid waste disposal needs (see Impact Statement 5.9-8); and/or

- If the project does not comply with federal, state, and local statutes and regulations related to solid waste (see Impact Statement 5.9-8).

Impacts to Services and Utilities are analyzed below according to topic. Mitigation measures at the end of this section directly correspond with the identified impact.

SUMMARY OF PREVIOUS ENVIRONMENTAL DOCUMENTATION FOR THE COLONIES AT SAN ANTONIO

FIRE PROTECTION

The EIR for the 1988 Specific Plan concluded that implementation of the Project would result in an incremental increase in demand for fire protection and emergency medical services. This demand would contribute to the cumulative need for additional equipment and manpower to provide adequate service to the Project area. The 1998 Supplemental EIR resulted in similar conclusions. Mitigation in the 1998 EIR included dedication of a Fire Station Facility.

POLICE PROTECTION

The EIR for the 1988 Specific Plan concluded that while implementation of the Project would result in an incremental increase in demand for law enforcement services, implementation of the proposed Project would not significantly affect service capabilities. Additionally, implementation of the recommended mitigation measures within the 1988 EIR would further reduce impacts to law enforcement services.

According to the 1998 Supplemental EIR, implementation of the 1998 Specific Plan would result in a potentially significant impact to police protection as an incremental increase in demand for law enforcement services would occur. Further, the 1998 Supplemental EIR concluded that six additional police personnel would be required for the Project and mitigation of this impact would require that the City gain the necessary funds for the additional police personnel needed. In November 1999, the City of Upland Planning Commission adopted Resolution 4143 which modified the EIR mitigation for police services. The modification is as follows:

> *"The full cost of police protection services required by the project, including the outfitting and provision of sworn officers, shall be provided by the City's General fund."*

SCHOOLS

The EIR for the 1988 Specific Plan concluded that implementation of the Project would generate approximately 600 students, for which educational housing was not present and would result in an overcrowded situation for the School District facilities. Implementation of the 1988 Specific Plan would necessitate the equivalent of one elementary school and additional classroom space at the junior high and senior high school levels to mitigate impacts from the students generated from the development.

According to the 1998 Supplemental EIR, implementation of the 1998 Specific Plan would generate approximately 1,232 students. Additionally, the State instituted a mandate to place an enrollment cap on all elementary schools. The increase in student numbers from the 1998 Specific Plan would have a significant adverse impact on school capacity within the UUSD. School mitigation plans would be enacted between the UUSD and the Project developer providing for a per dwelling unit fee rate for the residential portion of the Project site. The 1998 Supplemental

ncert with development and the requirements for

m the nearest existing dispatch station (4.8 miles) he Department's ability to meet the five-minute old. As previously noted, two officers in two trol Beat No. 3, 24-hours a day. These officers d from where they are located, thus, reducing the

consistent ratio of sworn personnel to resident rtment's emergency response time threshold, an uired. The Police Department has recommended s be hired during Phase I of the Project to respond construction phase. The increased demand for rant the construction of new police facilities, result sting facilities, or the need for additional patrol lice Department has identified the possibility of a . This possibility is anticipated to increase in time. hood station would be dependant upon an actual ility of development sites. Staffing for a satellite atrol services to the Specific Plan area would be und.

d requiring that adequate security protection be in of the Project. With implementation of the mpliance with City requirements, the proposed in significant impacts regarding police protection

could result in significant physical impacts to es. Potential impacts to school facilities are ignificant following compliance with all applicable rdinances and recommended mitigation.

Facilities, several schools within the UUSD are ct has augmented the existing school facilities with ate the over-crowded conditions. It is the intention cilities until adequate funding is made available for ools facilities.

t generation rate of 0.70 students per housing unit. n rate and the proposed development of 1,150 has the potential to generate approximately 805 e District's current overcrowding would be further of the proposed Project. With several school

, Captain John Cannon. June 4, 2001.

lemands for manpower, equipment, and

artment's ability to maintain acceptable O rating based on the current staffing t would create a demand for additional struction of new fire protection facilities. ant unless mitigated.

acre fire station site along the western Campus Avenue/19th Street intersection description does not include construction nal personnel/equipment. Dedication of ts and staffing of the facility would be

tion, coupled with dedication of the fire ant impacts with respect to fire protection EIR included mitigation for conveyance of edicated to the City and have secured a 8 months after the first certificate of noted that construction of a fire station mental review.

sult in significant physical impacts with Analysis has concluded that potential o a less than significant level with mitigation.

ould result in an increased demand for onstruction and operations phases of the nt, more crime may be anticipated in the truction areas can become the targets of d regional access to construction areas ate greater opportunity for crime related

services during the operations phase of average household size of 2.84 persons Project has the potential to increase the y 3,266 persons. In consideration of the 1.5 sworn officers per 1,000 population, mand for four additional sworn officers, a day. These projected needs inherently ed commercial uses.[13] Also, additional

e 4.

RECREATION

5.9-6 *Project implementation may increase the use of existing neighborhood and regional parks and other recreational facilities thereby creating the potential for physical deterioration of each facility. Analysis has concluded that since no new parks are proposed with the Amendment, a significant impact may occur. Implementation of recommended mitigation would reduce impacts to a less than significant level.*

The proposed Project involves the development of housing that would result in a direct impact upon existing recreational facilities. The proposed development would have the potential to increase the use of existing parks and facilities as a result of the Project-related growth in population.

The City of Upland General Plan has identified a park space standard of 5.0 acres of parkland per 1,000 residents.[16] Assuming an average household size of 2.84 persons per unit, implementation of the proposed Project has the potential to increase the City of Upland's population by approximately 3,266 persons. In consideration of the City's target standard of 5.0 acres of parkland per 1,000 population, this population increase would create a demand for approximately 16.33 acres of parkland.

Although the proposed project includes an approximately 59-acre central open space area within Planning Area 16, the City of Upland has determined that the project would have a significant impact on parks, since no new parks within the development are proposed. The City of Upland does not consider the proposed open space to be a parks and recreation facility. As such, the City would require the Applicant to pay park impact fees in the amount of $1.5 million dollars to permit the City to construction improvements to existing parks. Implementation of recommended mitigation would reduce impacts to a less than significant level.

WASTEWATER

5.9-7 *Project implementation would generate additional wastewater beyond current conditions, which could require the incremental expansion of the existing sewerage system and expansion of the water treatment facility. With mitigation, impacts to wastewater systems and facilities would be considered as less than significant.*

The quantity of wastewater that is attributable to the Project site would increase with implementation of the proposed Project. Exhibit 5.9-1, *Sewer Facilities*, illustrates the backbone sewer layout proposed in the Specific Plan.

Figure 1.1 of the referenced Sewer Study, *Sewer Zones*, illustrates the Planning Areas and the locations of proposed sewer line connections. Figure 1.2 of the Sewer Study, *Sewer Generation by Area,* illustrates the Planning Areas and the average daily sewage flow amount estimated for each Area. Table 5.9-5, *Sewage Flow Calculations*, outlines the average daily flows and peak flow rates. As indicated in

[16] City of Upland General Plan, Open Space/Conservation Element.

Table 5.9-5, flows to Campus Avenue facilities have a projected average daily flow of 0.0929 MGD of sewage and a peak flow rate of 0.2880 MGD. Flows to the Tanglewood Avenue facilities have a projected average daily flow of 0.3844 MGD and a peak flow rate of 1.1916 MGD. For both flow areas combined, the Project has a projected average daily flow of 0.4773 MGD of sewage and a peak flow rate of 1.4796 MGD. The concept sewer layout for the proposed Project is illustrated in Figure 1.3 of the Sewer Study, *Colonies Proposed Sewer Concept.*

Table 5.9-5
Sewage Flow Calculations

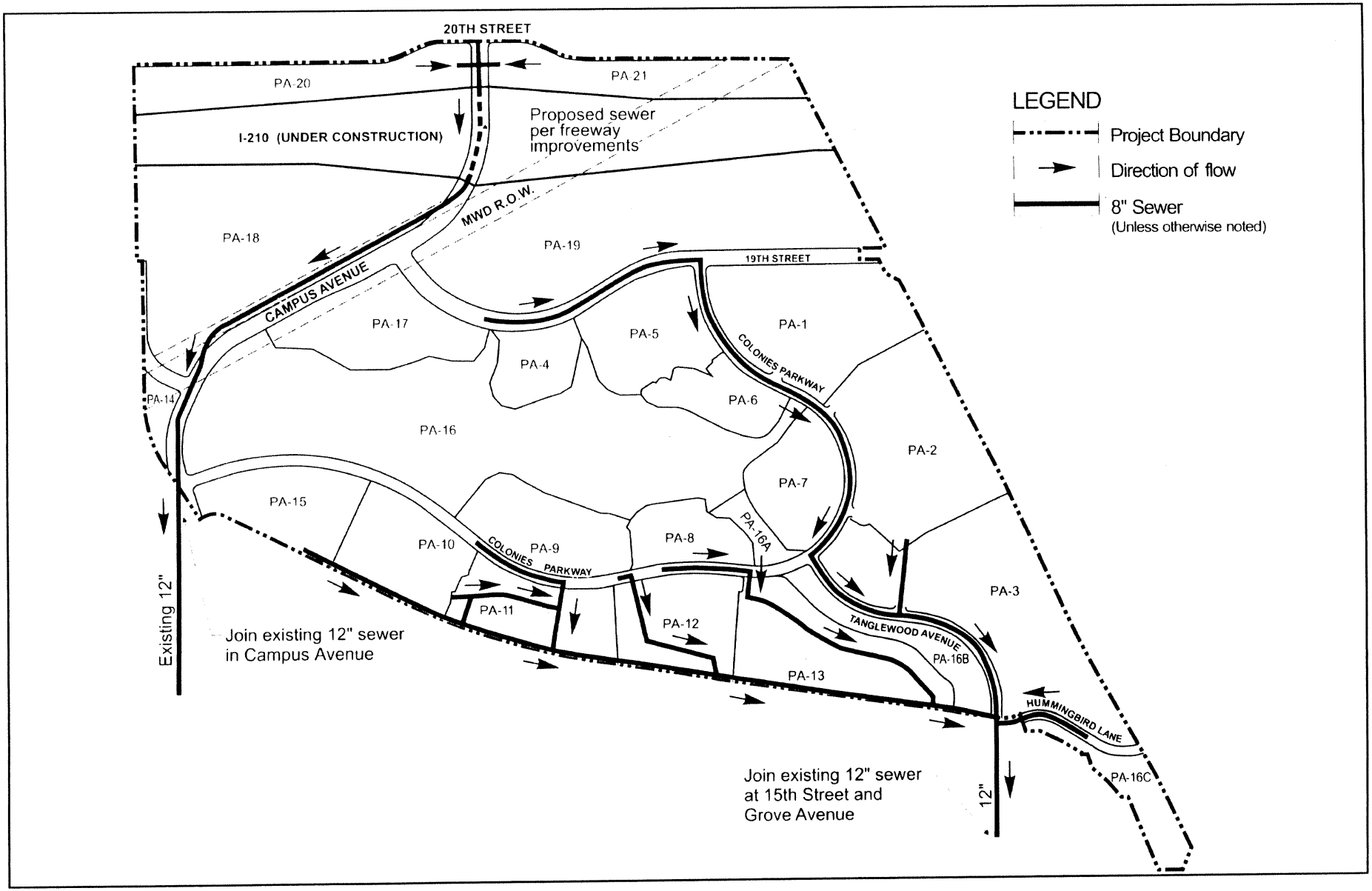
Sewer Area	Planning Area	Land Use	Net Acres	Rate (Gallons Per Day)	Average Daily Flow	Peaked Flow Rate
A	PA-20	Highway Commercial	2.79	1,500 GPD/Acre	0.0042	0.0130
A	NAP	Not a part	3.70	1,500 GPD/Acre	0.0056	0.0172
A	PA-20	Highway Commercial	6.17	1,500 GPD/Acre	0.0093	0.0287
A	PA-21	Highway Commercial	11.02	1,500 GPD/Acre	0.0165	0.0512
A	PA-18	Highway Commercial	36.53	1,500 GPD/Acre	0.0548	0.1699
A	PA-14	Fire Station	1.72	1,500 GPD/Acre	0.0026	0.0080
Subtotal			***61.93***		***0.0929***	***0.2880***
B	PA-19	Highway Commercial	42.31	1,500 GPD/Acre	0.0635	0.1801
B	PA-17	Neighborhood Commercial	12.40	1,500 GPD/Acre	0.0186	0.0493
B	PA-4*	Luxury Attached Housing	5.64	270 GPD/Acre	0.0864	0.2835
B	PA-15	School	10.20	1,500 GPD/Acre	0.0153	0.0474
B	PA-5 through 13	SFR	92.23	270 GPD/Acre	0.1183	0.4010
B	PA-1, 2, 3	SFR – Phase I	70.25	270 GPD/Acre	0.0824	0.2472
Subtotal			***233.03***		***0.3844***	***1.1916***
TOTAL			**294.96**		**0.4773**	**1.4796**

Notes:
* 350 Units / ** 495 Lots / *** 305 Lots

The Project's sewage generation figures were peaked and entered into a model based on Manning's Formula for flow in circular pipes. The model input information was the basis for determining pipe adequacy. The Project Applicant would have the responsibility of conveying any wastewater generated by the Project to the nearest local sewer and/or trunk sewer.

Phase 1 of the Colonies at San Antonio necessitated the construction of 3,200 linear feet (LF) of 12-inch diameter sewer that starts at the lower end of the Colonies. It continues southerly in Tanglewood Avenue, crosses 16th Street in Upland and extends across a portion of the Upland Hill Golf Course to the 15th Street Basin. At the flood control basin, the sewer turns and runs westerly to Grove Avenue, where it joins an existing City of Upland sewer at Node 15G015. The new section of sewer joins at a point where there is sufficient existing capacity downstream to handle all of the Phase 1 peaked flows.

The system was examined for the future inclusion of the remainder of the Specific Plan area. The modeling shows that with the addition of the Specific Plan Area flows, the system is not adequately sized from Node 15G015 at 15th Street southerly to Node 14G040 at 14th Street. Approximately 1,400 feet of the existing 8-inch sewer in Grove Avenue would require replacement with a parallel 10-inch sewer.



Source: LSA Associates, Inc.

Exhibit 5.9-1

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

06/02

JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Sewer Facilities

Additionally, approximately 1,200 feet of sewer in the Memorial Park East Access Road would require replacement between Node 11G070 and Node SBG002. A new 21-inch sewer would be required in San Bernardino Road at Node SBG002 and continue southwesterly to Node SBT010. Approximately 550 LF of 10-inch sewer and 450 LF of 12-inch sewer would be constructed parallel to the 8-inch sewer on 13th Street continuing southerly from Node SBT010 to Node AHG020 on Arrow Highway. The existing 18-inch sewer on Arrow Highway would require replacement and a new 21-inch sewer would be required to be installed from Node AHG020 to Node AHG040 in the same alignment. A parallel replacement sewer would be required southerly in Grove Avenue from Node AHG040 to Node 08G040 at 8th Street. The proposed replacement sewer mains would occur in existing street rights-of-way, eliminating the need to acquire additional easements. Some new on-site sewers would require easements.

The deficient lines are assumed to be replaced as a part of the Specific Plan Amendment with parallel sewers, whenever practical, in order to keep existing sewers in service for as long as possible without interruption.

Implementation of the recommended mitigation requiring that the existing sewage system be upsized/relieved consistent with the parameters recommended above would reduce this impact to less than significant levels.

IEUA has indicated that based on their regional contract with the City as a member agency, adequate capacity exists in the Upland/Ontario Interceptor to accommodate Phase I which is currently under construction.[17] However, it is anticipated that the remainder of the Specific Plan area would utilize the majority of the RP-1 allocation for the City for fiscal year 2003/2004.[18] Therefore, the City's current sewer allocation projections may not have an adequate allotment of EDU's projected sewer system for their portion of the IEUA RP-1 treatment allocation.[19] This impact would be considered significant unless mitigated. Mitigation has been recommended which requires the Project Applicant to provide on-site and off-site sewer improvements required to support development of the portion of the project for which building permits are being requested.

It should be noted that IEUA has completed construction of the Archibald Interceptor that is anticipated to alleviate capacity deficiencies associated with RP-1 allocations for the City. Additionally, design and construction of the new Upland Interceptor sewer (serving the Ontario/Upland Interceptor system) is projected to be completed in June 2002.[20] Upon completion of the second relief sewer, IEUA would be able to accept all of the projected flows from the proposed Project, as well as the flows from San Antonio Heights and east Ontario.[21] IEUA states that after June 2002, a Phasing Schedule of the Project's construction may not be required due to the

[17] Sewer Study, The Colonies at San Antonio, Associated Engineers, Inc., August 2001, Page 9.

[18] Ibid., Page 9.

[19] Ibid., Page 10.

[20] Ibid., Page 9.

[21] Ibid.

additional capacity provided by their new relief sewers. IEUA has stated that the housing in Phase I can be issued permits without the new interceptor being completed. However, Phase 2 would require the Interceptor to be operational prior to the issuance of permits.

WATER

5.9-8 *Project implementation would increase the demand for water beyond current conditions requiring the construction of new water facilities and the expansion of existing facilities. Analysis has concluded implementation of recommended mitigation measures would reduce impacts to a less than significant level.*

The demand for water infrastructure that is attributable to the Project site would increase with implementation of the proposed Project. Exhibit 5.9-2, *Water Facilities*, illustrates the backbone water system proposed in the Specific Plan.

Many factors affect water demand. Weather conditions, socioeconomic factors, and development patterns influence the volume of water required by various land uses. Water Master Plans are updated periodically in order to incorporate the changes in the water use pattern, as well as other changes in the water system. The Water Supply Evaluation prepared by RBF Consulting estimated the water demand that would be created by the proposed Project. Based on an average of 3 persons per residential dwelling unit generation rate, a duty factor of 510 gallons per dwelling unit per day (gpd/DU) was used for estimating the water demands of the proposed Project. Maximum-day and peak-hour demands of the proposed Project would be 2.27 MGD and 3,148 gpm, respectively. The average daily demand (ADD) for the proposed Project would be 1.014 MGD based on Table 5.9-6, plus the irrigation demand estimate provided by the Applicant's Engineer. Exhibit 5.9-2, *Water Facilities*, illustrates the Project's conceptual water distribution system.

The City's available water resources are sufficient to serve the Project and all of the City's customers throughout Project build out, and for the next 20 years, through normal, single dry years, and multiple dry years. Even without water conservation and expanded use of recycled water, the City has sufficient water supplies available to it to meet the demands of its service area. The City also has the option of developing alternative water management strategies for future implementation, including curtailment of the sale of its surplus water to others outside the City, the increased use of recycled water, and the imposition of water conservation practices.

The City does not fully use all of the water sources available to it, and sells water which is surplus to its immediate needs, or which is not immediately accessible with existing facilities. In March of 2002, as it has done in previous years, the City of Upland sold water surplus to its needs to another water user. This year, Upland has sold at least 6,000 acre-feet of its Chino Basin groundwater entitlement. That quantity is sufficient to furnish the needs of 12,000 families for one year. The sale of water surplus to the City's needs demonstrates the ample water supply available to serve the Project, without reducing the supply to existing customers.

Table 5.9-6
Estimated Water Demand

Land Use	Dwelling Units	Acreage	Building Square Footage	Duty Factor[1]	Estimated Average Water Demand
Residential					
PA-1 Single-Family		-	-		
PA-2 Single-Family		-	-		
PA-3 Single-Family		-	-		
Subtotal Phase I	*305 DU*	*70.25 ac*	-	*510 gpd/DU*	*155,550 gpd*
PA-4 Luxury Attached Housing		5.64 ac	-		
PA-5 Single-Family		11.49 ac	-		
PA-6 Single-Family		6.37 ac	-		
PA-7 Single-Family		9.12 ac	-		
PA-8 Single-Family		6.17 ac	-		
PA-9 Single-Family		11.07 ac	-		
PA-10 Single-Family		10.72 ac	-		
PA-11 Single-Family		10.78 ac	-		
PA-12 Single-Family		11.01 ac	-		
PA-13 Single-Family		15.6 ac	-		
Subtotal Phase II	*845 DU*			*510 gpd/DU*	*430,950 gpd*
Subtotal Residential	**1,150 DU**	**168.22 ac**			**586,500 gpd**
Non-Residential					
PA-14 Fire Station		1.72 ac	-	3.5 af/ac/yr	5,375 gpd
PA-15 School Site		10.2 ac	-	3.5 af/ac/yr	31,873 gpd
PA-16 Open Space		67.17 ac	-	0	0 gpd
PA-16C Basin B		5.55 ac	-	0	0 gpd
PA-17 Neighborhood Commercial		12.4 ac			
Retail		-	90,000 sf	100 gpd/1,000 sf	9,000 gpd
Restaurant		-	6,000 sf	1,100 gpd/1,000 sf	6,600 gpd
Drive-thru Restaurant		-	8,000 sf	1,100 gpd/1,000 sf	8,800 gpd
Gas/Wash/Minimart		-	4,000 sf	1,000 gpd/station	1,000 gpd
PA-18 Commercial Highway Zone		36.71 ac			
Retail		-	372,000 sf	100 gpd/1,000 sf	37,200 gpd
Restaurant		-	18,000 sf	1,100 gpd/1,000 sf	19,800 gpd
Drive-thru Restaurant		-	16,000 sf	1,100 gpd/1,000 sf	17,600 gpd
Gas/Wash/Minimart		-	4,000 sf	1,000 gpd/station	1,000 gpd
PA-19 Commercial Highway Zone		41.99 ac			
Retail		-	212,000 sf	100 gpd/1,000 sf	21,200 gpd
Restaurant		-	32,000 sf	1,100 gpd/1,000 sf	35,200 gpd
Drive-thru Restaurant		-	16,000 sf	1,100 gpd/1,000 sf	17,600 gpd
Theater		-	80,000 sf	200 gpd/1,000 sf	16,000 gpd
Office		-	80,000 sf	175 gpd/1,000 sf	14,000 gpd
Gas/Wash/Minimart		-	8,000 sf	1,000 gpd/station	2,000 gpd
PA-20 Commercial Highway Zone		8.11 ac			
Restaurant		-	6,000 sf	1,100 gpd/1,000 sf	6,600 gpd
Health Club/Spas		-	40,000 sf	500 gpd/1,000 sf	20,000 gpd
Hotel		-	80,000 sf	375 gpd/1,000 sf	30,000 gpd
Gas/Wash/Minimart		-	4,000 sf	1,000 gpd/station[2]	1,000 gpd
Day Care Facility		-	4,000 sf	200 gpd/1,000 sf	800 gpd
PA-21 Commercial Highway Zone		10.65 ac			
Retail		-	28,000 sf	100 gpd/1,000 sf	2,800 gpd
Drive-thru Restaurant		-	8,000 sf	1,100 gpd/1,000 sf	8,800 gpd
Gas/Wash/Minimart		-	4,000 sf	1,000 gpd/station	1,000 gpd
Auto Dealership		5 ac[3]	80,000 sf	1,000 gpd/acre	5,000 gpd
Subtotal Non-Residential		**194.5 ac**			**320,248 gpd**
Total Average Colonies at San Antonio Water Demand					**0.91 MGD[4]**
Total Maximum-Day Colonies at San Antonio Water Demand					**2.27 MGD[4]**
Total Peak-Hour Colonies at San Antonio Water Demand					**3,148 gpm[4]**

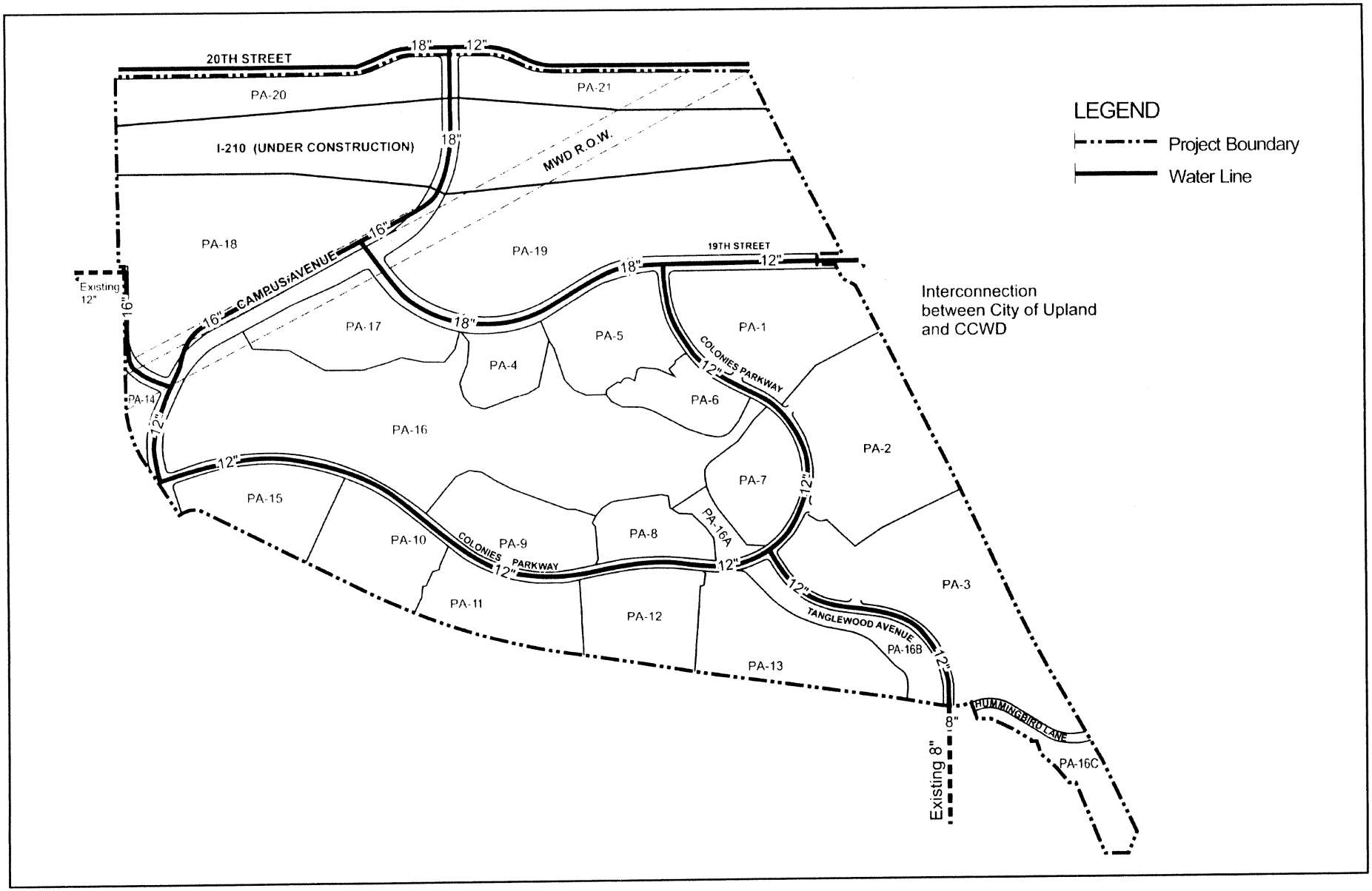
Notes:

1 For residential uses, based on 57% of City's total demand (300 gpcd) were for residential and assumes 3 persons per dwelling unit. For non-residential uses, based on the duty factors generated for the City's current Water System Master Plan or duty factors generated in separate studies performed by the City of Los Angeles, dated June, 1996, and City of San Clemente, dated April 1994.

2 Assumes 150 rooms demanding 200 gpd per room on average.

3 Assumes 5 acres of the 10.65-acre PA is auto dealership – available duty factors are "per acre" only.

4 Excludes irrigation area for major slopes and other greenbelts.



Source: LSA Associates, Inc.

Exhibit 5.9-2

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

06/02

JN 10-101248

CITY OF UPLAND

THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT

Water Facilities

yearly inspections of both the City's and West End Consolidated Water Company systems.

- Negotiated a license agreement with the San Antonio Water Company which allows the City to produce water using San Antonio Water Company water rights within the Cucamonga Basin. The City owns facilities jointly with San Antonio Water Company, and owns 70% of its stock shares. The City's relationship with the San Antonio Water Company offers additional water management options.

- Approved a Water System Master Plan, together with sub-area plans, which identify facilities which should be constructed to continue to furnish water to existing and proposed customers.

- Participates with other groundwater pumpers in the region as a member of the Watermaster, which administers the Judgment in the Chino Basin adjudication. In this way, it is kept abreast of the water supply availability regionally, as well as on the state level. The City is also kept abreast of the supply which will be made available to it through the Chino Basin Judgment. The Chino Basin Judgment offers a range of management options to the City.

- Participated recently with other groundwater producers to adjudicate its pumping rights in the Claremont Heights Basin in the Six Basin Judgment, and to develop a basin management plan. The adjudication paves the way for the City to develop additional water management options.

- Works closely with the San Antonio Water Company concerning about water quality monitoring, facilities, and groundwater production.

- Has sold to third parties this year 6,000 acre feet of surplus water to its needs. The amount sold would have been far more than adequate to meet the needs of the Project.

- Has received and considered a water supply assessment prepared by the Metropolitan Water District of Southern California which concludes that as to that portion of the City's water supply purchased from the Metropolitan Water District of Southern California, Metropolitan can provide adequate supplemental water supplies to its entire service area during normal, single dry, and multiple dry water years during the 20- year projection period. Metropolitan's February 11, 2002 report is consistent with its Year 2000 Regional Urban Water Management Plan for the Metropolitan Water District of Southern California. *Report on Metropolitan's Water Supplies*, February 11, 2002. Metropolitan's February 11, 2002 report takes into account the City's ultimate population, including the population attributable to the Project.

In conclusion, the proposed project would result in facility deficiencies in Zone III. Implementation of recommended mitigation would reduce impacts to a less than significant level.

SOLID WASTE

5.9-9 *Development of the Project area would result in increased solid waste generation. Project compliance with the City's AB 939 waste reduction requirements would reduce the amount of solid waste which is ultimately disposed of at the Olinda Alpha landfill and maintain potential impacts at a less than significant level.*

According to the City of Upland Public Works Department, the proposed Project is projected to generate an estimated 8,000 tons of solid waste annually.[22] This projected increase in solid waste generation would increase the demand to provide disposal service and would impact the capacity at the Olinda Alpha Landfill. Further, this increased solid waste generation would incrementally shorten the lifespan of the Landfill. Under existing State permits, the landfill has sufficient capacity to accommodate the disposal of solid waste at least to the year 2013.[23]

It is anticipated that the Project's estimated volume of solid waste generation would be reduced through the storage and collection of recyclables. Additionally, it should be noted that the volume of the Project's solid waste, which would be disposed of at Olinda Alpha Landfill, would be further reduced due to the requirements of AB 939. Therefore, implementation of the proposed Project would result in a less than significant impact in this regard.

NATURAL GAS

5.9-10 *Project implementation would result in an increase in the demand for natural gas service beyond existing conditions and would require expansion of the existing gas system. Analysis has concluded that a less than significant impact would occur in this regard.*

The Gas Company has identified a typical demand rate for single-family residential uses of 799 therms per year per dwelling and for multi-family residential of 483 therms per year per dwelling.[24] Based on these typical demand rates, the proposed residential units would create a demand for 808,250 therms per year of natural gas.[25] The Gas Company has indicated that they have facilities within proximity of the Project area and that natural gas service to the Project area could be provided without any significant impact on the environment. Currently, a three-inch medium pressure and a 6⅝-inch high pressure gas line exists within 20th Street at the Campus Avenue intersection. However, no natural gas facilities exist within the Project boundaries. As such, extensions to existing facilities would be required in order to provide service to the proposed development. Service would be provided in

[22] Correspondence: Roberta Knighten, Management Analyst, City of Upland Public Works Department. December 28, 2001.

[23] http://www.oc.ca.gov/iwmd/olindaalpha.htm

[24] Correspondence: Jorge Aspa, Technical Services, Southern California Gas Company, July 9, 2001.

[25] The Southern California Gas Company has indicated that a demand figure for the Project's commercial uses are not available at this time as construction varies so widely (i.e., a glass building vs. a heavily insulated building) and there is a wide variation in types of materials and equipment used within commercial uses. As such calculations would need to be made after the commercial buildings have been designed.

accordance with the Gas Company's policies and extension rules on file with the California Public Utilities Commission. Future natural gas service to the Project area would require coordination with the Gas Company's engineering department for a comprehensive plan as to levels of service required. Implementation of the proposed Project would result in a less than significant impact with respect to natural gas service.

ELECTRICITY

5.9-11 *Project implementation would result in an increase in the demand for electrical service beyond existing conditions and would require expansion of the existing electrical system. Analysis has concluded that impacts would be less than significant.*

The proposed Project would require additional electric facilities to service the site. An increased demand for electrical service for the Project's residential uses and commercial uses would occur at the Project site as a result of the proposed development. SCE has indicated that the electrical demand created by implementation of the proposed Project is within the parameters of the Projected load growth that SCE is planning to meet in the Project area. Additionally, SCE expects to meet the requirements for the Project given there are no unexpected outages to major sources of electrical supply.[26]

Implementation of the proposed Project would not result in significant impacts in regard to electric services. Additionally, since the required electrical distribution facilities would occur within the Project limits, implementation of the proposed Project would not result in substantial adverse physical impacts in this regard.

CUMULATIVE IMPACTS

5.9-12 *Cumulative development could result in an increase in the demand for public services and an increase in the consumption rates for public utilities, potentially requiring expansions of the existing utility systems. Analysis has concluded that cumulative development is subject to standards and requirements of reviewing agencies and no additional mitigation is required.*

In relation to past, present, and reasonable foreseeable future development, the proposed Project would cumulatively contribute to an increased demand for fire, police, schools, water, sewer, solid waste, and energy utilities. The Specific Plan Amendment and related projects would add to the cumulative demand for such services through the introduction of new residents, tenants, and users of the proposed facilities. However, this growth has been considered for in long range plans. The site is located in an area that is served by all utilities (i.e., water, sewer, and energy utilities) and other public services (i.e., police, fire, schools and sold waste). Existing facilities can be readily extended into the area to serve the proposed development. No additional governmental services or activities would be cumulatively impacted by the proposed Project. Since the respective providers of such services and facilities have indicated that the Project's incremental impacts can

[26] Correspondence: Curt Horne, Customer Service Planner, Southern California Edison. January 2, 2002.

be sufficiently mitigated, cumulative impacts on public services and utilities anticipated to result from this development are not considered to be significant.

MITIGATION MEASURES

This section directly corresponds to the identified Impact Statements in the impacts subsection.

FIRE PROTECTION

5.9-1 Prior to recordation of a subdivision map for residential development or issuance of a building permit for commercial development, an irrevocable offer of dedication for the proposed fire station site within the Specific Plan area (Planning Area 14) shall be granted to the City.

POLICE PROTECTION

5.9-2a To reduce the demand for short-term police services to the site during project construction, building materials storage shall be consolidated to the extent practical, and shall be fenced. Where appropriate, construction contractors shall provide an on-site security person.

5.9-2b As part of the development of Planning Areas 17, 18 and 19, the Developer shall provide up to 1,500 square feet of space within a retail building for the City, at no cost to the City of Upland, to establish a satellite police facility within one of these Planning Areas, as approved by the Upland Police Chief.

SCHOOLS

5.9-3 Prior to the issuance of certificate of occupancy, Project Applicant shall submit evidence to the City of Upland that legally required school impact mitigation fees have been paid per the mitigation established with the Upland Unified School District.

ROADWAY MAINTENANCE

5.9-4 No mitigation measures are recommended.

LIBRARIES

5.9-5 Prior to the issuance of building permits, the Project Applicant shall pay any legally required library impact mitigation fees established by the City of Upland.

RECREATION

5.9-6 The Applicant shall submit a park impact fee payment to the City of Upland in the amount of $1.5 million dollars to permit the City to construct improvements to existing City parks.

WASTEWATER

5.9-7a Prior to issuance of building permits, the Project Applicant shall provide the on-site and off-site sewer improvements required to support development of the portion of the Colonies at San Antonio Specific Plan for which building permits are being requested. Such improvements shall be provided to the satisfaction of the Upland Public Works Director, and may include replacement of existing sewer lines rather than construction of parallel lines.

5.9-7b Prior to issuance of building permits, the Project Applicant shall provide evidence that the Inland Empire Utilities District has sufficient transmission and treatment plant capacity to accept sewage flows from the buildings for which building permits are being requested.

WATER

5.9-8a Prior to issuance of building permits, the Project Applicant shall provide the on-site and off-site water system improvements required to support development of the portion of the Colonies at San Antonio Specific Plan for which building permits are being requested. Such improvements shall be provided to the satisfaction of the Upland Public Works Director.

5.9-8b To mitigate the facilities deficiencies in Zone III, the Applicant shall construct a 0.75 MG reservoir for system operational storage and utilize the jointly owned 5 MG San Antonio Water Company-City reservoir for emergency and fire flow storage together with construction of a sodium hypo-chlorite disinfection system and a 16" transmission pipeline connecting the system to the project. In addition, the 5 MG reservoir is located beyond the Zone III pressure zone, requiring construction of a pressure reducing system to permit use in Zone III. Prior to issuance of building permits, fees shall be submitted to the City of Upland, which includes a water production impact fee of $1.3 million. Fee requirements are based upon square footage for commercial and office development, and per dwelling unit for residential development.

5.9-8c Developer shall determine if off-site transmission and pumping improvements are required for the project. Such improvements shall be constructed by the Applicant to satisfaction of the Upland Public Works Director.

SOLID WASTE

5.9-9 No mitigation measures are recommended.

NATURAL GAS

5.9-10 No mitigation measures are recommended.

ELECTRICITY

5.9-11 No mitigation measures are recommended.

CUMULATIVE IMPACTS

5.9-12 No mitigation measures are recommended.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

No unavoidable significant impacts related to public services and utilities have been identified following implementation of recommended mitigation measures and compliance with applicable City, service or utility provider requirements, City Codes and Ordinances, and standards specified in the Specific Plan Amendment.

6.0 Long-Term Implications of the Proposed Project

6.0 Long-Term Implications of the Proposed Project

6.0 LONG-TERM IMPLICATIONS OF THE PROPOSED PROJECT

6.1 THE RELATIONSHIP BETWEEN SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

If the proposed Project is approved and constructed, a variety of short-term and long-term impacts would occur on a local level. During Project grading and construction, portions of surrounding uses may be temporarily impacted by dust and noise. Short-term erosion may occur during grading. There may also be an increase in dust and vehicle emissions caused by grading and construction activities. However, these disruptions would be temporary, and, with the exception of air quality, can be mitigated by measures cited in this report and the standards for construction as cited in the City of Upland Municipal Code (refer to Section 5.0, *Description of Environmental Setting, Impacts and Mitigation Measures*).

Ultimate development of the Project site would create long-term environmental consequences that are associated with a transition in land use. The long-term effects of the proposed Project and subsequent development would impact the physical, aesthetic, and human environments. Long-term physical consequences of development include: increased traffic volumes, additional noise created by traffic generated from the Project, incremental increased demands for public services and utilities, and increased energy and natural resource consumption. Long-term biological resource consequences associated with grading, construction and landscaping would also include the replacement of on-site vegetation with other plant varieties. Long-term visual/aesthetic impacts include alterations in views across the site. Incremental degradation of local and regional air quality would also be a long-term impact.

6.2 IRREVERSIBLE ENVIRONMENTAL CHANGES THAT WOULD BE INVOLVED IN THE PROPOSED ACTION SHOULD IT BE IMPLEMENTED

Approval of the proposed Project would cause irreversible environmental changes. Implementation of the proposed Project would result in the following changes:

- Commitment of land, which would be physically altered.
- Vegetation removal for grading and construction activities. Replacement landscaping is proposed as a part of the Project.
- Alteration of the human environment as a consequence of the development process. The Project represents a commitment to residential, commercial,

recreational, open space, and institutional uses, which intensifies land uses on the Project site.

- Utilization of various new raw materials, such as lumber, sand and gravel for construction. Some of these resources are already being depleted worldwide. The energy consumed in development and maintaining the site may be considered a permanent investment.

- Incremental increases in vehicular activity in the surrounding circulation system, resulting in associated increases in air emissions and noise levels.

6.3 GROWTH INDUCING IMPACTS

In accordance with CEQA Section 15126.2(d), the following section discusses ways in which the proposed Project could foster economic, housing, or population growth, whether directly or indirectly in the surrounding environments. The growth-inducing impacts of the proposed Project are assessed in terms of whether the Project removes obstacles to development, requires construction of expanded facilities that could serve other future developments, or otherwise facilitate or encourage development of other activities that could significantly affect that environment. "It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."

SUMMARY OF PREVIOUS ENVIRONMENTAL DOCUMENTATION

EIR No. 800 found that development of the Project would not result in growth inducing impacts for the following reasons: 1) public services and utilities would be extended from existing facilities that are currently adjacent to the site without the need for expansion of capacity or establishment of new sources of service; 2) the Project could be considered and urban in-fill project; 3) the commercial uses of the Project are in response to the future I-210 Freeway which runs through the site and can be considered growth accommodating, not growth-inducing; and 4) and the increase in demand would reduce or impair any existing or future levels of utility services, either locally or regionally, as costs for increases in utilities and services would be met through cooperative agreements between the applicants and servicing.

PROPOSED SPECIFIC PLAN AMENDMENT

Project implementation would be considered growth inducing inasmuch as the proposed development would result in the construction of additional housing fostering population growth, and the development of commercial uses, fostering economic growth. However, potential growth-inducing impacts are also assessed based on a project's consistency with adopted plans that have addressed growth management from a local and regional standpoint. Project-related population growth was anticipated in both local and regional plans as is evidenced below:

- The Project site's land use designation is Residential/Commercial (SP), with the exception of the I-210 right-of-way. The Project does not propose an Amendment to the Land Use Map and is considered consistent with the Residential/Commercial (SP) designation. Development, resultant population

increases, and economic growth were anticipated for the Project site in the General Plan Land Use Element.

- The 1998 Specific Plan permits development of up to 1,479 dwelling units, representing a potential population increase of approximately 4,200 persons.[1] The proposed Specific Plan Amendment would permit a maximum of 1,150 dwelling units, representing a potential population increase of approximately 3,266 persons. The Specific Plan Amendment proposes 329 fewer dwelling units representing an approximate 22 percent decrease and 934 fewer persons than the potential population growth accommodated by the existing entitlement. The proposed Project would result in less population growth than the existing entitlement.

- As discussed in Section 5.9, *Public Services and Utilities*, Project implementation would require the expansion of existing water and wastewater facilities, and the provision of both a school site and fire station site, to meet increased demands associated with the Project. However, public services and utilities would be extended to the Project site from existing adjacent facilities. These facilities would be extended for specific use by the land uses proposed by the Project. Additionally, developed areas exist east, west, and south of the site and the I-210 freeway is under construction to the north; thus, the Project can be considered an in-fill development.

- As discussed in Section 5.4, *Air Quality*, the Project would result in an increase in the severity of existing air quality violations. This increase in the severity of the existing violations would make the proposed development inconsistent with the indicators of consistency. The Project does not propose an Amendment to the Land Use Map nor does it resultant in population increases or economic growth that were not anticipated for the Project site in the General Plan. Therefore, the Project would not exceed the AQMP's assumptions for the Project site and would not be growth-inducing in this regard.

Based on these findings, implementation of the proposed Project would not result in significant growth inducing impacts since it would not remove obstacles to development or provide expanded facilities for other future developments. The proposed Specific Plan Amendment would be responding to growth that was previously planned rather than creating growth that would require substantial development of unplanned/unforeseen support uses and services. No further development as a result of Project development or provision of services to the site is anticipated.

REGIONAL AND LOCAL SETTING

POPULATION

The City of Upland is contained in one of the six counties that comprises the Southern California Association of Governments (SCAG) region. According to SCAG, since the 1990 Census, the six-county region (Los Angeles, Orange,

[1] Based on California Department of Finance (CADOF) estimate of 2.84 persons per household.

Riverside, San Bernardino, Ventura, and Imperial Counties) has grown from 14.6 million to 16.5 million, an increase of 12.81 percent. All of the counties in the SCAG region experienced a growth of at least 12 percent with the exception of Los Angeles County, which grew by 7.4 percent. The population projections for the year 2010 for the SCAG region is an estimated 20.5 million persons, representing a population increase of approximately 25 percent (4.2 million persons) between 1998 and 2010. According to SCAG, the growth in population for the region is a result of natural increase and net in-migration.[2]

The County of San Bernardino grew from 1,418,380 persons in 1990 to 1,709,434 persons in 2000. This growth represented an annual growth rate of 2.05 percent or a total change in population, from 1990 to 2000, of 20.52 percent. In 1990, the County's population represented approximately 9.7 percent of SCAG Region's total population, while in 2000 the County's population accounted for 10.4 percent of the Region's total population.[3] The County is anticipated to continue this population growth trend by increasing to 2,231,600 persons in the year 2010 and to 2,800,900 persons in 2020.[4]

In 1990, the City of Upland's population was an estimated 63,374 persons, while in 2000, the City's population was an estimated 68,100 persons. The City's population growth averaged approximately 0.80 percent per year between 1990 and 2000.[5] Overall, the City's population grew approximately 7.46 percent (4,726 persons) between 1990 and 2000. The growth experienced by the City was significantly less than the 20.52 percent growth experienced by the County of San Bernardino as a whole. The anticipated increase in population for the City of Upland is consistent with the Growth Management Chapter of the Southern California Association of Government's (SCAG) Regional Comprehensive Plan and Guide.

As of January 1, 2001, the City's population was an estimated 70,112 persons.[6] The Project proposes the development of approximately 444 acres to include a maximum of 1,150 dwelling units. At buildout, this development has the potential to increase the City's 2001 population by an estimated 3,266 persons, representing an approximately 4.66 percent increase over existing conditions.[7] As previously noted, the Specific Plan Amendment would result in less population growth (934 fewer persons representing an approximate 22 percent decrease) from the potential population growth accommodated by the existing entitlement.

---

[2] Natural increase is defined as the excess of births over deaths. Net in-migration is defined as the total number of people entering the region minus the people leaving a region.

[3] Southern California Association of Governments Region. http://www.scag.ca.gov/census/. April 2001.

[4] *Interim County Population Projections, Estimated July 1, 2000 and projections for 2005, 2010, 2015, and 2020*, State of California, Department of Finance, June 2001.

[5] The City's population increased every year with the exception of 1995 when the population experienced a slight decrease (0.46 percent).

[6] Report E-5, *City and County Population and Housing Estimates*, California State Department of Finance, January 2001.

[7] Based on California Department of Finance (CADOF) estimate of 2.84 persons per household.

HOUSING

A total of 25,603 dwelling units exist in the City of Upland as of January 2001. Of these existing units, a total of 14,464 are single-family detached units. The proposed Project would involve the development of up to 800 single-family detached dwellings and 350 luxury attached homes which would represent a 4.5 percent increase over the total existing housing stock and a 5.5 percent increase over the existing number of single-family detached housing.[8] As previously noted, the Specific Plan Amendment proposes 329 fewer dwelling units representing an approximate 22 percent decrease from the maximum dwellings permitted under the existing entitlement.

EMPLOYMENT

Estimates of employment in San Bernardino County were obtained from the Labor Market Information Division of the California State Employment Development Department. According to these statistics, there were 796,000 jobs in San Bernardino County as of February 2001. As of February 2001, the County's unemployment rate was 4.4 percent[9], which was less than State and that of the United States unemployment rate for the same period (4.9 percent and 4.6 percent, respectively).[10]

According to the California Employment Development Department, as of February 2001, the City of Upland had a labor force of 43,010 and provided 41,730 jobs.[11] The City's unemployment rate for the same year was an estimated 3.0 percent.

The Project proposes a total of 114.92 acres of commercial development including 102.52 acres of Highway Commercial and 12.4 acres of Neighborhood Commercial. Implementation of the proposed Project would generate short-term employment within the City of Upland associated with construction-related activities. Additionally, long-term employment would be created by Project implementation in association with the proposed commercial uses. The proposed Amendment would represent a net increase of 670,000 square feet in commercial development over the amount under the existing approved Specific Plan. Accordingly, the proposed Amendment would provide a proportionately greater amount of employment opportunities.

[8] California State Department of Finance. http://www.dof.ca.gov/HTML/DEMOGRAP/E-5text.htm.

[9] State of California Employment Development Department Labor Market Information Division. http://www.calmis.cahwnet.gov/file/lfmonth/lasub.txt

[10] State of California Employment Development Department Labor Market Information Division. http://www.calmis.cahwnet.gov/FILE/LFMONTH/CAL1$PR.TXT

[11] Employment data obtained from the California Employment Development Department, Labor Market Information Division. Data is based on the 2000 benchmark and is not seasonally adjusted. County data is for February (Preliminary) 2001.

7.0 Alternatives to the Proposed Action

7.0 Alternatives to the Proposed Action

7.0 ALTERNATIVES TO THE PROPOSED PROJECT

7.1 INTRODUCTION

CEQA requires EIRs to discuss a range of reasonable alternatives to a project, or to the project location, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives (CEQA Guidelines, Section 15126.6(a)). This section describes alternatives that satisfy these two criteria, i.e., alternatives which both: (a) attain most of the project's basic objectives; and, (b) lessen the project's potentially significant environmental effects. Pursuant to Section 15126.6 (f)(1) of the CEQA Guidelines, *among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent).* Although these factors do not present a strict limit on the scope of reasonable alternatives to be considered, they help establish the context in which "the rule of reason" is measured against when determining an appropriate range of alternatives sufficient to establish and foster meaningful public participation and informed decision-making.

7.1.1 ALTERNATIVES TO BE ANALYZED

The analysis focuses on alternatives capable of eliminating significant adverse environmental effects or reducing them to less than significant levels, even if these alternatives would impede, to some degree, the attainment of the project objectives. Potential environmental impacts associated with four separate alternatives are compared to impacts from the proposed project below.

These alternatives include:

- Alternative One. Completion of Phase One (305 dwelling units on approximately 76 acres). No development on the remaining 372 acres. Alternative One serves as the "No Project" Alternative in accordance with CEQA Section 15126.6(e).

- Alternative Two. Completion of Phase One (305 dwelling units) and buildout of the balance of the 1998 Colonies at San Antonio Specific Plan.

- Alternative Three. 50 acres of commercial designated land that could accommodate a maximum of 520,000 square feet of commercial uses. Residential development would permit a maximum of 1,100 dwelling units, including the 305 dwelling units constructed as part of Phase One. Two hundred (200) of the 1,100 dwelling units would be multi-family dwelling units. In addition, the school would be constructed.

- Alternative Four. Approximately 1.2 million square feet of commercial on approximately 114.92 acres would be permitted. Residential development would permit a maximum of 850 dwelling units, which would include 110 multi-family and 740 single-family units. The 305 dwelling units currently under construction in Phase One are included in the 850 dwelling unit total. In addition, the school would be constructed.

The potentially significant impacts associated with implementation of the proposed Project are set forth in Section 5.0 of this EIR. The proposed Project would result in potentially significant or significant impacts in regards to: land use and relevant planning, aesthetics/light and glare, transportation and circulation, air quality, noise, biological resources, geology and soils, hydrology and drainage, and public services and utilities.

Throughout the following analysis, impacts of alternatives are examined only for those issue areas where significant or potentially significant impacts prior to the imposition of mitigation measures were identified in Section 5.0 of this EIR. In this manner, each alternative can be compared to the proposed Project on an issue-by-issue basis for the following issues:

- Land Use: City of Upland General Plan – Circulation Element Amendment
- Land Use: City of Upland Municipal Code/Zoning Ordinance
- Aesthetics: Short-Term Grading and Construction Impacts
- Aesthetics: Visual Character and Scenic Views
- Aesthetics: Light and Glare
- Traffic: Year 2011 Future Traffic Conditions
- Traffic: Year 2015 Future Traffic Conditions
- Traffic: Year 2020 Buildout Traffic Conditions
- Air Quality: Short-Term Air Quality Impacts
- Air Quality: Long-Term Air Quality Impacts
- Air Quality: Consistency with Air Quality Management Plan
- Air Quality: Cumulative Impacts
- Noise: Short-Term Construction Noise and Vibration Impacts
- Noise: Long-Term Noise Impacts
- Noise: Stationary Noise Impacts
- Biological Resources: Riparian Habitat
- Biological Resources: Sensitive Habitat Community
- Biological Resources: Habitat Conservation Plan/Significant Natural Areas Program
- Geology: Ground Shaking
- Geology: Soil Erosion
- Geology: Unstable Geologic Units and Expansive Soils
- Hydrology: Storm Water Quality – Construction
- Hydrology: Non-Point Source Pollutants – Project Buildout
- Hydrology: Project Development Storm Flows/Percolation
- Hydrology: Hydrology/Drainage
- Hydrology: Water Quality - Project Buildout
- Public Services and Utilities: Fire Protection
- Public Services and Utilities: Police Protection

- Public Services and Utilities: Schools
- Public Services and Utilities: Libraries
- Public Services and Utilities: Recreation
- Public Services and Utilities: Wastewater
- Public Services and Utilities: Water
- Public Services and Utilities: Solid Waste

The analysis of alternatives includes the assumption that all applicable mitigation measures associated with the proposed Project would be implemented with the appropriate alternatives. However, applicable mitigation measures have been incorporated to reduce or avoid the potential impacts of the alternative under consideration, and may not precisely match those identified for the proposed Specific Plan Project.

An EIR must identify an "environmentally superior" alternative and where the No Project Alternative is identified as environmentally superior, the EIR is then required to identify as environmentally superior an alternative from among the others evaluated. Each alternative's environmental impacts are compared to the proposed Project and determined to be environmentally superior, inferior or neutral. However, only those impacts found to be significant and unavoidable for the proposed Project are used in making the final determination of whether an alternative is environmentally superior or inferior to the proposed project.

7.1.2 PROJECT GOALS AND OBJECTIVES

The goals for the Colonies at San Antonio Specific Plan Amendment (2002) are stated in Section 3.4, *Project Goals and Objectives*. They have been restated here for ease in reviewing each alternative's ability to meet the objectives set for the proposed Project.

Overall Goal

As stated in the proposed Specific Plan Amendment document the intent of the Colonies at San Antonio Specific Plan is to provide the City of Upland, its citizens, nearby residents, and project developers with a document that identifies objectives, directions for development, and development regulations which would aid in the achievement of mutual goals. These goals, which evolved during a series of meetings and conferences with all parties concerned, include responding to public demand for a variety of residential product types and housing densities; providing compatible commercial facilities and open space areas; facilitating efficient vehicular circulation flow within the project site while minimizing through traffic on Colonies Parkway; providing essential flood control detention facilities; and responding to existing natural and man-made site conditions. These goals, then, are the framework upon which the Specific Plan is constructed. The success of this Specific Plan depends, in large part, upon its ability to respond to and adequately meet these goals. When implemented, the Colonies at San Antonio project would prove a safe, attractive, and economically viable addition to the City of Upland and the region. Thus, the overall goal of the Colonies at San Antonio Specific Plan is:

To establish a clearly recognizable, mixed use community that provides a broad range of commercial opportunities, maintains a high quality living environment, and enhances the quality of life for present and future residents of the City of Upland.

To further define this overall goal statement, goals and objectives are provided by the Applicant for Community Design, Land Use, Circulation, Infrastructure, and project Implementation. These goals and objectives are detailed in Section 3.4.

7.2 ALTERNATIVE ONE

7.2.1 DESCRIPTION OF ALTERNATIVE

Alternative One proposes the completion of 305 dwelling units on approximately 70 acres under Phase One, with no additional development on the remainder of the project site. Alternative One serves as the "No Project" Alternative in accordance with CEQA Section 15126.6(e). Alternative One was a part of the approved Amendment of 1998 and is currently under construction.

7.2.2 IMPACT COMPARISON TO THE PROPOSED PROJECT

Land Use and Relevant Planning

According to the City of Upland General Plan Map, the project site is designated as Specific Plan Residential/Commercial (R/C-SP), with the exception of the I-210 right-of-way. Implementation of this Alternative is partially consistent with the R/C-SP designation, which anticipated commercial and residential uses on the entire 448-acre site. Under this Alternative, the Circulation Element Amendment for 19th Street would not be required. Given that only a small portion of the 1998 Specific Plan would be implemented under this Alternative, Alternative One is considered environmentally inferior to the proposed Project.

Aesthetics/Light and Glare

Under this Alternative, 305 dwelling units are to be constructed in three planning areas (Planning Areas 1, 2 and 3) in the eastern portion of the project site, south of 19th Street and east of Tanglewood Avenue. Thus, the numerous rock and debris piles, and levee with flood control structures would remain on the remainder of the site. Only views from residential uses to the east would be impacted by the residential development. However, the 305 residential units are not anticipated to significantly impact views of the mountains to the north or the valley to the south. This Alternative is not anticipated to generate significant amounts of light and glare that would impact surrounding uses. Therefore, Alternative One would be environmentally superior to the proposed Project with regards to aesthetics and light and glare.

Traffic and Circulation

Several intersections are currently operating at deficient levels and would continue to do so in the future analysis years (2011, 2015 and 2020). Those intersections are:

- 19th Street at Campus Avenue;
- 16th Street at Mountain Avenue;
- Baseline Street at Carnelian Street; and
- Baseline Street at Archibald Avenue.

The mitigation measures proposed for the Project for these intersections would be applicable for Alternative One. Thus, implementation of Alternative One with applicable mitigation would result in less than significant impacts in this regard.

On a daily basis, Alternative One would generate 2,892 average daily trips (ADT) as compared to the 67,319 daily trips generated by the proposed Project. Implementation of Alternative One would result in less traffic impacts to both area intersections and roadway segments than the proposed Project. In conclusion, Alternative One would be environmentally superior to the proposed Project with regard to traffic and circulation.

Air Quality

Given that Alternative One involves construction of 305 dwelling units, which is 845 fewer dwelling units and 1.2 million less square feet of commercial uses than the proposed Project, it would generate significantly less short-term construction impacts and long-term regional air quality impacts. While demolition, grading and construction activities would occur under this Alternative, it is not anticipated that the NO_x, PM_{10}, and ROG emissions standard would be violated (South Coast Air Quality Management District), nor would the standards for stationary and mobile source emissions. In this regard, Alternative One is environmentally superior to the proposed Project.

Noise

Given that Alternative One involves construction of only 305 dwelling units, significantly less short-term construction and long-term vehicular and operational noise impacts would occur. In addition, fewer sensitive receptors (i.e., residences, schools) would be impacted by on-site operational and traffic noise. In this regard, Alternative Two is environmentally superior to the proposed Project.

Biological Resources

Development under Alternative One would not impact the existing riparian habitat on the project site, nor would this Alternative significantly impact the Riversidean alluvial fan sage scrub habitat located north of the I-210 freeway. The habitat located south of the freeway is fragmented and is not considered to be of significant habitat value. Implementation of Alternative One would not result in significant impacts to biological resources. It should be noted that the proposed habitat restoration would occur under this Alternative. In conclusion, Alternative One is considered environmentally superior to the proposed Project with regard to biological resources.

Geology and Soils

Under this Alternative, significantly fewer residents would be exposed to seismic hazards, and fewer impacts related to soil erosion would occur when compared to

the proposed Project. In this regard, Alternative One is considered environmentally superior to the proposed Project.

Hydrology and Drainage

Alternative One would result in short-term impacts to water quality associated with grading, excavation and construction activities since development of approximately 70 acres would occur. This Alternative proposes significantly less development than the proposed project and focuses the development on approximately 70 acres as compared to approximately 448 acres. Thus, this Alternative would generate significantly less storm water and urban runoff than the proposed Project. It is worth noting that none of the proposed Project's overall site drainage improvements would be implemented with this Alternative, only the necessary drainage improvements for the 305 dwelling units. With regard to storm water runoff, Alternative One is considered environmentally superior to the proposed Project.

Public Services and Utilities

Alternative One would result in significantly fewer impacts than the proposed Project for fire protection, police protection, and schools, given that only 305 dwelling units are proposed. And while this Alternative would necessitate the incremental expansion of the existing sewer, water, electrical, and gas systems, the impacts would be significantly less than those generated by the proposed Project. This Alternative would also result in an increase in solid waste generation, which would be significantly less than the amount generated by the proposed Project. With regard to public services and utilities, Alternative One is environmentally superior to the proposed Project.

7.2.3 ABILITY TO MEET PROJECT OBJECTIVES

Alternative One is considered to be environmentally superior to the proposed Project. However, this Alternative would not realize all of the project objectives as indicated in Section 3.4, *Project Goals and Objectives*, of this EIR, particularly those related to providing a mixed-use community that includes a range of commercial opportunities.

7.3 ALTERNATIVE TWO

7.3.1 DESCRIPTION OF ALTERNATIVE

Alternative Two involves development of the project site based primarily upon the existing entitlements. This Alternative proposes the development of 305 dwelling units in Phase One and buildout of the balance of the 1998 Colonies at San Antonio Specific Plan. Alternative Two would result in the development of 1,464 dwelling units; 530,000 square feet of commercial uses; and 52,000 square feet of business park uses. The acreage by land use for Alternative Two is detailed below:

- 239.3 acres of Residential Uses;
- 48.9 acres of Commercial Uses;
- 3.0 acres of Business Park Uses;
- 16.8 acre School/Park Site;

- 2.4 acre Fire Station Site;
- 40.0 acre Lake and Greenbelt Area;
- 6.1 acre Flood Control Corridor;
- 5.4 acre Drainage Basin; and
- 78.6 acres of Freeways and Roads.

7.3.2 IMPACT COMPARISON TO THE PROPOSED PROJECT

Land Use

Implementation of Alternative Two would not require an amendment to the existing Specific Plan, nor would an amendment to the General Plan Circulation Element be required for the 19th Street modification, as this Alternative generally conforms to the prescribed zoning and general plan land use designations. In addition, the existing entitlements were approved and deemed not to conflict with the policies of the City of Upland General Plan and Municipal Code. Of note is the fact single-family and multi-family residential would be situated adjacent to the I-210 freeway corridor.

Similarly, the proposed Project would be consistent with applicable plans and policies as stated in Section 5.1, *Land Use and Relevant Planning*, the policies of the City of Upland General Plan, and the Municipal Code. In this regard, Alternative Two is neither environmentally superior nor inferior to the proposed Project.

Aesthetics/Light and Glare

As with the proposed project, this Alternative would introduce urban development to the project site, which would be visible from the surrounding community. However under Alternative Two, approximately 670,000 less square feet of commercial and office uses would be permitted. While the proposed Project includes development standards and design guidelines for commercial and residential uses, residential uses adjacent to the Project area would be less significantly impacted from both a visual character and light and glare perspective given that fewer commercial and office uses would be constructed. In this regard, Alternative Two is considered environmentally superior to the proposed Project.

Traffic and Circulation

As previously noted, several intersections are currently operating at deficient levels and would continue to do so in the future analysis years (2011, 2015 and 2020). Those intersections are:

- 19th Street at Campus Avenue;
- 16th Street at Mountain Avenue;
- Baseline Street at Carnelian Street; and
- Baseline Street at Archibald Avenue.

The mitigation measures proposed for the Project for these intersections would be applicable for Alternative Two. Thus, implementation of Alternative Two with applicable mitigation would result in less than significant impacts in this regard.

According to EIR No. 800, the 1998 project would generate a total of 38,660 average daily trips as compared to the 67,319 daily trips generated by the proposed Project. Implementation of Alternative Two would produce 40 percent fewer daily trips, and thus result in less traffic impacts to both area intersections and roadway segments than the proposed Project. In conclusion, Alternative Two would be environmentally superior to the proposed Project with regard to traffic and circulation.

Air Quality

Alternative Two includes 670,000 less square feet of commercial uses and 314 more dwelling units than the proposed Project. Overall, Alternative Two would generate less short-term construction impacts and long-term regional air quality impacts. However, significant and unavoidable impacts with respect to short- and long-term air quality impacts would result under either Alternative Two or the proposed Project. In this regard, Alternative Two is neither environmentally superior nor inferior to the proposed Project.

Noise

Noise from mobile and stationary sources associated with the proposed project would be greater than with Alternative Two as a result of the increased commercial uses and daily trips. Therefore, when compared to the proposed project this Alternative would result in fewer impacts in this regard. With implementation of the mitigation measures specified in Section 5.4, *Noise*, impacts for Alternative Two would also be reduced to a less than significant level. Thus, Alternative Two is neither environmentally superior nor inferior to the proposed Project.

Biological Resources

Development under either the proposed Project or Alternative Two would impact the existing on-site riparian habitat, as well the Riversidean alluvial fan sage scrub habitat located north of the I-210 freeway.

The proposed Project recommends modifying the purpose of the open space area at the center of the site from a flood control and recreational lake to a flood control detention facility, which would serve as a riparian mitigation area and major open space amenity. Within this 60-acre area, acreage would be devoted to restored riparian, with the balance devoted to passive open space and trails. The amount of acreage designated for habitat restoration and/or preservation would be greater with the proposed Project than with this Alternative.

While the proposed Project allocates more land to and/or restores more wetland habitat, the impact to the alluvial fan sage scrub habitat would not be reduced under Alternative Two. Therefore, Alternative Two is neither environmentally superior nor inferior to the proposed Project with regard to biological resources.

Geology and Soils

Under this alternative, more residents and fewer employees would be exposed to seismic hazards than the proposed Project. Also, the intensity of future seismic activity on-site is expected to be no greater than for other sites in the immediate

vicinity. Thus, when compared to the proposed Project, this Alternative would have a similar impact due to similar size development areas. In this regard, Alternative Two is neither environmentally superior nor inferior to the proposed Project.

Hydrology and Drainage

Both Alternative Two and the proposed Project involve the development of commercial and residential uses that would increase pollutant loadings, including hydrocarbons, fertilizers, and pesticides. This impact would be considered significant unless mitigated. As with the proposed Project, development of this Alternative has the potential to result in significant impacts associated with water quality and quantity. These impacts would be reduced to less than significant levels with proposed mitigation measures in Section 5.8, *Hydrology and Drainage*. When compared to the proposed Project, this Alternative would result in fewer impacts in this regard as a result of the decreased amount of commercial uses and impermeable surfaces and is considered environmentally superior.

Public Services and Utilities

Alternative Two proposes 670,000 less square feet of commercial uses and 314 more dwelling units than the proposed Project. This Alternative would result in fewer impacts than the proposed Project for fire and police protection, but greater impacts to schools given that over 300 more dwelling units are proposed. And while this Alternative would necessitate the incremental expansion of the existing sewer, water, electrical, and gas systems, the impacts would be similar to those generated by the proposed Project. This Alternative would also result in an increase in solid waste generation, which would be less than the amount generated by the proposed Project. These impacts would be reduced to less than significant levels with proposed mitigation measures in Section 5.9, *Public Services and Utilities*. Thus, in comparison to the proposed Project, Alternative Two is considered neither environmentally superior nor inferior.

7.3.3 ABILITY TO MEET PROJECT OBJECTIVES

The issues of aesthetics/light and glare, traffic and circulation, and hydrology and drainage are considered environmentally superior for Alternative Two as compared to the proposed Project. For Alternative Two, all other impact areas are considered neither environmentally superior nor inferior to the proposed Project. Alternative Two is not considered the environmentally superior alternative. However, this Alternative would realize many of the project objectives as indicated in Section 3.4, *Project Goals and Objectives*, of this EIR.

7.4 ALTERNATIVE THREE

7.4.1 DESCRIPTION OF ALTERNATIVE

Alternative Three involves the development of 520,000 square feet of commercial uses on 50 acres and a maximum of 1,110 dwelling units, which includes the 305 dwelling units currently under construction part of Phase One. Two hundred (200) of

the 1,100 dwelling units would be multi-family dwelling units. In addition, the school would be constructed.

7.4.2 IMPACT COMPARISON TO THE PROPOSED PROJECT

Land Use

Implementation of Alternative Three would require an amendment to the existing Specific Plan, as well as an amendment to the General Plan Circulation Element for the 19th Street modification. As discussed in Section 5.1, *Land Use and Relevant Planning*, the proposed Project was concluded to be consistent with applicable plans and policies, the goals and policies of the City of Upland General Plan, and the Municipal Code. Similarly, Alternative Two would be consistent with the aforementioned plans and policies. Thus, Alternative Three is neither environmentally superior nor inferior to the proposed Project in this regard.

Aesthetics/Light and Glare

As with the proposed project, this Alternative would introduce urban development to the project site, which would be visible from the surrounding community. However under Alternative Three, approximately 680,000 less square feet of commercial and office uses would be permitted. While the proposed Project includes development standards and design guidelines for commercial and residential uses, residential uses to the north and east would be less significantly impacted from both a visual character and light and glare perspective given a reduced scale in which commercial and office uses would be constructed. In this regard, Alternative Three is considered environmentally superior to the proposed Project.

Traffic and Circulation

As previously noted, several intersections are currently operating at deficient levels and would continue to do so in the future analysis years (2011, 2015 and 2020). Those intersections are:

- 19th Street at Campus Avenue;
- 16th Street at Mountain Avenue;
- Baseline Street at Carnelian Street; and
- Baseline Street at Archibald Avenue.

The mitigation measures proposed for the Project for these intersections would be applicable for Alternative Three. And thus, implementation of Alternative Three with applicable mitigation would result in less than significant impacts in this regard.

Alternative Three would generate similar number of daily trips as Alternative Two, which is projected to generate a total of 38,660 average daily trips. The proposed Project is anticipated to generate 67,319 daily trips. Thus, implementation of Alternative Three would produce approximately 40 percent fewer daily trips, and thus result in less traffic impacts to both area intersections and roadway segments than the proposed Project. In conclusion, Alternative Three would be environmentally superior to the proposed Project with regard to traffic and circulation.

Air Quality

Although similar grading and earthwork would occur when compared to the proposed project, Alternative Three proposes 680,000 less square feet of commercial uses and approximately the same number of dwelling units as the proposed Project. Overall, Alternative Three would generate less short-term construction impacts and long-term regional air quality impacts. Significant and unavoidable impacts with respect to short- and long-term air quality impacts would result under either Alternative Three or the proposed Project. In this regard, Alternative Three is neither environmentally superior nor inferior to the proposed Project.

Noise

Noise from mobile and stationary sources associated with the proposed project would be greater than with Alternative Three as a result of the increased commercial uses and daily trips. Therefore, when compared to the proposed project, this Alternative would result in fewer impacts in this regard. With implementation of the mitigation measures specified in Section 5.4, *Noise*, impacts for Alternative Three would also be reduced to a less than significant level. Thus, in this regard, Alternative Three is neither environmentally superior nor inferior to the proposed Project.

Biological Resources

Development under either the proposed Project or Alternative Three would impact the existing on-site riparian habitat, as well the Riversidean alluvial fan sage scrub habitat located north of the I-210 freeway. Thus, Alternative Three is neither environmentally superior nor inferior to the proposed Project with regard to biological resources.

Geology and Soils

Under this alternative, more residents and fewer employees would be exposed to seismic hazards than the proposed Project. Also, the intensity of future seismic activity on-site is expected to be no greater than for other sites in the immediate vicinity. When compared to the proposed Project, this Alternative would have a similar impact due to similar size development areas. In this regard, Alternative Three is neither environmentally superior nor inferior to the proposed Project.

Hydrology and Drainage

Both Alternative Three and the proposed Project involve the development of commercial and residential uses that would increase pollutant loadings, including hydrocarbons, fertilizers, and pesticides. This impact would be considered significant unless mitigated. As with the proposed Project, development of this Alternative has the potential to result in significant impacts associated with water quality and quantity. These impacts would be reduced to less than significant levels with proposed mitigation measures in Section 5.8, *Hydrology and Drainage*. When compared to the proposed Project, this Alternative would result in fewer impacts in this regard as a result of the decreased amount of commercial uses and impermeable surfaces and is considered environmentally superior.

Public Services and Utilities

Alternative Three proposes 680,000 less square feet of commercial uses and approximately the same number of dwelling units as the proposed Project. This Alternative would result in fewer impacts than the proposed Project for fire and police protection. With respect to schools, this Alternative would result in a beneficial impact given that a school facility would be constructed.

This Alternative would necessitate the incremental expansion of the existing sewer, water, electrical, and gas systems, however, the impacts would be similar to those generated by the proposed Project. This Alternative would also result in an increase in solid waste generation, which would be less than the amount generated by the proposed Project.

The impacts for fire and police protection, utility systems, and solid waste would be reduced to less than significant levels with proposed mitigation measures in Section 5.9, *Public Services and Utilities*. Thus, for these issues, Alternative Three is neither environmentally superior nor inferior in comparison to the proposed Project. However, for schools, Alternative Three is environmentally superior to the proposed Project.

7.4.3 ABILITY TO MEET PROJECT OBJECTIVES

The issues of aesthetics/light and glare, traffic and circulation, hydrology and drainage, and schools are considered environmentally superior for Alternative Three as compared to the proposed Project. For Alternative Three, all other impact areas are considered neither environmentally superior nor inferior to the proposed Project. Alternative Three is not considered the environmentally superior alternative. However, this Alternative would realize many of the project objectives as indicated in Section 3.4, *Project Goals and Objectives*, of this EIR.

7.5 ALTERNATIVE FOUR

7.5.1 DESCRIPTION OF ALTERNATIVE

Alternative Four proposes the development of 1.2 million square feet of commercial uses on 102 acres and a maximum of 850 dwelling units, which includes the 305 dwelling units currently under construction as part of Phase One. One hundred ten (110) of the 1,100 dwelling units would be multi-family dwelling units, and the remaining 750 dwelling units would be single-family units. In addition, the school would be constructed.

7.5.2 IMPACT COMPARISON TO THE PROPOSED PROJECT

Land Use

Implementation of Alternative Four would require an amendment to the existing Specific Plan, as well as an amendment to the General Plan Circulation Element for the 19th Street modification. As discussed in Section 5.1, *Land Use and Relevant Planning*, the proposed Project was concluded to be consistent with applicable plans

and policies, the goals and policies of the City of Upland General Plan, and the Municipal Code. Similarly, Alternative Four would be consistent with the aforementioned plans and policies. Thus, Alternative Four is neither environmentally superior nor inferior to the proposed Project in this regard.

Aesthetics/Light and Glare

As with the proposed project, this Alternative would introduce urban development to the project site, which would be visible from the surrounding community. Under Alternative Four, the same amount of commercial and office uses would be permitted and approximately 300 fewer dwelling units. While the proposed Project includes development standards and design guidelines for commercial and residential uses, surrounding uses to the north, south and east would be significantly impacted from both a visual character and light and glare perspective. These same significant and unavoidable impacts would result under Alternative Four. In this regard, Alternative Four is considered neither environmentally superior nor inferior to the proposed Project.

Traffic and Circulation

As previously noted, several intersections are currently operating at deficient levels and would continue to do so in the future analysis years (2011, 2015 and 2020). Those intersections are:

- 19th Street at Campus Avenue;
- 16th Street at Mountain Avenue;
- Baseline Street at Carnelian Street; and
- Baseline Street at Archibald Avenue.

The mitigation measures proposed for the Project for these intersections would be applicable for Alternative Four. And thus, implementation of Alternative Four with applicable mitigation would result in less than significant impacts in this regard.

Alternative Four would generate approximately 3,000 fewer daily trips given that 300 fewer residential units are anticipated than the proposed Project, which is anticipated to generate 67,319 daily trips. Thus, implementation of Alternative Four would produce approximately 5 percent fewer daily trips, and thus result in slightly less traffic impacts to both area intersections and roadway segments than the proposed Project. Given that Alternative Four results in only a slight reduction in daily traffic, this Alternative is considered neither environmentally superior nor inferior to the proposed project.

Air Quality

Under Alternative Four, the same amount of commercial and office uses would be permitted and approximately 300 fewer dwelling units. Overall, Alternative Four would generate only slightly less short-term construction impacts and long-term regional air quality impacts. However, significant and unavoidable impacts with respect to short- and long-term air quality impacts would result under either Alternative Four or the proposed Project. In this regard, Alternative Four is neither environmentally superior nor inferior to the proposed Project.

Noise

Noise from mobile and stationary sources associated with the proposed project would be similar to that generated under Alternative Four, which proposes 300 fewer residential units. Therefore, when compared to the proposed project, this Alternative would result in only slightly fewer impacts in this regard. With implementation of the mitigation measures specified in Section 5.4, *Noise*, impacts for Alternative Four would also be reduced to a less than significant level. Thus, in this regard, Alternative Four is neither environmentally superior nor inferior to the proposed Project.

Biological Resources

Development under either the proposed Project or Alternative Four would impact the existing on-site riparian habitat, as well the Riversidean alluvial fan sage scrub habitat located north of the I-210 freeway. Thus, Alternative Four is neither environmentally superior nor inferior to the proposed Project with regard to biological resources.

Geology and Soils

Under this alternative, the same number of employees and slightly fewer residents would be exposed to seismic hazards than the proposed Project. Also, the intensity of future seismic activity on-site is expected to be no greater than for other sites in the immediate vicinity. Thus, when compared to the proposed Project, this Alternative would have a similar impact due to similar size development areas. In this regard, Alternative Four is neither environmentally superior nor inferior to the proposed Project.

Hydrology and Drainage

Both Alternative Four and the proposed Project involve the development of commercial and residential uses that would increase pollutant loadings, including hydrocarbons, fertilizers, and pesticides. This impact would be considered significant unless mitigated. As with the proposed Project, development of this Alternative has the potential to result in significant impacts associated with water quality and quantity. However, these impacts would be reduced to less than significant levels with proposed mitigation measures in Section 5.8, *Hydrology and Drainage*. When compared to the proposed Project, this Alternative would result in similar impacts as the proposed Project. In this regard, Alternative Four is neither environmentally superior nor inferior to the proposed Project.

Public Services and Utilities

Under Alternative Four, the same amount of commercial and office uses would be permitted and approximately 300 fewer dwelling units. This Alternative would result in similar impacts as the proposed Project for fire and police protection. With respect to schools, this Alternative would result in a beneficial impact given that a school facility would be constructed.

This Alternative would necessitate the incremental expansion of the existing sewer, water, electrical, and gas systems, however, the impacts would be similar to those generated by the proposed Project. This Alternative would also result in an increase in solid waste generation, which would be less than the amount generated by the proposed Project.

The impacts for fire and police protection, utility systems, and solid waste would be reduced to less than significant levels with proposed mitigation measures in Section 5.9, *Public Services and Utilities*. Thus, for these issues, Alternative Four is neither environmentally superior nor inferior in comparison to the proposed Project. However, for schools, Alternative Four is environmentally superior to the proposed Project.

7.5.3 ABILITY TO MEET PROJECT OBJECTIVES

Only the issue of schools is considered environmentally superior for Alternative Four as compared to the proposed Project. For Alternative Four, all other impact areas are considered neither environmentally superior nor inferior to the proposed Project. Alternative Four is not considered the environmentally superior alternative. However, this Alternative would realize many of the project objectives as indicated in Section 3.4, *Project Goals and Objectives*, of this EIR.

7.6 COMPARATIVE OVERVIEW OF ALTERNATIVE'S IMPACTS

Table 7.1, *Comparison of Alternative Environmental Impacts with Proposed Project*, provides an overview of the alternatives analyzed in this section and a comparison of each alternative's impact in relation to the proposed project.

Table 7-1
Comparison of Alternative Environmental Impacts with Proposed Project

Issue	Alternative One	Alternative Two	Alternative Three	Alternative Four
Land Use and Relevant Planning	■	=	=	=
Aesthetics/Light and Glare	□	□	□	=
Traffic and Circulation	□	□	□	=
Air Quality	□	=	=	=
Noise	□	=	=	=
Biological Resources	□	=	=	=
Geology and Soils	□	=	=	=
Hydrology and Drainage	□	□	□	=
Fire and Police Protection	□	=	=	=
Schools	□	=	□	□
Utility Systems	□	=	=	=
Solid Waste	□	=	=	=
Ability to Meet All or Most Project Objectives	Not All Identified Objectives	Yes	Yes	Yes

= Impact is equivalent to impact of proposed project (neither environmentally superior nor inferior).
■ Impact is greater than impact of proposed project (environmentally inferior).
□ Impact is less than impact of proposed project (environmentally superior).

8.0 Inventory of Mitigation Measures

8.0 INVENTORY OF MITIGATION MEASURES

LAND USE AND RELEVANT PLANNING

CITY OF UPLAND GENERAL PLAN

5.1-1 No mitigation measures are recommended.

CITY OF UPLAND MUNICIPAL CODE/ZONING ORDINANCE

5.1-2 No mitigation measures are recommended.

APPLICABLE PLANS, POLICIES, AND REGULATIONS

5.1-3 No mitigation measures are recommended. Refer also to Section 5.4, *Air Quality*, Section 5.6, *Biological Resources*, and Section 5.8, *Hydrology and Drainage*.

CUMULATIVE IMPACTS

5.1-4 No mitigation measures are recommended.

AESTHETICS/LIGHT AND GLARE

SHORT-TERM IMPACTS

5.2-1 Construction equipment staging areas shall be located away from existing residential uses and appropriate screening (i.e., temporary fencing with opaque material), shall be utilized to buffer views of construction equipment and material, when feasible. Staging locations shall be identified on project Final Development Plans and Grading Plans and subject to review and approval of the City. Compliance with this measure is subject to periodic field inspections by City staff.

LONG-TERM IMPACTS

SCENIC RESOURCES

5.2-2 No mitigation measures are recommended.

VISUAL CHARACTER

5.2-3 No mitigation measures are recommended.

LIGHT AND GLARE

5.2-4 No mitigation measures are recommended.

CUMULATIVE IMPACTS

5.2-5 No mitigation measures are recommended.

TRAFFIC AND CIRCULATION

TRIP GENERATION DISTRIBUTION AND ASSIGNMENT

5.3-1 Prior to the issuance of building permits, the Applicant shall pay fair share project costs for the following off-site intersection improvements.

- 16th Street and Mountain Avenue: Add an eastbound right turn lane, northbound left turn lane, and a northbound right turn lane. Modify existing traffic signal.
- Baseline Road and Carnelian Avenue: Add an eastbound right turn lane, westbound right turn lane, and a southbound left turn lane. Modify existing traffic signal.
- Baseline Road and Archibald Avenue: Add an eastbound through lane and a westbound right turn lane. Modify existing traffic signal.
- 19th Street and Sapphire Avenue: Add a westbound through lane. Modify existing traffic signal.

YEAR 2011 FUTURE TRAFFIC CONDITIONS

5.3-2 Refer to Mitigation Measure 5.3-1. No additional mitigation measures are required.

YEAR 2015 FUTURE TRAFFIC CONDITIONS

5.3-3 Refer to Mitigation Measure 5.3-1. No additional mitigation measures are required.

YEAR 2020 FUTURE TRAFFIC CONDITIONS

5.3-4 Refer to Mitigation Measure 5.3-1. No additional mitigation measures are required.

CMP FREEWAY EVALUATION

5.3-5 No mitigation measures are recommended or are feasible.

AIR QUALITY

SHORT-TERM AIR QUALITY IMPACTS

5.4-1 In accordance with the City Development Code and SCAQMD Rules, the Project Applicant shall incorporate the following measures during the construction phase of the Project to the satisfaction of the SCAQMD and City Public Works Director. Compliance with this measure is subject to periodic field inspections by the SCAQMD and City Public Works Director.

Grading:

- Apply non-toxic soil stabilizers according to manufacturer's specifications to all inactive construction areas (previously graded for ten days or more);
- Replace ground cover in disturbed areas as quickly as possible;
- Enclose, cover, water two times daily or apply non-toxic soil binders in accordance to manufacturer's specifications to exposed piles (i.e., gravel, sand, dirt) with 5% or greater silt content;
- Water active sites at least three times daily;
- Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph; and
- All trucks hauling dirt, sand, soil, or other loose materials shall be covered and shall maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer) in accordance with the requirements of the CVC Section 23114.

Paved Roads:

- Sweep streets at the end of the day if visible soil material is carried onto adjacent public paved roads; and
- Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip.

LONG-TERM OPERATIONAL IMPACTS

5.4-2 No mitigation measures are recommended.

CONSISTENCY WITH AIR QUALITY MANAGEMENT PLAN

5.4-3 No mitigation measures are recommended.

CUMULATIVE IMPACTS

5.4-4 SCAQMD Standards and City Municipal Code requirements would be implemented on a project-by-project basis.

NOISE

SHORT-TERM CONSTRUCTION NOISE AND VIBRATION IMPACTS

5.5-1 No mitigation measures are recommended.

LONG-TERM NOISE IMPACTS

5.5-2 Residential units located south of 19th Street, within Planning Areas 4 and 5, shall be located or architecturally designed such that the noise levels do not exceed the City of Upland Noise Ordinance (Section 5400.500 and Section 5400.800) requirements for residential uses. Design features could include setbacks, berms, landscaping, and architectural features as stated in the Development Regulations (Section 7.0) and Design Guidelines (Section 8.0) of the Colonies at San Antonio Specific Plan Amendment.

LONG-TERM STATIONARY NOISE

5.5-3a Prior to Final Development Plan approval for Commercial Planning Areas of the Specific Plan area, subsequent noise studies shall be prepared, to the satisfaction of the Community Development Director, which demonstrates the site placement of stationary noise sources would not exceed criteria established in the City of Upland Noise Ordinance Code. The analysis shall verify that loading dock facilities, rooftop equipment, trash compactors and other stationary noise sources are adequately shielded and/or located at an adequate distance from residential areas in order to comply with the City's noise standards.

5.5-3b Outdoor PA systems shall not be permitted to operate in Planning Area 19, within 300 feet of the easterly property line, between the hours of 10:00 p.m. and 7:00 a.m. and shall not exceed the City's Noise Ordinance standards. Adherence with this measure is subject to periodic site inspections by the City of Upland.

5.5-3c Directional speakers shall be shielded and/or oriented away from off-site residences to the satisfaction of the Community Development Director.

CUMULATIVE IMPACTS

5.5-4 No mitigation measures are recommended.

BIOLOGICAL RESOURCES

SENSITIVE BIOLOGICAL RESOURCES

Special Interest Wildlife Species

5.6-1 In the event focused surveys indicate that threatened or endangered wildlife species are present on the Project site, the following measures shall be implemented prior to Grading Permit issuance and to the satisfaction of the City of Upland and applicable reviewing/permitting agencies:

- Vegetation removal shall be restricted to a time period outside of the breeding season; and
- Habitat of similar type and quality shall be acquired at a 1:1 replacement ratio; or
- Habitat shall be purchased through a mitigation bank (i.e., Team Arundo) at a 1:1 replacement ratio.

RIPARIAN HABITAT

5.6-2 The Project Applicant shall obtain approval of a Section 1603 Streambed Alteration Agreement pursuant to the requirements of the California Department of Fish and Game. The Agreement shall provide a Mitigation Plan which specifies terms, conditions, criteria and monitoring requirements.

SENSITIVE HABITAT COMMUNITY

5.6-3 Prior to Grading Permit issuance and to the satisfaction of the City of Upland and applicable reviewing/permitting agencies, the loss of 20 acres of Riversidean alluvial fan sage scrub and alluvial fan chaparral shall be mitigated by replacing habitat on and off-site at a 1:1 replacement ratio.

Land shall be acquired at an off-site location to provide for the preservation of 20 acres of alluvial chaparral or alluvial fan sage scrub. The land to be acquired shall be located along the southern slope of the San Gabriel Mountains either on the alluvial fan or within the foothills. Acquisition may consist of land purchase, establishment of an easement, or other appropriate vehicle that shall ensure the preservation of habitat values. The land shall be in a location that will facilitate the long-term preservation and management of the on-site habitat; for instance, the land shall be adjacent to National Forest lands, adjacent to an existing natural preserve, or adjacent to lands otherwise designated for preservation of biological values. A management entity shall be identified to receive the easement, title, or other appropriate control of the property. The management entity shall determine costs associated with

analysis and design of slopes shall be conducted during future geotechnical studies for each Planning Area.

5.7-3e The existing steep pit walls shall be sloped to provide a stable earth mass where failure may cause damage to persons or property.

SOILS

Erosion

5.7-4a Project grading shall comply with the following requirements:

- All grading shall occur in conformance with City engineering guidelines and shall, whenever possible, be balanced on-site.
- Prior to any development within Planning Areas of the Specific Plan, an overall conceptual grading plan for the portion in process shall be submitted to the Engineering Department of the City of Upland for approval. The grading plan for each such area shall be used as a guideline for subsequent detailed grading plans for individual stages of development within that area, and shall include techniques utilized to prevent erosion and sedimentation during and after the grading process; approximate time frames for grading; and preliminary pad and roadway elevations.
- Prior to initial grading activities, a soils report and geotechnical study shall be completed that further analyzes on-site soil conditions and includes appropriate measures to be implemented to control erosion and dust.
- Where cut and fill slopes are created higher than 10 feet in vertical height and exceeding a 5:1 slope, slope erosion control plans shall be submitted to the City of Upland Community Development Department.
- The overall shape, height and grade of any cut and fill slope shall be developed in concert with the existing natural contours and scale of the natural terrain of a particular site. The graded form shall reflect the natural, rounded terrain, where possible. All cut and fill slopes shall be constructed at inclinations of no steeper than 2:1. Exceptions for steeper slopes can be included, if supported by technical analysis and approved by the City Engineer. The grading plan shall reflect a contouring and landscaping program intended to control erosion.
- The toes and tops of all slopes higher than 10 feet in vertical height (except freeway slopes) shall be rounded with curves with radii designed in proportion to the total height of the slope, where drainage and stability permit such rounding.
- Potential brow ditches, terrace drains or other minor swales determined necessary at future stages of project review shall be lined with natural erosion control materials or concrete.

- The applicant shall be responsible for maintenance and upkeep of all planting and irrigation systems until those operations become the responsibility of other parties.

- MWD guidelines are to be followed for grading within the existing 200-foot-wide MWD right-of-way extending northeast-southwest across the Project site.

5.7-4b Non-engineered fill shall be over-excavated to competent natural ground or approved engineered fill. Over-excavation shall encompass cobble and boulder stockpiles, any non-engineered fill in the soil stockpile area created during the Phase I grading, miscellaneous fill, quarry bottom fill, quarry side slope fill, and berm and levee fill.

5.7-4c Loose surficial natural soils shall be over-excavated to competent alluvium. The quantity of over-excavation shall be determined based upon the performance of additional geotechnical study and when grading plans are being finalized. Excavated soils may be utilized for engineered fill provided they are free of deleterious organic matter and deleterious man-made materials.

5.7-4d Prior to Grading Permit issuance, the Project Applicant shall prepare a Soil Erosion and Sedimentation Plan for submittal and approval by the City Engineer.

Also, refer to Section 5.4, *Air Quality*, and Section 5.8, *Hydrology and Drainage*.

UNSTABLE GEOLOGIC UNITS AND EXPANSIVE SOILS

5.7-5 Further evaluation of the soil properties of the fine-grained fill soils placed in Quarry No. 4 (as referenced in the RMA Group's February 2002 Report) and other areas of the site shall be conducted during future geotechnical studies for each Planning Area and during rough grading of the site.

MINERAL RESOURCES

5.7-6 No mitigation measures are recommended.

CUMULATIVE

5.7-7 No mitigation measures are recommended.

HYDROLOGY AND DRAINAGE

WATER QUALITY – CONSTRUCTION

5.8-1a Prior to issuance of any grading permit, a General Construction Activity Storm Water Permit shall be obtained from the State Water Resources Control Board. Such permits are required for specific (or a series of

related) construction activities which exceed five acres in size and include provisions to eliminate or reduce off-site discharges through implementation of a Storm Water Pollution Prevention Plan (SWPPP). Specific SWPPP provisions include requirements for erosion and sediment control, as well as monitoring requirements both during and after construction. Pollution-control measures also require the use of best available technology, best conventional pollutant control technology, and/or best management practices to prevent or reduce pollutant discharge (pursuant to definitions and direction).

5.8-1b Prior to issuance of any building permit, specified vehicle fueling and maintenance procedures and hazardous materials storage areas shall be designated to preclude the discharge of hazardous materials used during construction (e.g., fuels, lubricants and solvents). Such designations shall include specific measures to preclude spills or contain hazardous materials, including proper handling and disposal techniques and use of temporary impervious liners to prevent soil and water contamination.

5.8-1c Concurrent with grading permit application submittal, the Applicant shall submit a Storm Water Pollution Prevention Plan (SWPPP), subject to approval by the Regional Water Quality Control Board, which would include the following BMPs:

- Development of temporary stream crossings to minimize potential increases in sediment transport and wetlands impacts.
- Construction road utilizing aggregate over geotextile fabric stabilization to minimize erosion.
- Utilization of sand bags, straw bales and silt fences to divert and slow storm water run-off.
- Utilization of temporary earth dikes, drains and swales as a form of spill protection and storm water run-off control.
- Development of a maintenance plan for grading equipment.
- Development of a Spill Prevention and Control Plan for construction-related substances.
- Development of a Use and Disposal Plan for hazardous materials.

PROJECT DEVELOPMENT STORMFLOWS/PERCOLATION

5.8-2a Prior to issuance of grading permits, a Detention Basin Study shall be prepared and submitted to the City of Upland for review and approval to confirm adequacy of the proposed detention system. The Detention Basin Study should account for optimal percolation rates in accordance with established standards for storm water treatment.

5.8-2b A finalized and approved Vegetation System Plan which accounts for optimal percolation rates in accordance with established standards for storm water treatment shall be approved by the City and applicable agencies prior to issuance of grading permits.

5.8-2c A Basin Maintenance Agreement is required between the Project Applicant and all other applicable agencies for operation and maintenance of the basin system and drainage facilities. The Agreement shall confirm ownership and operation of facilities.

FLOODING IMPACTS

5.8-3a Drainage systems within or crossing 19th, 20th, the new Campus Avenue and along the southern boundary of the site shall be sized to collect and convey 100-year storm flows.

5.8-3b Due to the preliminary nature of in-tract storm drain facilities, individual tract maps shall be further reviewed by the City of Upland, based upon final grading plans to confirm design, sizing and facilities to meet required standards.

5.8-3c Tracts north of Basin A shall be designed to dewater in-tract sump areas for 100-year storm surface flows.

5.8-3d Existing easements held by the ~~County of~~ San Bernardino County Flood Control District for on-site flood control shall be reviewed in consideration of ownership and maintenance agreements that are to be established.

5.8-3e Prior to Grading Permit issuance, the Final Hydrology and Hydraulic Study shall be approved by the County of San Bernardino.

WATER QUALITY – PROJECT BUILDOUT

5.8-4a The project applicant shall prepare a Storm Water Pollution Prevention Plan (SWPPP), subject to approval by the Regional Water Quality Control Board, which shall cite water quality control measures for the project. The approved SWPPP shall be submitted concurrent with grading permit application to the City Engineer. The SWPPP may include the following components:

- Description of significant potential sources of pollutants in storm water discharges.
- A listing of all chemicals which may contact storm water and estimates of concentrations.
- An estimate of the area of impervious surfaces.
- Source controls.
- Isolation/separation of hazardous from non-hazardous pollutant sources.
- Treatment/conveyance structures and their impacts on groundwater quality.
- Design criteria for the structures/ conveyances.

- Maintenance schedules.
- Erosion control measures.
- An estimate of pollutant reduction levels expected from implementing the controls.
- Establishment of internal record keeping and internal reporting procedures.
- Eliminate illicit discharges of storm water to storm water system.
- Develop and implement a storm water monitoring, sampling, testing, and reporting program.
- Develop a special management plan for loading dock areas and vehicle refueling and maintenance areas.
- Installation and maintenance of oil/water separators for all parking lot areas.

5.8-4b Non-structural BMPs shall be incorporated into the project, to the satisfaction of the Regional Water Quality Control Board. The applicable BMPs include:

- Plant materials that require fertilization and pest control shall be maintained in accordance with San Bernardino County Management Guidelines for Use of Fertilizers and Pesticides.

- BMP structures and facilities shall be cleaned and maintained on a scheduled basis by a City-appointed person.

- All hazardous wastes shall be handled in accordance with Title 22 of the California Code of Regulations and relevant sections of the California Health and Safety Code regarding hazardous waste management.

5.8-4c Routine structural BMPs shall be incorporated into the proposed project design to facilitate future water quality measures, to the satisfaction of the City Engineer, prior to issuance of grading permits.

NON-POINT SOURCE POLLUTANTS – PROJECT BUILDOUT

5.8-5 Refer to Mitigation Measures 5.8-4a, 5.8-4b and 5.8-4c. No additional mitigation measures are recommended.

CUMULATIVE IMPACTS

5.8-6 No mitigation measures are recommended.

PUBLIC SERVICES AND UTILITIES

FIRE PROTECTION

5.9-1 Prior to recordation of a subdivision map for residential development or issuance of a building permit for commercial development, an irrevocable

offer of dedication for the proposed fire station site within the Specific Plan area (Planning Area 14) shall be granted to the City.

POLICE PROTECTION

5.9-2a To reduce the demand for short-term police services to the site during project construction, building materials storage shall be consolidated to the extent practical, and shall be fenced. Where appropriate, construction contractors shall provide an on-site security person.

5.9-2b As part of the development of Planning Areas 17, 18 and 19, the Developer shall provide up to 1,500 square feet of space within a retail building for the City, at no cost to the City of Upland, to establish a satellite police facility within one of these Planning Areas, as approved by the Upland Police Chief.

SCHOOLS

5.9-3 Prior to the issuance of certificate of occupancy, Project Applicant shall submit evidence to the City of Upland that legally required school impact mitigation fees have been paid per the mitigation established with the Upland Unified School District.

ROADWAY MAINTENANCE

5.9-4 No mitigation measures are recommended.

LIBRARIES

5.9-5 Prior to the issuance of building permits, the Project Applicant shall pay any legally required library impact mitigation fees established by the City of Upland.

RECREATION

5.9-6 The Applicant shall submit a park impact fee payment to the City of Upland in the amount of $1.5 million dollars to permit the City to construct improvements to existing City parks.

WASTEWATER

5.9-7a Prior to issuance of building permits, the Project Applicant shall provide the on-site and off-site sewer improvements required to support development of the portion of the Colonies at San Antonio Specific Plan for which building permits are being requested. Such improvements shall be provided to the satisfaction of the Upland Public Works Director, and may include replacement of existing sewer lines rather than construction of parallel lines.

5.9-7b Prior to issuance of building permits, the Project Applicant shall provide evidence that the Inland Empire Utilities District has sufficient transmission and treatment plant capacity to accept sewage flows from the buildings for which building permits are being requested.

WATER

5.9-8a Prior to issuance of building permits, the Project Applicant shall provide the on-site and off-site water system improvements required to support development of the portion of the Colonies at San Antonio Specific Plan for which building permits are being requested. Such improvements shall be provided to the satisfaction of the Upland Public Works Director.

5.9-8b To mitigate the facilities deficiencies in Zone III, the Applicant shall construct a 0.75 MG reservoir for system operational storage and utilize the jointly owned 5 MG San Antonio Water Company-City reservoir for emergency and fire flow storage together with construction of a sodium hypo-chlorite disinfection system and a 16" transmission pipeline connecting the system to the project. In addition, the 5 MG reservoir is located beyond the Zone III pressure zone, requiring construction of a pressure reducing system to permit use in Zone III. Prior to issuance of building permits, fees shall be submitted to the City of Upland, which includes a water production impact fee of $1.3 million. Fee requirements are based upon square footage for commercial and office development, and per dwelling unit for residential development.

5.9-8c Developer shall determine if off-site transmission and pumping improvements are required for the project. Such improvements shall be constructed by the Applicant to satisfaction of the Upland Public Works Director.

SOLID WASTE

5.9-9 No mitigation measures are recommended.

NATURAL GAS

5.9-10 No mitigation measures are recommended.

ELECTRICITY

5.9-11 No mitigation measures are recommended.

CUMULATIVE IMPACTS

5.9-12 No mitigation measures are recommended.

9.0 Level of Significance After Mitigation

9.0 LEVEL OF SIGNIFICANCE AFTER MITIGATION

LAND USE AND RELEVANT PLANNING

Implementation of the Specific Plan Amendment would not result in any significant and unavoidable land use impacts.

AESTHETICS/LIGHT AND GLARE

Significant and unavoidable impacts have been identified for viewshed alterations involving existing residents to the north, south and northeast of the project site. If the City of Upland approves the project, the City shall be required to cite their findings in accordance with section 15091 of CEQA and prepare a Statement of Overriding Considerations in accordance with section 15093 of CEQA.

No additional significant impacts related to Aesthetics/Light and Glare have been identified following implementation of mitigation measures and/or compliance with applicable standards and policies set forth in the proposed Specific Plan Amendment and requirements set forth by the City of Upland.

TRAFFIC AND CIRCULATION

Following implementation of recommended mitigation measures and proposed project improvements, Traffic and Circulation impacts for years 2011, 2015 and 2020 would be reduced to a less than significant level.

Due to the infeasibility of establishing a fair share contribution program for improvements to the I-210 between Monte Vista and Milliken, impacts cannot be mitigated to a less than significant level. If the City of Upland approves the project, the City shall be required to cite their findings in accordance with Section 15091 of CEQA and prepare a Statement of Overriding Considerations in accordance with Section 15093 of CEQA.

AIR QUALITY

The following air quality impacts would remain significant and unavoidable following mitigation:

- ROG, NO_x and PM_{10} from construction vehicle exhaust and PM_{10} fugitive dust emissions from construction activities;
- Project Operations: Phase 2 (ROG, NO_x, CO and PM_{10}) and Phase 3 (ROG, NO_x and CO) emissions from project operations;
- Cumulative development would also result in significant and unavoidable impacts to regional air quality levels of ROG, NO_x, CO and PM_{10}.

If the City Upland approves the project, the City shall be required to cite their findings in accordance with Section 15091 of CEQA and prepare a Statement of Overriding Considerations in accordance with Section 15093 of CEQA.

NOISE

No unavoidable significant impacts related to noise have been identified following implementation of recommended mitigation measures and compliance with applicable City codes and ordinances, and standards specified in the Specific Plan Amendment.

BIOLOGICAL RESOURCES

No significant impacts to Biological Resources have been identified following implementation of mitigation measures referenced in this Section.

GEOLOGY AND SOILS

No significant impacts related to Geology and Soils have been identified following implementation of mitigation measures and/or compliance with applicable standards, policies and/or City of Upland Municipal Code.

HYDROLOGY AND DRAINAGE

No significant impacts related to hydrology, drainage, water quality or groundwater resources have been identified following implementation of mitigation measures and/or compliance with applicable policies and standards.

PUBLIC SERVICES AND UTILITIES

No unavoidable significant impacts related to public services and utilities have been identified following implementation of recommended mitigation measures and compliance with applicable City, service or utility provider requirements, City Codes and Ordinances, and standards specified in the Specific Plan Amendment.

10.0 Effects Found Not To Be Significant

10.0 EFFECTS FOUND NOT TO BE SIGNIFICANT

The City of Upland conducted an Initial Study in April, 2001 to determine significant effects of the project. In the course of this evaluation, certain impacts of the project were found to be less than significant due to the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type. The effects determined not to be significant are not required to be included in primary analysis sections of the Draft EIR. In accordance with CEQA Guidelines Section 15128, the following section provides a brief description of potential impacts found to be less than significant. A copy of the Initial Study is found in Appendix 14.1.

AGRICULTURE RESOURCES

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

Pursuant to the Farmland Mapping and Monitoring Program for the California Resources Agency, the subject site is not identified as an agricultural resource and is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide importance.

b) *Conflict with existing zoning for agricultural use, or a Williamson act contract?*

The property is not zoned for agriculture and would not result in any conflicts with a Williamson Act Contract. Therefore, no significant impacts would result from project implementation.

c) *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?*

The proposed project would not result in the conversion of farmland to a non-agricultural uses. Therefore, no significant impacts would result from project implementation.

BIOLOGICAL RESOURCES. *Would the project:*

c) *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pol, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

Project implementation would result in no impacts to wetlands under Army Corps of Engineers (ACOE). The seasonally ponded areas existing on the Project site are isolated and the ACOE does not have jurisdiction over isolated wetlands. Neither are there Corps jurisdictional non-wetland waters present on the site. Thus, there would be no impacts to wetlands or jurisdictional waters.

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

The proposed Project would not conflict with any local policies/ordinances protecting biological resources since there is currently no local policy/ordinance that includes the Project site. Therefore, no impacts in this regard are expected to occur as a result of Project implementation.

CULTURAL RESOURCES. *Would the project:*

a) *Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?*

An archaeological survey and a records/literature search performed as part of the San Antonio Lakes Specific Plan/Environmental Impact Report determined that one artifact of archeological importance was found on-site. No associated artifacts or features were located in the vicinity of the isolate. It is likely that the artifact was redeposited during a major flooding episode from a site farther up the Cucamonga Creek Channel drainage. No historical resources exists on the project site. No other archaeological resources were found in the area during the San Antonio Lakes Specific Plan/Environmental Impact Report study. Considering the topography and hydrology of the study area and the significant amount of human disturbance associate with the construction of drainage basins and mineral resource extraction, it is not likely that any significant archaeological resources would be found in the area.

b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?*

Refer to Response "a" above.

c) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

A paleontological field survey, performed as part of the San Antonio Lakes Specific Plan/Environmental Impact Report (1988), determined that no paleontological resources exist on-site. In addition, a records search performed as part of San Antonio Lakes Specific Plan/Environmental Impact Report revealed no known fossil localities occurring within the vicinity of the site.

GEOLOGY AND SOILS. *Would the project:*

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

The project proposes to install on-site sewer lines. It would not be necessary to install septic tanks or other alternative types of wastewater disposal systems. No significant impacts are anticipated in this regard.

HAZARDS AND HAZARDOUS MATERIALS. *Would the project:*

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

According to the Colonies at San Antonio Draft Supplemental EIR and available records information, the proposed project site is not included on a list of sites containing hazardous materials, and would not result in a significant hazard to the public or to the environment.

e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?*

The proposed project site is not located within an airport land use plan and the project would not impact any airport operations or create any airport related safety hazards.

f) *For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?*

Refer to Response "e" above.

g) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The proposed project would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan.

h) *Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

The proposed project is not located in an areas designated as a high fire hazard area. Additionally, much or the existing vegetation would be removed with implementation of the proposed project; thus, reducing potential impacts in this regard.

HYDROLOGY AND WATER QUALITY. *Would the project:*

j) *Inundation by seiche, tsunami, or mudflow?*

No significant water features have been identified in the project area. Therefore, no impacts are anticipated in this regard.

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

e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

Refer to Response "e" under Hazards and Hazardous Materials above.

f) *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?*

The project site is not located within the vicinity of a private airstrip. Therefore, project implementation would not expose people residing or working in the project area to excessive noise levels.

POPULATION AND HOUSING. ***Would the project:***

b) *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

Project implementation would not displace existing housing and would not necessitate the construction of replacement housing elsewhere.

c) *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

Refer to Response "b" above.

TRANSPORTATION/TRAFFIC. ***Would the project:***

c) *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?*

The proposed project would not affect air traffic patterns.

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

The project site plan is subject to review by the City of Upland to evaluate the effectiveness of internal circulation in the parking areas and the driveways. Compliance with City standards would reduce potential impacts to a less than significant level.

e) *Result in inadequate emergency access?*

The proposed project would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan.

f) Result in inadequate parking capacity?

Parking requirements for the project would be subject to City standards and requirements.

g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

Impacts to alternative transportation modes such as bus facilities and bicycle access/ parking requirements are expected to be less than significant.

11.0 Organizations and Persons Contacted

11.0 ORGANIZATIONS AND PERSONS CONSULTED

LEAD AGENCY

City of Upland
460 North Euclid Avenue
Upland, California 91786-4732
Mr. Jeff Bloom, Community Development Director
Ms. Sylvia Scharf, AICP, Senior Planner
Mr. Michael Thornton, City Engineer

APPLICANT

Colonies Crossroads, Inc.
10621 Civic Center Drive
Rancho Cucamonga, California 91730
Mr. Phil Burum

APPLICANT REPRESENTATIVES

Pitassi Architects
8439 White Oak Avenue, Suite 105
Rancho Cucamonga, California 91730
Mr. Peter Pitassi, AIA

LSA Associates, Inc.
1650 Spruce Street, Suite 500
Riverside, California 92507
Mr. Lloyd Zola
Mr. Kevin Fincher
Mr. Jack Easton

PREPARERS OF THE ENVIRONMENTAL IMPACT REPORT

RBF Consulting
14725 Alton Parkway
Irvine, California 92618-2069
Mr. Glenn Lajoie, AICP, EIR Project Manager
Ms. Collette Morse, AICP, Senior Environmental Analyst
Mrs. Rita Garcia, Environmental Analyst
Mr. Charlie Marr, Public Works Engineer
Mr. Mike Harden, Environmental Analyst
Mr. Eddie Torres, Environmental Analyst
Ms. Linda Bo, Document Preparation/Graphic Artist

SUBCONSULTANTS

Kimley-Horn and Associates
2100 W. Orangewood Avenue, Suite 140
Orange, California 92868
Ms. Serine Ciandella, AICP

PUBLIC SERVICE AND UTILITIES

Fire Protection:
City of Upland Fire Department
475 North 2nd Avenue
Upland, CA 91785
John Scanlon, Division Chief

Police Protection:
Upland Police Department
1499 West 13th Street
Upland, CA 91786
Captain John Cannon, Operations Commander

Schools:
Upland Unified School District
P.O. Box 1239
Upland, CA 91785
Mr. Steve Cary, Assistant, Superintendent

Roadway Maintenance:
City of Upland Public Works Department
460 North Euclid Avenue
Upland, CA 91786
Richard Husa

Libraries:
Upland Public Library
450 North Euclid Avenue
Upland, CA 91786
Kathy Bloomberg-Rissman
Linda Yao

Recreation:
City of Upland Parks and Recreation Department
460 North Euclid Avenue
Upland, CA 91786
Larry Thornburg

Wastewater:
Inland Empire Utilities Agency (Formerly Chino Basin Municipal Water District)
9400 Cherry Avenue, Building A
Fontana, CA 92335
Gary Hackney, Planning Manager
Rose Hess, Senior Associate Engineer

City of Upland Public Works Department
460 North Euclid Avenue
Upland, CA 91786
Jim Moody

Water:
Cucamonga County Water District
10440 Ashford St.
Rancho Cucamonga, CA 91729
Robert A. DeLoach, General Manager/CEO
Lloyd Michael

Metropolitan Water District of Southern California
700 N. Moreno Avenue
La Verne, CA 91750
Laura J. Simonek, Principal Environmental Specialist

Solid Waste:
City of Upland Public Works Department
460 North Euclid Avenue
Upland, CA 91786
Roberta Knighten, Senior Management Analyst

Norcal San Bernardino
222 W. Hospitality Lane, 2nd floor
San Bernardino, CA 92408
Ross Sandul

Burrtec Waste Industries
Richard Crockett, General Manager

Electricity:
Southern California Edison Company
7951 Redwood Avenue
Fontana, CA 92336
Curt Horne, Customer Service Planner
Arlan Avery, Mapping Supervisor

Natural Gas:
The Gas Company
P.O. Box 3003, SC8031
Redlands, CA 92373
Jorge Aspa, Technical Services
Bruce R. Waddell, Planning Associate

12.0 Bibliography

12.0 BIBLIOGRAPHY

California Integrated Waste Management Board. http://www.ciwmb.ca.gov. February 15, 2001.

California State Department of Finance. http://www.dof.ca.gov/HTML/DEMOGRAP/E-5text.htm.

City of Upland Consolidated Plan Update Draft, The Planning Center, Section III, Housing and Community Development Needs, April 2000.

City of Upland General Plan, Adopted June 1982.

City of Upland Municipal Code. Contains Ordinances through: Ordinance No. 1699 passed February, 28, 2000.

City of Upland Recreation. http://www.ci.upland.ca.us/rec/parks.htm, February 15, 2001.

The Colonies at San Antonio Draft Supplemental Environmental Impact Report, LSA Associates, Inc., August 5, 1998.

The Colonies at San Antonio Specific Plan, LSA Associates, Inc., January 24, 2002.

Colonies at San Antonio Specific Plan Visual Analysis, LSA Associates, Inc., May 7, 2002.

The Colonies at San Antonio Water Supply Evaluation, RBF Consulting, November 6, 2001.

Interim County Population Projections, Estimated July 1, 2000 and projections for 2005, 2010, 2015, and 2020, State of California, Department of Finance, June 2001.

Olinda Alpha Landfill Website: www.oc.ca.gov/iwmd/olindaalpha.htm.

Report E-5, City and County Population and Housing Estimates, California State Department of Finance, January 2001.

Review of Major Geotechnical and Geologic Constraints, RMA Group, February 15, 2002.

San Antonio Lakes Specific Plan/Environmental Impact Report, Turrini & Brink, September 1988.

Sewer Study, The Colonies at San Antonio, Associated Engineers, Inc., April 2002.

Southern California Association of Governments Region. http://www.scag.ca.gov/census. April 2001.

State of California Employment Development Department Labor Market Information Division. http://www. calmis.cahwnet.gov/file/lfmonth/cal1$pr.txt

State of California Employment Development Department Labor Market Information Division. http://www.calmis.cahwnet.gov/file/lfmonth/lasub.txt

Upland Police Department Impact Report - The Colonies at San Antonio, Martin E. Thouvenell, Chief of Police, No Date.

13.0 Mitigation Monitoring Program

13.0 MITIGATION MONITORING PROGRAM

Section 2.0 of this DEIR identifies the mitigation measures that will be implemented to reduce the impacts associated with the Colonies at San Antonio project. The California Environment Quality Act (CEQA) was amended in 1989 to add Section 21081.6, which requires a public agency to adopt a monitoring and reporting program for assessing and ensuring compliance with any required mitigation measures applied to proposed development. As stated in Section 21081.6 of the Public Resources Code,

> *". . . the public agency shall adopt a reporting or monitoring program for the changes to the project which it has adopted, or made a condition of project approval, in order to mitigate or avoid significant effects on the environment."*

Section 21081.6 provides general guidelines for implementing mitigation monitoring programs and indicates that specific reporting and/or monitoring requirements, to be enforced during project implementation, shall be defined prior to final certification of the EIR.

The mitigation monitoring table below lists those mitigation measures that may be included as conditions of approval for the project. These measures correspond to those outlined in Section 2.0 and discussed in Section 5.0. To ensure that the mitigation measures are properly implemented, a monitoring program has been devised which identifies the timing and responsibility for monitoring each measure. The developer will have the responsibility for implementing the measures, and the various City of Upland departments will have the primary responsibility for monitoring and reporting the implementation of the mitigation measures.

THE COLONIES AT SAN ANTONIO
SPECIFIC PLAN AMENDMENT
ENVIRONMENTAL IMPACT REPORT

MITIGATION MONITORING AND REPORTING CHECKLIST

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
AESTHETICS/LIGHT AND GLARE							
5.2-1	Construction equipment staging areas shall be located away from existing residential uses and appropriate screening (i.e., temporary fencing with opaque material), shall be utilized to buffer views of construction equipment and material, when feasible. Staging locations shall be identified on project Final Development Plans and Grading Plans and subject to review and approval of the City. Compliance with this measure is subject to periodic field inspections by City staff.	Review and Approval of the Final Development Plan and Grading Plans/ Ongoing Field Checks	Prior to Approval of Development Plan during Development	Upland Community Development Department			
TRAFFIC AND CIRCULATION							
5.3-1	Prior to the issuance of building permits, the Applicant shall pay fair share project costs for the following off-site intersection improvements. ♦ 16th Street and Mountain Avenue: Add an eastbound right turn lane, northbound left turn lane, and a northbound right turn lane. Modify existing traffic signal. ♦ Baseline Road and Carnelian Avenue: Add an eastbound right turn lane, westbound right turn lane, and a southbound left turn lane. Modify existing traffic signal.	Fair Share Payment	Prior to Issuance of Building Permit	Upland Community Development Department			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
	◆ Baseline Road and Archibald Avenue: Add an eastbound through lane and a westbound right turn lane. Modify existing traffic signal. ◆ 19th Street and Sapphire Avenue: Add a westbound through lane. Modify existing traffic signal.						
AIR QUALITY							
5.4-1	In accordance with the City Development Code and SCAQMD Rules, the Project Applicant shall incorporate the following measures during the construction phase of the Project to the satisfaction of the SCAQMD and City Public Works Director. Compliance with this measure is subject to periodic field inspections by the SCAQMD and City Public Works Director. <u>Grading:</u> ◆ Apply non-toxic soil stabilizers according to manufacturer's specifications to all inactive construction areas (previously graded for ten days or more); ◆ Replace ground cover in disturbed areas as quickly as possible; ◆ Enclose, cover, water two times daily or apply non-toxic soil binders in accordance to manufacturer's specifications to exposed piles (i.e., gravel, sand, dirt) with 5% or greater silt content; ◆ Water active sites at least three times daily; ◆ Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph; and	Field Inspections	Ongoing During Construction	Upland Public Works Department			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
	♦ All trucks hauling dirt, sand, soil, or other loose materials shall be covered and shall maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer) in accordance with the requirements of the CVC Section 23114. Paved Roads: ♦ Sweep streets at the end of the day if visible soil material is carried onto adjacent public paved roads; and ♦ Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip.						
5.4-4	SCAQMD Standards and City Municipal Code requirements would be implemented on a project-by-project basis.	Field Inspections	Ongoing During Construction	Upland Public Works Department			
NOISE							
5.5-2	Residential units located south of 19th Street, within Planning Areas 4 and 5, shall be located or architecturally designed such that the noise levels do not exceed the City of Upland Noise Ordinance (Section 5400.500 and Section 5400.800) requirements for residential uses. Design features could include setbacks, berms, landscaping, and architectural features as stated in the Development Regulations (Section 7.0) and Design Guidelines (Section 8.0) of the Colonies at San Antonio Specific Plan Amendment.	Adherence to Development Regulations and Design Guidelines	Prior to Issuance of Building Permit in Planning Areas 4 and 5	Upland Community Development Department			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
5.5-3a	Prior to Final Development Plan approval for Commercial Planning Areas of the Specific Plan area, subsequent noise studies shall be prepared, to the satisfaction of the Community Development Director, which demonstrates the site placement of stationary noise sources would not exceed criteria established in the City of Upland Noise Ordinance Code. The analysis shall verify that loading dock facilities, rooftop equipment, trash compactors and other stationary noise sources are adequately shielded and/or located at an adequate distance from residential areas in order to comply with the City's noise standards.	Completion and Review of Subsequent Noise Studies	Prior to Approval of the Final Development Plan	Upland Community Development Department			
5.5-3b	Outdoor PA systems shall not be permitted to operate in Planning Area 19, within 300 feet of the easterly property line, between the hours of 10:00 p.m. and 7:00 a.m. and shall not exceed the City's Noise Ordinance standards. Adherence with this measure is subject to periodic site inspections by the City of Upland.	Periodic Site Inspections	Ongoing	Upland Community Development Department			
5.5-3c	Directional speakers shall be shielded and/or oriented away from off-site residences to the satisfaction of the Community Development Director.	Periodic Site Inspections	Ongoing	Upland Community Development Department			
BIOLOGICAL RESOURCES							
5.6-1	In the event focused surveys indicate that threatened or endangered wildlife species are present on the Project site, the following measures shall be implemented prior to Grading Permit issuance and to the satisfaction of the City of Upland and applicable reviewing/permitting agencies: ♦ Vegetation removal shall be restricted to a time period outside of the breeding season; and	Completion and Review of Focused Surveys	Prior to Issuance of Grading Permits	Upland Community Development Department			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
	◆ Habitat of similar type and quality shall be acquired at a 1:1 replacement ratio; or ◆ Habitat shall be purchased through a mitigation bank (i.e., Team Arundo) at a 1:1 replacement ratio.						
5.6-2	The Project Applicant shall obtain approval of a Section 1603 Streambed Alteration Agreement pursuant to the requirements of the California Department of Fish and Game. The Agreement shall provide a Mitigation Plan which specifies terms, conditions, criteria and monitoring requirements.	Approval of Mitigation Plan	Prior to Issuance of Grading Permits	Upland Community Development Department			
5.6-3	Prior to Grading Permit issuance and to the satisfaction of the City of Upland and applicable reviewing/permitting agencies, the loss of 20 acres of Riversidean alluvial fan sage scrub and alluvial fan chaparral shall be mitigated by replacing habitat on and off-site at a 1:1 replacement ratio. Land shall be acquired at an off-site location to provide for the preservation of 20 acres of alluvial chaparral or alluvial fan sage scrub. The land to be acquired shall be located along the southern slope of the San Gabriel Mountains either on the alluvial fan or within the foothills. Acquisition may consist of land purchase, establishment of an easement, or other appropriate vehicle that shall ensure the preservation of habitat values. The land shall be in a location that will facilitate the long-term preservation and management of the on-site habitat; for instance, the land shall be adjacent to National Forest lands, adjacent to an existing natural preserve, or adjacent to lands otherwise designated for preservation of biological values. A management entity shall be identified to receive the easement, title, or other appropriate control of the property. The management entity shall determine costs associated with management of the site and an endowment shall be	Establish-ment of Off-site Preservation Location and Endowment	Prior to Issuance of Grading Permits	Upland Community Development Department			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
	established to fund the management of the site in perpetuity. As an alternative to habitat acquisition, mitigation for impacts to 20 acres of alluvial fan sage scrub and alluvial chaparral shall be achieved by acquisition of 20 acres in a mitigation bank that would provide for the preservation and management of alluvial fan sage scrub and/or alluvial chaparral.						
GEOLOGY AND SOILS							
5.7-1	Geologic mapping shall be performed during grading to verify the findings of the Ryland and Mills studies (i.e., to confirm features attributable to the Red Hill fault are not present on the Project site).	Completion of Geologic Mapping	During Grading and Prior to the Issuance of Building Permits	Upland Building Department			
5.7-2a	Prior to Grading Permit issuance, additional design-level geotechnical studies shall be performed to provide the adequate level of information to properly design and engineer the Project. The Applicant shall submit a Geotechnical Report for review and approval by the City's Geotechnical Consultant which further analyzes on-site soil conditions and includes appropriate measures to control erosion and dust.	Completion and Approval of Geotechnical Report	Prior to Issuance of Grading Permits	City's Geotechnical Consultant/ Upland Building Official			
5.7-2b	Engineering design for all structures shall be based on the probability that the Project area will be subjected to strong ground motion during the lifetime of development. Construction plans shall be subject to the City of Upland Municipal Code and shall include applicable standards, which address seismic design parameters.	Approval of Construction Plans	Prior to Issuance of Grading Permits	Upland Building Department			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
5.7-2c	For each specific Planning Area of development, mitigation of earthquake ground shaking shall be incorporated into design and construction in accordance with Uniform Building Code requirements and site specific design. The Cucamonga fault shall be considered the seismic source for the Project site and specified design parameters shall be used.	Review and Approval of Design and Construction Plans	Prior to Issuance of Building Permits	Upland Building Department			
5.7-2d	The potential damaging effects of regional earthquake activity shall be considered in the design of each structure. The preliminary seismic evaluation shall be based on basic data including the Uniform Building Code Seismic Parameters and the RMA Report's exhibits and tables. Structural design criteria shall be determined in consideration of building types, occupancy category, seismic importance factors and possibly other factors. A determination of seismic factors for each individual Planning Area of development shall be conducted. The Cucamonga fault shall be considered the seismic source for the Project site and specified design parameters shall be used.	Review and Approval of Design and Construction Plans	Prior to Issuance of Building Permits	Upland Building Department			
5.7-2e	Geologic and geotechnical studies shall be submitted to the City of Upland for development of each planning area in order to verify the findings, conclusions and recommendations of the RMA Group Report, and to develop specific design parameters. Studies shall be reviewed for approval of Plans prior to issuance of Building Permits.	Completion and Review of Geologic and Geotechnical Studies	Prior to Issuance of Building Permits	City's Geotechnical Consultant/ Upland Building Official			
5.7-3a	Prior to Grading Permit issuance, geotechnical investigations for Planning Areas shall confirm that conditions favorable to liquefaction are not present on-site. The results of the studies shall be reviewed by the City's Geotechnical Engineer. A Grading Permit shall not be	Completion of Geotechnical Investigation	Prior to Issuance of Grading Permits	City's Geotechnical Consultant			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
	issued until the City deems conditions and/or remedial actions acceptable to reduce the significance of potential impacts from liquefaction.						
5.7-3b	Backdrains/weep holes shall be provided for retaining walls. Backdrains may be required for slopes descending into Quarry No. 1, as referenced in the RMA's Report Group February, 2002, which would continue to be used as infiltration basins for surface runoff. Further evaluation shall be conducted during geotechnical studies for each Planning Area to determine the need for backdrains.	Evaluation of Geotechnical Studies	During Geotechnical Studies	City Engineer			
5.7-3c	Loose surficial soils and non-engineered fill on the Project site shall be removed and recompacted during future grading.	Site Inspection	During Grading and prior to Issuance of Building Permits	Upland Building Department			
5.7-3d	To ensure stability, created slopes shall be inclined no steeper than 2:1 (horizontal to vertical) and shall be keyed, benched and compacted to the satisfaction of the City Engineer. Specific slope stability calculations, analysis and design of slopes shall be conducted during future geotechnical studies for each Planning Area.	Site Inspection Further Investigation/Evaluation Geotechnical Studies	During Grading during Geotechnical Studies and Prior to Issuance of Precise Grading Plan	City Engineer			
5.7-3e	The existing steep pit walls shall be sloped to provide a stable earth mass where failure may cause damage to persons or property.	Site Inspection	During Grading	City Engineer			
5.7-4a	Project grading shall comply with the following requirements:	On-site inspections, Review and Approval of	Prior to and During Grading/Construction	Upland Building Department/ Upland Engineering			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
	◆ All grading shall occur in conformance with City engineering guidelines and shall, whenever possible, be balanced on-site. ◆ Prior to any development within Planning Areas of the Specific Plan, an overall conceptual grading plan for the portion in process shall be submitted to the Engineering Department of the City of Upland for approval. The grading plan for each such area shall be used as a guideline for subsequent detailed grading plans for individual stages of development within that area, and shall include techniques utilized to prevent erosion and sedimentation during and after the grading process; approximate time frames for grading; and preliminary pad and roadway elevations. ◆ Prior to initial grading activities, a soils report and geotechnical study shall be completed that further analyzes on-site soil conditions and includes appropriate measures to be implemented to control erosion and dust. ◆ Where cut and fill slopes are created higher than 10 feet in vertical height and exceeding a 5:1 slope, slope erosion control plans shall be submitted to the City of Upland Community Development Department. ◆ The overall shape, height and grade of any cut and fill slope shall be developed in concert with the existing natural contours and scale of the natural terrain of a particular site. The graded form shall reflect the natural, rounded terrain, where possible. All cut and fill slopes shall be constructed at inclinations of no steeper than 2:1. Exceptions for steeper slopes can be included, if supported by technical analysis and approved by the City Engineer. The grading plan shall	Grading Plan, Soil Report and Geotechnical Study and Slope Erosion Control Plans	Activities	Department/ Upland Community Development Department			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
	reflect a contouring and landscaping program intended to control erosion. ◆ The toes and tops of all slopes higher than 10 feet in vertical height (except freeway slopes) shall be rounded with curves with radii designed in proportion to the total height of the slope, where drainage and stability permit such rounding. ◆ Potential brow ditches, terrace drains or other minor swales determined necessary at future stages of project review shall be lined with natural erosion control materials or concrete. ◆ The applicant shall be responsible for maintenance and upkeep of all planting and irrigation systems until those operations become the responsibility of other parties. ◆ MWD guidelines are to be followed for grading within the existing 200-foot-wide MWD right-of-way extending northeast-southwest across the Project site.						
5.7-4b	Non-engineered fill shall be over-excavated to competent natural ground or approved engineered fill. Over-excavation shall encompass cobble and boulder stockpiles, any non-engineered fill in the soil stockpile area created during the Phase I grading, miscellaneous fill, quarry bottom fill, quarry side slope fill, and berm and levee fill.	Site Inspection	During Phase I Grading Plan	Upland Building Department			
5.7-4c	Loose surficial natural soils shall be over-excavated to competent alluvium. The quantity of over-excavation shall be determined based upon the performance of additional geotechnical study and when grading plans are being finalized. Excavated soils may be utilized for engineered	Review of Additional Geotechnical Studies	During Finalization of Grading Plans and prior to the Issuance	Upland Building Department			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
	fill provided they are free of deleterious organic matter and deleterious man-made materials.		of a Grading Permit				
5.7-4d	Prior to Grading Permit issuance, the Project Applicant shall prepare a Soil Erosion and Sedimentation Plan for submittal and approval by the City Engineer.	Receipt and Approval of Soil Erosion/ Sedimentation Plan	Prior to Issuance of Grading Permits	City Engineer			
5.7-5	Further evaluation of the soil properties of the fine-grained fill soils placed in Quarry No. 4 (as referenced in the RMA Group's February 2002 Report) and other areas of the site shall be conducted during future geotechnical studies for each Planning Area and during rough grading of the site.	Geotechnical Studies	During Rough Grading and prior to the Issuance of Precise Grading Permits	City Engineer			
HYDROLOGY AND DRAINAGE							
5.8-1a	Prior to issuance of any grading permit, a General Construction Activity Storm Water Permit shall be obtained from the State Water Resources Control Board. Such permits are required for specific (or a series of related) construction activities which exceed five acres in size and include provisions to eliminate or reduce off-site discharges through implementation of a Storm Water Pollution Prevention Plan (SWPPP). Specific SWPPP provisions include requirements for erosion and sediment control, as well as monitoring requirements both during and after construction. Pollution-control measures also require the use of best available technology, best conventional pollutant control technology, and/or best management practices to prevent or reduce pollutant discharge (pursuant to definitions and direction).	Verification of Receipt of General Construction Activity Storm Water Permit	Prior to Issuance of Grading Permit	San Bernardino Regional Water Quality Control Board			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
5.8-1b	Prior to issuance of any building permit, specified vehicle fueling and maintenance procedures and hazardous materials storage areas shall be designated to preclude the discharge of hazardous materials used during construction (e.g., fuels, lubricants and solvents). Such designations shall include specific measures to preclude spills or contain hazardous materials, including proper handling and disposal techniques and use of temporary impervious liners to prevent soil and water contamination.	Verification of Vehicle Fueling and Maintenance Procedures for Grading	Prior to Issuance of a Grading Permit	Upland Public Works Department			
5.8-1c	Concurrent with grading permit application submittal, the Applicant shall submit a Storm Water Pollution Prevention Plan (SWPPP), subject to approval by the Regional Water Quality Control Board, which would include the following BMPs: ◆ Development of temporary stream crossings to minimize potential increases in sediment transport and wetlands impacts. ◆ Construction road utilizing aggregate over geotextile fabric stabilization to minimize erosion. ◆ Utilization of sand bags, straw bales and silt fences to divert and slow storm water run-off. ◆ Utilization of temporary earth dikes, drains and swales as a form of spill protection and storm water run-off control. ◆ Development of a maintenance plan for grading equipment. ◆ Development of a Spill Prevention and Control Plan for construction-related substances.	Verification of Submittal of Storm Water Pollution Prevention Plan	Prior to Issuance of Grading Permits	San Bernardino Regional Water Quality Control Board			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
	♦ Development of a Use and Disposal Plan for hazardous materials.						
5.8-2a	Prior to issuance of grading permits, a Detention Basin Study shall be prepared and submitted to the City of Upland for review and approval to confirm adequacy of the proposed detention system. The Detention Basin Study should account for optimal percolation rates in accordance with established standards for storm water treatment.	Receipt and Approval of Detention Basin Study	Prior to Issuance of Grading Permits	Upland Public Works Department			
5.8-2b	A finalized and approved Vegetation System Plan which accounts for optimal percolation rates in accordance with established standards for storm water treatment shall be approved by the City and applicable agencies prior to issuance of grading permits.	Receipt and Approval of Vegetation System Plan	Prior to Issuance of Grading Permits	Upland Public Works Department			
5.8-2c	A Basin Maintenance Agreement is required between the Project Applicant and all other applicable agencies for operation and maintenance of the basin system and drainage facilities. The Agreement shall confirm ownership and operation of facilities.	Verification of Basin Maintenance Agreement	Prior to Approval of the Final Development Plan	Upland Public Works Department			
5.8-3a	Drainage systems within or crossing 19th, 20th, the new Campus Avenue and along the southern boundary of the site shall be sized to collect and convey 100-year storm flows.	Review of Individual Tentative Map(s)	Prior to the Approval of the Final Development Plan	Upland Public Works Department			
5.8-3b	Due to the preliminary nature of in-tract storm drain facilities, individual tract maps shall be further reviewed by the City of Upland, based upon final grading plans to confirm design, sizing and facilities to meet required standards.	Review of Individual Tract Map(s)	Prior to Approval of the Final Development Plan and prior to Issuance of Precise Grading Permits	Upland Public Works Department			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
5.8-3c	Tracts north of Basin A shall be designed to dewater in-tract sump areas for 100-year storm surface flows.	Review of Individual Tract Map(s)	Prior to the Approval of the Final Development Plan	Upland Public Works Department			
5.8-3d	Existing easements held by the San Bernardino County Flood Control District for on-site flood control shall be reviewed in consideration of ownership and maintenance agreements that are to be established.	Review/ Approval of Agreements	Prior to the Approval of the Final Development Plan	County of San Bernardino			
5.8-3e	Prior to Grading Permit issuance, the Final Hydrology and Hydraulic Study shall be approved by the County of San Bernardino.	Receipt and Approval of Final Hydrology/ Hydraulic Study	Prior to Issuance of Grading Permits	County of San Bernardino			
5.8-4a	The project applicant shall prepare a Storm Water Pollution Prevention Plan (SWPPP), subject to approval by the Regional Water Quality Control Board, which shall cite water quality control measures for the project. The approved SWPPP shall be submitted concurrent with grading permit application to the City Engineer. The SWPPP may include the following components: ◆ Description of significant potential sources of pollutants in storm water discharges. ◆ A listing of all chemicals which may contact storm water and estimates of concentrations. ◆ An estimate of the area of impervious surfaces. ◆ Source controls. ◆ Isolation/separation of hazardous from non-hazardous pollutant sources.	Receipt of Approved Storm Water Pollution Prevention Plan	Prior to Issuance of Grading Permits	City Engineer			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
	♦ Treatment/conveyance structures and their impacts on groundwater quality. ♦ Design criteria for the structures/ conveyances. ♦ Maintenance schedules. ♦ Erosion control measures. ♦ An estimate of pollutant reduction levels expected from implementing the controls. ♦ Establishment of internal record keeping and internal reporting procedures. ♦ Eliminate illicit discharges of storm water to storm water system. ♦ Develop and implement a storm water monitoring, sampling, testing, and reporting program. ♦ Develop a special management plan for loading dock areas and vehicle refueling and maintenance areas. ♦ Installation and maintenance of oil/water separators for all parking lot areas.						
5.8-4b	Non-structural BMPs shall be incorporated into the project, to the satisfaction of the Regional Water Quality Control Board. The applicable BMPs include: ♦ Plant materials that require fertilization and pest control shall be maintained in accordance with San Bernardino County Management Guidelines for Use of Fertilizers and Pesticides. ♦ BMP structures and facilities shall be cleaned and maintained on a scheduled basis by a City-appointed person. ♦ All hazardous wastes shall be handled in accordance with Title 22 of the California Code of Regulations and relevant sections of the California Health and Safety Code regarding hazardous waste management.	Verification of Incorporation of Non-structural BMPs	Prior to the Approval of the Final Development Plan	Regional Water Quality Board			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
5.8-4c	Routine structural BMPs shall be incorporated into the proposed project design to facilitate future water quality measures, to the satisfaction of the City Engineer, prior to issuance of grading permits.	Verification of Incorporation of Routine Structural BMPs	Prior to Issuance of Grading Permits	City Engineer			
PUBLIC SERVICES AND UTILITIES							
5.9-1	Prior to recordation of a subdivision map for residential development or issuance of a building permit for commercial development, an irrevocable offer of dedication for the proposed fire station site within the Specific Plan area (Planning Area 14) shall be granted to the City.	Dedication of Fire Station Site to the City	Prior to Recordation of Subdivision Map or Issuance of Building Permits	Upland Community Development Department			
5.9-2a	To reduce the demand for short-term police services to the site during project construction, building materials storage shall be consolidated to the extent practical, and shall be fenced. Where appropriate, construction contractors shall provide an on-site security person.	On-site Visits	During Project Construction	Upland Community Development Department			
5.9-2b	As part of the development of Planning Areas 17, 18 and 19, the Developer shall provide up to 1,500 square feet of space within a retail building for the City, at no cost to the City of Upland, to establish a satellite police facility within one of these Planning Areas, as approved by the Upland Police Chief.	Verification of Space for City Use	Prior to Issuance of Building Permits for Planning Areas 17, 18, 19	Upland Police Chief			
5.9-3	Prior to the issuance of certificate of occupancy, Project Applicant shall submit evidence to the City of Upland that legally required school impact mitigation fees have been paid per the mitigation established with the Upland Unified School District.	Proof of Payment of School Impact Fees	Prior to Issuance of Certificate of Occupancy	Upland Community Development Department			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
5.9-5	Prior to the issuance of building permits, the Project Applicant shall pay any legally required library impact mitigation fees established by the City of Upland.	Proof of Payment of Library Impact Fees	Prior to Issuance of Building Permits	Upland Community Development Department			
5.9-6	The Applicant shall submit a park impact fee payment to the City of Upland in the amount of $1.5 million dollars to permit the City to construct improvements to existing City parks.	Proof of Payment of Park Impact Fees	Prior to Issuance of Building Permits	Upland Public Works Department			
5.9-7a	Prior to issuance of building permits, the Project Applicant shall provide the on-site and off-site sewer improvements required to support development of the portion of the Colonies at San Antonio Specific Plan for which building permits are being requested. Such improvements shall be provided to the satisfaction of the Upland Public Works Director, and may include replacement of existing sewer lines rather than construction of parallel lines.	Review and Approval of On-site Sewer Improvements	Prior to Issuance of Building Permits	Upland Public Works Director			
5.9-7b	Prior to issuance of building permits, the Project Applicant shall provide evidence that the Inland Empire Utilities District has sufficient transmission and treatment plant capacity to accept sewage flows from the buildings for which building permits are being requested.	Verification of Sufficient Capacity	Prior to Issuance of Building Permits	Upland Public Works Director			
5.9-8a	Prior to issuance of building permits, the Project Applicant shall provide the on-site and off-site water system improvements required to support development of the portion of the Colonies at San Antonio Specific Plan for which building permits are being requested. Such improvements shall be provided to the satisfaction of the Upland Public Works Director.	Review and Approval of Water System Improvements	Prior to Issuance of Building Permits	Upland Public Works Director			

Mit./ Cond. No.	Mitigation Measure/Conditions of Approval	Monitoring and Reporting Process	Monitoring Milestones	Party Responsible for Monitoring	VERIFICATION OF COMPLIANCE		
					Initials	Date	Remarks
5.9-8b	To mitigate the facilities deficiencies in Zone III, the Applicant shall construct a 0.75 MG reservoir for system operational storage and utilize the jointly owned 5 MG San Antonio Water Company-City reservoir for emergency and fire flow storage together with construction of a sodium hypo-chlorite disinfection system and a 16" transmission pipeline connecting the system to the project. In addition, the 5 MG reservoir is located beyond the Zone III pressure zone, requiring construction of a pressure reducing system to permit use in Zone III. Prior to issuance of building permits, fees shall be submitted to the City of Upland, which includes a water production impact fee of $1.3 million. Fee requirements are based upon square footage for commercial and office development, and per dwelling unit for residential development.	Site Inspection	Prior to Issuance of Building Permits	Upland Public Works Director			
5.9-8c	Developer shall determine if off-site transmission and pumping improvements are required for the project. Such improvements shall be constructed by the Applicant to satisfaction of the Upland Public Works Director.	Determination of Additional Improvements	Prior to the Approval of the Final Development Plan	Upland Public Works Director			

14.0 Comments and Responses

14.0 COMMENTS AND RESPONSES

14.1 INTRODUCTION

In accordance with Section 15088, 15089 and 15132 of the California Environmental Quality Act (CEQA), the City of Upland has prepared the Program Environmental Impact Report (EIR) for the Colonies at San Antonio Specific Plan Amendment (SCH #1998051075).

This Comments and Response section combined with the Draft EIR, which was circulated from June 14, 2002 to July 29, 2002, make up the Final Program EIR. Any additional City recommendations or requirements during the certification process will make up the final components of this EIR.

The following is an excerpt from the CEQA Guidelines, Section 15132:

"The Final EIR shall consist of:

(a) The Draft EIR or a version of the draft.

(b) Comments and recommendations received on the Draft EIR either verbatim or in summary.

(c) A list of persons, organizations and public agencies commenting on the Draft EIR.

(d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process.

(e) Any other information added by the Lead Agency."

This Comments and Responses section includes all of the above-required components and shall be attached to the revised Draft EIR to make up the Final EIR. Each comment letter is followed by the corresponding responses. A response is provided for each comment raising significant environmental issues, as received by the City during the Draft EIR review period. Added or modified text is double underlined (example) while deleted text is striked out (~~example~~).

14.2 LIST OF COMMENTS

1. State Clearinghouse Acknowledgement of Receipt
2. Matthew W. Slowik, County of San Bernardino, Land Use Services Department
3. David Woelfel, California Regional Water Quality Control Board
4. Naresh Varma, County of San Bernardino, Department of Public Works
5. Laura Simonek, Metropolitan Water District of Southern California
6. Haissam Y. Salloum, California Department of Toxic Substance Control
7. Robert DeLoach, Cucamonga County Water District
8. City of Upland Planning Commission Hearing, July 24, 2002
9. Jennifer Buckman, Best Best & Krieger LLP
10. Brad Buller, City of Rancho Cucamonga
11. Ray Wellington, San Antonio Water Company
12. Melanie Ingram, Alta Loma Resident
13. Linda Yoder, Alta Loma Resident
14. Jennifer Buckman, Best Best & Krieger LLP
15. Lloyd Zola, LSA Associates
16. Donna McClenahan, Upland Resident
17. State Clearinghouse Acknowledgement of Close of Review Period

COMMENT NO. 1

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse

ACKNOWLEDGEMENT OF RECEIPT

Gray Davis
GOVERNOR

Tal Finney
INTERIM DIRECTOR

DATE: July 1, 2002

TO: Sylvia Scharf
City of Upland
460 Euclid Avenue
Upland, CA 91786-4732

RE: Colonies at San Antonio Specific Plan Amendment
SCH#: 1998051075

This is to acknowledge that the State Clearinghouse has received your environmental document for state review. The review period assigned by the State Clearinghouse is:

Review Start Date: June 14, 2002
Review End Date: July 29, 2002

We have distributed your document to the following agencies and departments:

California Highway Patrol
Caltrans, District 8
Department of Conservation
Department of Fish and Game, Region 6
Department of Parks and Recreation
Department of Toxic Substances Control
Department of Water Resources
Native American Heritage Commission
Office of Emergency Services
Regional Water Quality Control Board, Region 8
Resources Agency
State Lands Commission

1A

The State Clearinghouse will provide a closing letter with any state agency comments to your attention on the date following the close of the review period.

Thank you for your participation in the State Clearinghouse review process.

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
916-445-0613 FAX 916-323-3018 www.opr.ca.gov

Response to Comment No. 1

State Clearinghouse Acknowledgement of Receipt
July 1, 2002

1A. The State Clearinghouse has acknowledged receipt of the Draft EIR for distribution and public review. The acknowledged review is from June 14, 2002 to July 29, 2002. No additional response is required.

ND USE SERVICES DEPARTMENT

NNING DIVISION
North Arrowhead Avenue • San Bernardino, CA 92415-0182 • (909) 387-4131
Current Planning Fax (909) 387-3249 • Advance Planning Fax (909) 387-3223
)5 Civic Drive • Victorville, CA 92392 • (760) 243-8245 • Fax (760) 243-8212
//www.sbcounty.gov/landuseservices

COUNTY OF SAN BERNARDINO
ECONOMIC DEVELOPMENT
AND PUBLIC SERVICES GROUP

MICHAEL E. HAYS
Director of Land Use Services

COMMENT NO. 2

July 2, 2002

Sylvia Scharf
City of Upland
460 North Euclid Avenue
Upland, California 91786-4732

Glenn LaJoie
RBF Consulting
14725 Alton Parkway
Irvine, California 92618-2069

RE: THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT DRAFT ENVIRONMENTAL IMPACT REPORT REVIEW AND COMMENTS

Dear Ms. Scharf and Mr. LaJoie:

2A

Thank you for providing our office a copy of the above-stated draft environmental impact report. We have reviewed the document and have no comments at this time. Please also forward a copy of the Final Environmental Impact Report to our office, when available.

Sincerely,

Matthew W. Slowik

MATTHEW W. SLOWIK, M.U.R.P.
Senior Associate Planner
Advance Planning Division

MWS:dja

Response to Comment No. 2

Matthew W. Slowik, County of San Bernardino Land Use Services Department
July 2, 2002

2A. Comment is noted. The Land Use Services Department has no comments on the Draft EIR and no additional response is required.

California Regional Water Quality Control Board
Santa Ana Region

nston H. Hickox
Secretary for Environmental Protection

Internet Address: http://www.swrcb.ca.gov
3737 Main Street, Suite 500, Riverside, California 92501-3339
Phone (909) 782-4130 • FAX (909) 781-6288

Gray Davis
Governor

COMMENT NO. 3

RECEIVED
JUL 15 2002
COMMUNITY DEVELOPMENT

July 5, 2002

Ms. Sylvia Scharf
City of Upland
460 Euclid Avenue
Upland, CA 91786-4732

DRAFT ENVIRONMENTAL IMPACT REPORT FOR COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT/ STATE CLEARING HOUSE NUMBER 1998051075

Dear Ms. Scharf:

Staff of the Regional Water Quality Control Board, Santa Ana Region (RWQCB), have reviewed the Draft Environmental Impact Report for the above-referenced project which consists of the construction of 1150 residential units and 114.89 acres of commercial use, on approximately 444 acres of existing open land. The project is located within the City of Upland, San Bernardino County, California.

There is widespread experience that urban development activity impacts water quality. There is the potential that the development of this area will substantially impact the water quality and the associated beneficial uses. Therefore, to lessen impacts to water quality standards and protect beneficial uses, the following principals and policies should be considered for the project.

1. Avoid disturbance to natural water bodies and drainage systems; conserve natural areas; protect slopes, drainage systems, and water bodies. Natural drainage systems and water bodies reduce impacts to water quality and will improve impacted waters. In addition, they provide beneficial uses for wildlife and recreation. Encourage riparian vegetation in drainage systems, if feasible. Provide adequate vegetated buffer areas to capture storm flows, to lessen erosion, and protect water quality. All disturbances to natural waters and drainages require mitigation.

2. Post-development storm water runoff flow rates (Q) should not differ from the pre-development Q. Changes in Q, either in a positive or negative manner can lead to erosion or sedimentation. Such a change in Q may create potential downstream impacts. **3A**

3. This project will increase the amount of area covered with pavement or structures. This will alter the rate and volumes of groundwater recharge and surface water runoff. We encourage the use of pervious materials to retain absorption and allow more percolation of storm water into the ground within the site. The use of pervious materials, such as grass (grassed swales), permeable/porous pavement, etc., for runoff channels and parking areas is strongly encouraged.

   Vegetated or grassed swales reduce the pollutants in storm or urban water runoff by filtering the runoff through the vegetation and the soil matrix and/or allowing infiltration into the underlying soils. Studies have shown that these swales remove nutrients, total suspended solids, and metals from impacted runoff.

Porous pavement is an alternative to standard impervious pavement and should be considered for use in parking areas of the project. One type of porous pavement contains an underlying stone reservoir to temporarily store surface runoff allowing it to infiltrate into the subsoil.

4. Native vegetation has been found effective at reducing slope erosion, helps filter and clean runoff, maintains habitat for native animal species, and has other water quality benefits. Therefore, we encourage the use of native vegetation in replanting and hydroseeding operations as much as possible. Clearing of native vegetation during development should be limited, and areas of natural vegetation preserved and protected to the maximum extent possible.

5. Appropriate best management practices (BMPs) should be developed and implemented to control the discharge of pollutants and to avoid tracking of sediments into the streets and into water conveyance channels.

6. No waste material may be discharged to any drainage areas, channels, streambeds, or streams. Spoil sites must not be located within any streams or areas where spoil material could be washed into a waterbody. No waste material may be discharged to any drainage areas, channels, streambeds, or streams. Spoil sites must not be located within any streams or areas where spoil material could be washed into a waterbody. **3A**

7. This project should be designed and constructed to protect, and if possible, improve the quality of underlying groundwater. Incorporating the principals and policies mentioned above will help protect the groundwater basin.

8. Please be advised that any impacts to Waters of the United States/State require a Section 401 Water Quality Standards Certification from the Regional Board. Impacts to these waters should first and foremost be avoided. Where that is not practicable, impacts to these waters should be minimized. Mitigation of unavoidable impacts must replace the full function and value of the impacted waterbody. Information concerning Section 401 certification can be found at the Regional Board's website, www.swrcb.ca.gov/rwqcb8/html/401.html. Impacts to the waters of the United States also require a Clean Water Act Section 404 permit from the United States Army Corps of Engineers and a Streambed Alteration Agreement from the California Department of Fish and Game.

9. A National Pollutant Discharge Elimination System (NPDES) permit for any discharge of wastes to surface waters, or Waste Discharge Requirements for any discharge of wastes to land, is required by the California Water Code.

For more information on the construction of the Best Management Practices (BMPs) mentioned above (grassed swales, porous pavement, constructed wetlands, and dry/wet detention ponds) please review the EPA website www.epa.gov/npdes/menuofbmps/post.htm.

If you have any questions, contact David Woelfel at (909) 782-7960, or Mark Adelson at (909) 782-3234.

Sincerely,

David Woelfel
Planning Section

cc: Scott Morgan – State Clearinghouse

O:\Planning\ZWest\CEQA Comments 2002\Colonies at San Antonio CEQA Comments.doc

Response to Comment No. 3

David Woelfel, California Regional Water Quality Control Board
July 5, 2002

3A. The RWQCB urges the following principles and policies be followed: (1) avoid disturbance to natural water bodies; (2) avoid disturbance to natural drainage systems; (3) conserve natural areas; (4) protect slopes; (5) protect drainage systems; (6) protect water bodies; (7) encourage riparian vegetation in drainage systems; (8) provide adequate vegetated buffers to capture storm flows, lessen erosion and protect water quality; and (9) mitigate disturbances to natural waters and drainages. The Draft EIR addresses each of the principles and policies listed.

The City is committing to ensuring that the project preserves historic levels of ground water recharge in the Cucamonga groundwater basin. To that end the City intends to impose the following condition of approval on the project:

> *"In using Lot 20 for groundwater recharge, the project shall be capable of perpetually recharging to the groundwater table an amount of water equal to the sum of the following:*
>
> - *All historic storm water volumes from the 19th Street storm drain and other drainage areas historically tributary to Pit #6 and #7.*
> - *All historic rainfall volumes falling on the project area.*
> - *All historic volumes of water imported to Pit #6 and Pit #7 by the San Antonio Water Company.*
>
> *For purposes of this section, the term "historic" shall mean the forty-two year period from the adjudication of the Cucamonga Basin (1958) through 1999, the year before the 20th Street drain was constructed. The analysis of historic storm flows shall be based on a daily time step of local rainfall for the forty-two year period. The analysis of imported water flows shall be based upon the records of the San Antonio Water Company for the forty-two year period, or as far back in the period as the records exist and such other credible records deemed appropriate by the City of Upland and in accordance with professional engineering standards.*
>
> No individual tract maps shall be recorded for Lots 13, 14, 15, 16, 17, 18 and/or 19 unless and until all water recharge improvements to Lot 20 have been completed to the satisfaction of the Public Works Director."

The City is working cooperatively with San Antonio Water Company, Cucamonga County Water District, and the developer to quantify the historic recharge levels and ascertain realistic sustainable design percolation rates for the basin.

The City of Upland believes that the analysis contained in the Draft EIR is sufficient in addressing hydrologic and drainage impacts pursuant to the provisions of Section 15168 of the CEQA Guidelines (Program EIR). Mitigation Measures are presented in the EIR which assure proper design and implementation of drainage and percolation systems, based upon available data. Based upon final design of the drainage and percolation system, it is to the discretion of the City of Upland, serving as the Lead Agency, to determine if additional review pursuant to the CEQA Guidelines is warranted. Should additional review be required, this EIR serves as the "Tiering" document in accordance with Section 15152 of the CEQA Guidelines.

Included as an attachment to this response is a letter from the Law Offices of Susan M. Trager which represents the Developers' position on water recharge to be provided by the project. The letter does not represent the position of the City on the matter.

Law Offices of
SUSAN M. TRAGER
A Professional Corporation

19712 MacArthur Blvd., Suite 120
Irvine, California 92612

TELEPHONE
(949) 752-8971

FACSIMILE
(949) 863-9804

E-MAIL
SMT @ tragerlaw.com

SUSAN M. TRAGER
ÄÄÄÄÄÄÄÄ
OF COUNSEL
ERIC S. NORBY

MEMORANDUM

TO: Peter Pitassi

FR: Susan M. Trager

DT: August 15, 2002

RE: Responses to Comments

CL: Colonies

You have asked for our input to assist in the City of Upland (City) staff's responses to comments 3A, 3C, 3D, 3E, and 3G; 5B; 7A; 8A; 9A; 11A; 12H; 14A; and 15J on the draft Environmental Impact Report for the Colonies of San Antonio. Attached are our draft responses to comments. Please review and revise the material where appropriate, and forward it to the appropriate person. Please double check the drainage numbers we used, for consistency. We stuck generally with Draft EIR figures. If you or the preparer has questions, I can be reached at the office, 949 752-8971, at home at 949 497-3431, or on my cell at 949 267-7282.

3A Response to California Regional Water Quality Control Board

The RWQCB urges the following principles and policies be followed: (1) avoid disturbance to natural water bodies; (2) avoid disturbance to natural drainage systems; (3) conserve natural areas; (4) protect slopes; (5) protect drainage systems; (6) protect water bodies; (7) encourage riparian vegetation in drainage systems; (8) provide adequate vegetated buffers to capture storm flows, lessen erosion and protect water quality; and (9) mitigate disturbances to natural waters and drainages.

1. Avoid Disturbance to Natural Water Bodies:

There are no natural water bodies on the project site. The site generally involves two geographical areas: the area north and the area south of 19th Street. The area north of 19th Street has no natural water bodies on it. (DEIR, at p. 5.1-1.) The area south of 19th Street is largely disturbed, due to past sand and gravel mining. (DEIR, at p.

5.1-2.) While standing water in the area south of 19th Street can be found, it appears from the topography that all of this water is collecting in old mining pits. (DEIR, at p. 5.1-2.)

It should also be noted that the U.S. Army Corps of Engineers, which is required by law to protect Waters of the United States@ has declined jurisdiction over the project.

2. Avoid Disturbance to Natural Drainage Systems:

The project is located on the southern portion of the Cucamonga Creek alluvial fan. (DEIR at p. 5.8-1.) The fan has been used historically to conserve water, and to capture debris from storm flows. At various times, continuing into present times, the project site has been improved with flood control facilities and with artificial weirs to allow for spreading and conservation of flood water. (DEIR, at p. 5.8-1.) Cucamonga Creek has been confined to a concrete boxed flood control channel running along the eastern edge of the project site. Between the flood control and recharge facilities, on the one hand, and the commercial sand and gravel mining, on the other, there are no natural drainage systems of any significance left to avoid. In confirmation of the City' s conclusion that no natural drainage systems remain, the U.S. Army Corps of Engineers, declined to exercise jurisdiction over the project.

3. Conserve Natural Areas.

The project site contains approximately 224 acres of alluvial fan sage scrub and alluvial fan chaparral. The remainder of the project site consists of disturbed land, or riparian habitat associated with the artificially created ponds. (DEIR at p. 5.6-2.) The alluvial scrub and chaparral is of little long-term habitat value, because it is a vegetation type adapted to occasional flooding. Also, the construction of the I-210 freeway has already isolated the project site from the large expanses of natural open space to the north of the property. (DEIR, at p.5.6-19.) Due to the existing changes in land use around the project site, and the confinement of Cucamonga Creek, this habitat will never again be subject to that kind of flooding or connect to larger areas of open space. (DEIR, at p. 5.6-4.)

The project proponent will mitigate for the loss of the higher value alluvial scrub (that north of the I-210). (DEIR at p. 5.6-22.) Also, the project will create a 58-acre open space area with 18 acres of riparian habitat. (DEIR at p. 5.6-17.)

4. Protect slopes

As may be expected in an alluvial fan, the project site is largely flat. The proposed project will grade the entire site to direct stormwater runoff toward the planned open space element in the center of the site called Basin A. (DEIR Exhibit 5.8-3 [Storm Drain Concept].) Basin A will be built as a series of sub-basins with appropriately graded and vegetated slopes to manage stormwater flows as planned. (DEIR Exhibit 5.8-1 [Open Space Concept].)

5. Protect drainage systems

One of the key issues driving the design of the proposed project, especially

Basin A, is the need to manage stormwater flows, which are directed to the property from off-site. The watershed for the project encompasses a total of 2,563 acres, including 1,755 acres draining into the County's 20th Street Storm Drain, 343 acres into the City's 19th Street Storm Drain (both of which discharge onto the project site), drainage from the I-210 freeway, and drainage within the 330-acre project site. The design of the Cucamonga Creek Channel allows for the addition of only 658 cfs from the project site, even during 100-year storm events. (DEIR, at p.5.8-2.) Extensive modeling has been done to design a system, which will detain the stormwater flows without exceeding the capacity of the Cucamonga Creek Channel. (DEIR Table 5.8-1 and related discussion.) (For further discussion, please refer to Response to Comment 12H.)

6. Protect water bodies

Stormwater discharge into Basin A from its 2,563-acre watershed is expected to carry typical urban water pollutants, such as oil and grease residues, fertilizers, pesticides, and animal waste. (DEIR 5.8-20.) One role of Basin A is to act as a filter for those discharges so that the water flowing into the Cucamonga Creek Channel complies with all applicable water permits. (DEIR 5.8-20 to 22.) Basin A would act as a back-up system to water, which is subject to NPDES requirements. Basin A will thus serve to protect downstream water bodies from the urban pollutants in the project site's watershed.

7. Encourage riparian vegetation in drainage systems

One component of the design of Basin A is the placement of vegetation adjacent to the channels and in tributary bio-swales to act as bio-filters, removing contaminants from first-flush storm flows and from nuisance flows. (DEIR at p. 5.8-21.)

8. Provide adequate vegetated buffers to capture storm flows, lessen erosion and protect water quality

See discussion in paragraph 6, above.

9. Mitigate disturbances to natural waters and drainages.

See discussion in paragraph 3 above on applicant's mitigation obligation.

3C <u>Response to California Regional Water Quality Control Board</u>

The RWQCB encourages the use of pervious materials such as vegetated swales and permeable pavement for runoff channels and parking areas to mitigate for increase in amount of area covered with pavement and structures.

As noted above, vegetated swales play an important role in the design of Basin A for the very purpose suggested by the RWQCB. (DEIR at 5.8-21.)

Also, tracts north of Basin A will be designed to dewater in-tract sump areas for 100-year storm flows. (Mitigation Measure 5.8-3c.) The City believes that the existing project design adequately mitigates for the increase in pavement and structures.

3D Response to California Regional Water Quality Control Board

The RWQCB encourages the use of native vegetation in replanting and the preservation and protection of existing natural vegetation to the maximum extent possible.

See Response to Comment 3A.3 and 3A.6.

3E Response to California Regional Water Quality Control Board

The RWQCB requests implementation of appropriate BMPs to control discharge of pollutants and to avoid the tracking of sediments into streams and water conveyance channels.

The management of stormwater will be done pursuant to a series of permits issued pursuant to the National Pollution Discharge Elimination System (NPDES) program of the Clean Water Act, among other statutory authority, that will impose the obligation to use BMPs. (Draft EIR, at 5.8-22.)

3G Response to California Regional Water Quality Control Board

The RWQCB requests that the project be designed and constructed to protect and improve underlying groundwater quality.

See Response to Comment 3A. One key feature of the entire project is managing stormwater and other flows of water onto the project site in a manner that will effectively recharge the underlying groundwater basin while using surface features such as natural vegetation to take up pollutants.

5B Response to Metropolitan Water District of Southern California

1. Comments

Paragraph 5B The EIR must further explain potential impacts to groundwater recharge, including an explanation and analysis of a project design that accommodates the local water purveyor's request to maintain the groundwater basin

The local water purveyor for the project and within the City's boundaries, is the City of Upland, and not the San Antonio Water Company (SAWCO), or Cucamonga County Water District (CCWD), and the project has been designed to accommodate the City's request to maintain the groundwater basin. In the interest of full disclosure regarding the unresolved issues among the City, the project applicant, SAWCO and CCWD regarding this project, this response also addresses certain comments submitted by SAWCO and CCWD.

The City has interpreted the comments from SAWCO and CCWD as a request that the City exercise its police powers to exact from the applicant a commitment to set aside a substantial amount of valuable real property beyond that which has been used historically for artificial recharge, so that SAWCO may continue to artificially recharge

imported water to the Cucamonga Basin without actually buying the land.

The project applicant has already incorporated into its project a plan to retain sufficient land in open space to accommodate what it and the City believe to be SAWCO's historic spreading requirements, based upon the most reliable data obtainable. Historically, as best the City can determine, the water remained at the discharge point in a pond of approximately 14 acres. Not only would the design concept serve to allow the continuation of recharge to the Cucamonga alluvial fan, but also it would facilitate SAWCO's compliance with the terms of the 1958 Decree. It would do so by creating a permeable pathway B a bio-swale B from SAWCO's discharge point at the 19th Street storm drain, (which discharges to a point on the Chino Basin side of the political and judicial demarcation line established by the Court in the 1958 decree) so that water can be carried over the political/judicial demarcation into an area overlying the Cucamonga Basin, where it sinks into the ground to recharge the basin.

In an effort to resolve the conflicting demands on the applicant's land, the City, the applicant, SAWCO, CCWD and others have met repeatedly between August 2001 and March 2002 to discuss the participants' demands. SAWCO and CCWD were asked to present support for their demands that the artificial recharge component of the applicant's project be expanded to accommodate greater quantities of water for recharge over a much larger area than had actually been SAWCO's historic practice.

In reviewing the data furnished, SAWCO's estimates of quantities artificially percolated in Basin No. 6 on the applicant's property are conflicting and uncorroborated. The City was never able to learn just how much of the water exported from the San Antonio Creek area was percolated into Basin No. 6. The lack of correlation in the data, at least in part, results from the fact that SAWCO did not meter the amount discharged to Basin No. 6. Data are inconsistently reported, and the correlation of data from one set with data from another set can only lead to speculative results.

SAWCO has furnished no information useful to the City to assist the City in the analysis of the data, some of which represent flows diverted from San Antonio Canyon; some appear to represent total amounts percolated. This is important, because SAWCO has asserted that it has, on occasion, percolated up to 20,000 acre feet per year.

City staff has evaluated SAWCO's estimates of water it asserts is artificially recharged to Basin No. 6. Staff has also reviewed published reports of water diversions, tabulations of water percolated, engineering reports, studies, SAWCO records, the public records, and publications of other agencies to independently evaluate the comments and other submissions of both SAWCO and CCWD as to the quantities of water which SAWCO and CCWD claim have been spread at this location.

The City has taken into account analysis and data from the City's *Urban Water Management Plan, Year 2000 Update*, prepared jointly by regional water purveyors and by the Inland Empire Utilities Agency; Metropolitan Water District of Southern California's *Report on Metropolitan Water Supplies*, February 11, 2002, prepared by the Metropolitan Water District of Southern California; Metropolitan Water District of Southern California's *Regional Urban Water Management Plan*, December 2000; City of Upland's *Colonies at San Antonio Water Supply Evaluation* (November 6, 2001) prepared by

RBF Consulting; City of Upland's *Water Recharge Report for San Antonio Lakes* (October 1990) prepared by NBS/Lowry Engineers & Planners; City of Upland's *Water System Master Plan* (1992); *City of Upland's Water Supply Assessment for the Colonies at San Antonio,* April 2002, prepared by Associated Engineers Inc., as reviewed by the City of Upland; *Water Facilities Master Plan for the San Antonio Water Company,* Water Master Plan Report, March 21, 1994, prepared by Camp Dresser & McKee; historic water supply and water use records of the City, SAWCO, and West End Consolidated Water Company; oral and written accounts of water quantities spread by SAWCO; annual reports of the San Antonio Water Company; Resolutions and Minutes of the City of Upland; reports of operations of the water treatment plants; pleadings on file in the three groundwater adjudications which govern the groundwater resources for the City and for SAWCO; records of historic groundwater production and surface water deliveries; Open Space Preliminary Design Documents (February, 2002) prepared by Natural Systems International, LLC.; and various engineering studies and reports of SAWCO, CCWD, and the City. These data sources are available at the City of Upland.

The City has concluded that SAWCO and CCWD are unable to justify their demands by data, facts, or an approved plan for recharge to support their demands that the project applicant provide more recharge opportunities than have been incorporated into the project, the environmental impacts of which have been analyzed in this Draft EIR.

The project proponent has presented a project design which the City believes more than accommodates SAWCO's recharge requirements as described in SAWCO's 1994 Master Plan. SAWCO's master plan, *Water Facilities Master Plan for the San Antonio Water Company,* Water Master Plan Report, March 21, 1994, prepared by Camp Dresser & McKee, provides that [a]ccording to water company records, an average of 4, 239 ac-ft/yr. of water from the canyon were spread in [Basin No. 6] between 1984 and 1992, as shown in Table 2-11. In reviewing Table 2-11 entitled, Monthly Spreading in the Cucamonga Basin (ac-ft), and Table 2-7, entitled Monthly Deliveries to Holliday Rock, showing water sold and delivered to Holliday Rock for its gravel operations just north of the applicant's proposed project, it is clear to the City that the amounts discharged by SAWCO to Basin No. 6 combined with the quantities delivered to Holliday Rock, average 4, 239 ac-ft/yr. Holliday Rock receives more than 270 ac/ft per year. (Master Plan, Table 2-7.) Thus, the quantities discharged by SAWCO to Basin No. 6 may well be less than the 4,239 ac-ft/yr. average reported in the Master Plan.

It is not clear from the Master Plan Report, or from SAWCO, whether the quantities SAWCO asserts it discharges to the Cucamonga Basin for recharge include water delivered for use at traditional spreading areas such as golf courses, which overlie the Cucamonga Basin.

Nevertheless, the Master Plan reported that Basin No. 6 has a maximum surface area of approximately 40 acres; however the main recharge area consists of only 14 acres. According to the Master Plan, [t]he existing Basin No. 6 is fully capable of providing the necessary recharge capacity ... and the area of the basin is more than adequate. Section 5.3.6, Pages 5-17, and 5-18.

SAWCO's Master Plan also identified other basins in which SAWCO

deliberately applies water for artificial recharge, basins No. 3 and 4, which are located north of Basin No. 6, and within Holliday Rock's Campus Avenue rock quarry.

CCWD's claims likewise appear to the City to be unsupportable, although its comment letter appears to make such claims (see Comment 14A, letter from Best Best & Krieger LLP dated July 29, 2002, page 2), CCWD does not, to the best of the City's knowledge, artificially recharge water to the Cucamonga Basin in Basin No. 6, nor has it acquired from the applicant any right or permission to do so. CCWD's assertions that it uses Basin No. 6 for artificial recharge activities, are unsupported by evidence persuasive to the City. Similarly, CCWD's assertions that a reduction in SAWCO's percolation activities will directly result in financial penalty, or water shortfalls to CCWD's customers are also not factually supported by evidence persuasive to the City.

CCWD's assertion that Basin No. 6 is the only location, at which artificial recharge does, or can, take place, is also unsupported. CCWD has shown to the City no adequate basis to support a demand that the City require the project applicant to continue to accept SAWCO's existing quantities of imported water for artificial recharge on the applicant's property, or that it set aside more land to accommodate increases in the volume of water for percolation.

Neither SAWCO nor CCWD owns the land on which they demand that artificial water recharge activities be conducted and expanded. SAWCO asserts that it reserved to itself the right to spread water in Basin No. 6 of the applicant's property even after it sold the property. The viability and extent of SAWCO's reservations is being tested in a quiet title action brought by the applicant, which case is now pending in the Superior Court. The City has been advised by the applicant's counsel, Miller, Starr & Regalia, that CCWD's threats to litigate if its demands are not satisfied are nothing short of inverse condemnation of the applicant's property. In addition, it is Miller, Starr & Regalia's opinion that SAWCO's use of Basin No. 6 for artificial recharge is beyond the scope of the rights SAWCO reserved in selling the land. The reservation allows SAWCO to spread water in facilities in existence in 1966. The location of SAWCO's recharge activities on the applicant's land, now called Basin No. 6, did not come into existence until after SAWCO created the reservation and sold the land.

According to the City's reading, the Decree entered in 1958 following a stipulated settlement in a case brought by SAWCO against other local pumpers for pumping rights, does nothing more than establish that SAWCO and only SAWCO may extract from the Cucamonga Basin that quantity of water which it imports from the San Antonio Creek watershed to the west, and which SAWCO spreads in the Cucamonga Creek alluvial fan. CCWD was not a party to that decree, although it claims to be the successor to the parties in the litigation sued by SAWCO.

The City is a SAWCO shareholder, holds seats on SAWCO's board of directors and produces from the Cucamonga Basin pursuant to rights which SAWCO licenses to it. It is in the City's interest that SAWCO continue its artificial recharge of the Cucamonga Basin, and that the basin is well managed.

The City has closely reviewed the issues raised in the comments from SAWCO and CCWD. The City believes that the issues raised in those letters are largely

legal, and therefore beyond the scope of this EIR. To the extent the comments raise environmental issues, those issues are based on SAWCO's and CCWD's reading of the historical record with which the City disagrees. The City engaged in an extensive historical review in the preparation of the Draft EIR and this response. The City believes that the environmental analysis in the Draft EIR is adequate, accurate and supported by substantial evidence.

Please refer to sections Draft EIR Section 5.8-1, **Hydrology and Drainage**, for a discussion of the impacts of the proposed project on the environment, its proposal to manage the flood flows and drainage which are discharged to the applicant's property, and its Open Space Concept, shown on Exhibits 5.8-1 and 5.8-2.

7A Response to Cucamonga County Water District's July 23, 2002 letter

Please refer to response to comment 5B

8A Response to Cucamonga County Water District's Public Comments, by its General Manager Robert DeLouch, before the Upland Planning Commission July 24, 2002

Please refer to response to comment 5B.

9A Response to letter of attorney for Cucamonga County Water District to the Upland Planning Commission dated July 24, 2002

1. Comments:

Paragraph 2 The Draft EIR fails to comply with the requirements of Senate Bill (SB) 610 in that it failed to include a Water Supply Assessment for circulation and comment by the public

This comment raises a purely legal question, which is beyond the scope of appropriate comment. The City believes that the Draft EIR contains the information and analysis required by applicable law, including the California Environmental Quality Act, Pubic Resources Code section 21000, et seq., and the Water Supply Planning Act, Water Code section 10910, et seq.

Also, the City concurs with the legal analysis provided by the project applicant's counsel on water issues, the Law Offices of Susan M. Trager, provided by letter dated August 14, 2002, that neither CEQA nor the Water Supply Planning Act required the inclusion of the WSA in the draft EIR prior to the adoption of SB 610, and that SB 610 did not impose that requirement.

Paragraph 2 Draft EIR improperly defers its analysis of the Project's potential impacts on water supply together with its ability to determine whether the project will have significant impacts on water demand and supply

Analysis of the effects of the proposed project on the City's water supply has not been deferred. Rather, the analysis can be summed up as follows: This year alone, the City has sold 6,000 acre feet of water surplus to its needs to third parties outside of its service area. This quantity would have been far more than adequate to meet the needs of the Project. The quantity of 6000 acre feet per year is sufficient to supply the needs of 12,000 typical residential dwellings in Southern California, and far more than is called for by the proposed project.

In addition to its sale of 6,000 acre feet sold to third parties outside of the City's service area, this summer, the City has also supplied water outside of its boundaries to meet the water shortfall in the San Antonio Heights area, in unincorporated San Bernardino County.

The Draft EIR's discussion and analysis of the impacts of the project on the City's available water supply is found in Section 5.9, **Public Services and Utilities**, at pages 5.9-7-5.9-25, 5.9-12, and in section 5.9-8 **Water**, pages 5.9-21 through 5.9-27. Mitigation measures are discussed at page 5.9-30, in sections 5.9-8a, 5.9-8b, and 5.9-8c.

In preparation of its Water Supply Assessment for the applicant's proposal, and in preparing its environmental analysis of the impacts of the applicant's project demands upon the City's water supply, the City has relied on information from the following sources: the City's *Urban Water Management Plan, Year 2000 Update,* prepared

jointly by regional water purveyors and by the Inland Empire Utilities Agency; Metropolitan Water District of Southern California's (AMWD@) *Report on Metropolitan's Water Supplies,* February 11, 2002, prepared by MWD; MWD's *Regional Urban Water Management Plan,* December 2000; City of Upland's *Colonies at San Antonio Water Supply Evaluation* (November 6, 2001) prepared by RBF Consulting; City of Upland's *Water Recharge Report for San Antonio Lakes* (October 1990) prepared by NBS/Lowry Engineers & Planners; City of Upland's *Water System Master Plan* (1992); *Water Facilities Master Plan for the San Antonio Water* Company (1994) prepared by Camp, Dresser & McKee; City *of Upland's Water Supply Assessment for the Colonies at San Antonio,* April 2002, prepared by Associated Engineers Inc., as reviewed by the City of Upland; historic water supply and water use records of the City of Upland, San Antonio Water Company, and West End Consolidated Water Company; annual reports of the San Antonio Water Company; Resolutions and Minutes of the City of Upland; reports of operations of the water treatment plants; pleadings on file in the three groundwater adjudications which govern SAWCO's and the City's groundwater resources; City of Upland's records of historic groundwater production and surface water deliveries; Open Space Preliminary Design Documents (February, 2002) prepared by Natural Systems International, LLC.; the City of Upland's 2000 Consumer Confidence Report, available at the City of Upland's Web Site which data has been certified by the City's water Operations Manager; Draft Water Study for the Colonies at San Antonio, (August 2002) prepared by Associated Engineers, Inc.; and various engineering studies and reports of SAWCO and the City of Upland. These data sources are available and can be reviewed at the City of Upland.

The Draft EIR identifies some deficiencies in facilities, but not of water supply, which will be corrected with the adoption of the recommended mitigation measures.

Please note that the Final EIR includes a new table of Estimated Water Demand, which supercedes Table 5.9-6.

[NOTE TO RESPONDERS: PLEASE INCLUDE NEW TABLE. ALSO INCLUDE A TABLE SHOWING THE CITY'S WATER SUPPLY.]

Paragraph 2 <u>Draft EIR's alleged failure to include a completed Water Supply Assessment as the basis of its environmental review as to the Project's potential impacts on water supply and demand requires recirculation of the EIR for public review and comment</u>

This comment raises a legal question, which is beyond the scope of appropriate comment. By letter dated August 14, 2002, the Law Offices of Susan M. Trager, water counsel for the project applicant, advised the City that the legal standard for recirculation of a draft EIR is the inclusion of significant new information. The City concurs with the analysis in this letter. If, following its review of the Final EIR and after receiving final comments on the public hearing on the project, the City determines that significant new information has been added to the EIR which has changed the EIR in a way which has deprived the public of a meaningful opportunity to comment on a substantial adverse effect of the project, the City will then recirculate the Draft EIR.

11A Response to letter by San Antonio Water Company dated July 26, 2002

This responds to written comments, which incorporate, by reference, letters dated June 15, 1998, February 20, 2001, and May 3, 2002.

1. Comments:

Paragraph 1 Fails to examine the project impacts to the Cucamonga Wash

Section 5.8 of the Draft EIR addresses the impacts of the project on the Cucamonga Wash. The Open Space Design Concept provides an area for the continuation of recharge activities. Please refer to the City's response to Comment 5B.

Paragraph 1 Workable mitigation measures remain undefined

Section 5.8 of the Draft EIR contains an analysis of how the Open Space Design, a key element of the applicant's project, accommodates the reasonable requirements of SAWCO to continue its artificial recharge activities at the Basin No. 6 location. SAWCO's proposals for additional features, including its manned valve concept, are infeasible or unreliable and have been rejected. The mitigation measures proposed set forth the mechanism for actualizing the Open Space concept. Please refer also to the City's response to Comment 5B.

Paragraph 2 Both the recent and historic uses of the area for water percolation and projection are not clearly identified and defined in the background and existing condition descriptions of the draft EIR document

See response to comment 5B.

Paragraph 2 The no project lacks correct definition necessary for realistic comparison with the proposed alternative.

Please refer to Response to Comment 5B.

Paragraph 2 The resulting impact mitigation would be deficient specifically for the percolation areas known as basins #6 and #7.

Please refer to Response to Comment 5B.

Paragraph 2 The remaining portion of basin #6 is proposed as a temporary stormwater detention facility, with landscaping and passive use elements in which is otherwise designated as open space.

Comment noted. To the extent that the comment is innuendo to the effect that SAWCO's percolation area is being converted to another use, please refer to the Response to Comment 5B.

Paragraph 2 The area known as basin #7 is to be filled -in and built upon thereby reducing percolation of water into the ground and

substantially eliminating that water recharge and conservation capacity from the site

Please refer to Response to Comment 5B.

Paragraph 3 Losses or reduction in the groundwater recharge capacity or depletion of quality of the groundwater will substantially impact the Company's supply, unless reliable mitigation measures are implemented

Please refer to Response to Comment 5B.

As to the protection of water quality from the impacts of the project itself, mitigation measures have been proposed requiring the implementation of standard water quality mitigation during construction, operation and maintenance of the Project. Please refer to mitigation measures 5.8-1a, through 5.8-5. Storm Water Pollution Prevention Plans (SWPPP) may be submitted concurrently to the City Engineer. Approval is by the Water Quality Control Board, prior to grading.

The quality of water which drains to the property from off-site, including drainage and flood flows from Upland, the County Flood Control, from County unincorporated areas, and from Interstate 210, is subject to the jurisdiction of the Regional Water Quality Control Board, and the State Water Resources Control Board, which regulated discharges through National Pollution Discharge Elimination System programs permits which have been issued.

The project's open space design concept is designed to provide some measure of water filtration and treatment, and as such would also mitigate the effects of drainage from offsite, which is not treated to the levels required by the NPDES permits in effect.

Paragraph 4 Hydrology and drainage mitigation measures are tied to applicable (undefined) State or City Standards and/or subjective decisions at a future time of permit issuance for then specific elements of the project

Please refer to Response to Comment 11A (Paragraph 3), above, and to DEIR Section 5.8-1 **Water Quality - Construction**, which provides an analysis and explanation of the sources of State and City standards taken into account in the issuance of permits. The Regional Water Quality Control Board by Order R8-2002-0012 adopted a new NPDES permit for San Bernardino County and its incorporated cities including Upland. The new permit includes programs and policies the permittees are proposing to implement. The 2000 management plan and other requirements specified in the Order have been adopted to protect beneficial uses of all receiving waters. Treatment of storm water runoff according to volume-based calculations or flow-rate based calculations is not a requirement for new development. However, meeting the storm water discharge requirements may require some form of treatment controls to be employed in new development projects, on the basis of requiring Best Available Technology and Best Conventional Technology. The BMP selection is guided by the California Storm Water Best Management Practice Handbooks for Construction Activity, and the ASCE Urban Runoff

Quality Management, WEF Manual of Practice No. 23 and 87.

Paragraph 4 The overlooked practice of existing and historic water percolation and production in the area, compared with the proposed drainage/percolation mentioned, but vaguely defined in the document, does not constitute adequate mitigation of the impacts that will be likely as required under Appendices Section 4.0 (Environmental Analysis)(Baseline not adequately described)

Please refer to Response to Comment 5B, and 11A.

Paragraph 5 Project will substantially conform to the Clean Water Act (Section 404) through design concepts that which are intended to protect water resources and enhance water quality

While this may be accurate, it should be noted, however, that the U.S. Army Corps of Engineers (Corps) has declined to exercise jurisdiction over the Project. This means that state and local water agencies will have the lead in determining such things as the appropriate best management practices (BMPs). It is possible, therefore, that had the Corps asserted jurisdiction under section 404, and certain measures would be implemented differently. Because the Corps has waived jurisdiction, inconsistencies between the ways that the Regional Board and the City implement their authority and the ways that the Corps would have implemented its authority, had it chosen to do so, do not create significant impacts and do not mean that the project proponent is violating the Clean Water Act.

Paragraph 5 Section 5.8 of the EIR provides that the average annual recharge capacity within the project is effectively 18 to 32 percent less then [sic] the average annual recharge data presented by this company.

Please see Response to Comment 5B. SAWCO's recharge data submitted for consideration was found by the City to be uncorroborated, uncorrelated, unreliable, and inconsistent with visual observations. The City declines to rely on the data submitted by SAWCO and instead elects to rely on data in SAWCO's Master Plan, and the data it and the applicant generated.

Paragraph 5 The project design does not accommodate the local purveyor's request to maintain the groundwater basin as a long-term water storage facility, and to offset any groundwater basin recharge losses [Page 5.8-7].

Please refer to Response to Comment 5B, which is identical to this comment.

Paragraph 5 The project as designed, would further deplete the capability of recharge and storage of water for the consumers in this region, including those proposed to be benefiting from within the

project and appears to conclude that the project

Please refer to the Response to Comment 5B.

Paragraph 6 What assurance is there that the required SWPPP and BMPs will be implemented and maintained in order to protect water resources and enhance water quality as required?

The Regional Water Quality Control Board has enforcement powers under the California Water Code. Criminal and civil proceedings can be initiated for enforcement. Both the County and the City adopt ordinances from time to time to reduce litter, and to prohibit contamination of water supplies.

Paragraph 7 Since the 1940s spreading and recharge activities have been conducted by SAWCO in conjunction with the San Bernardino County Flood Control District under its water conservation responsibilities

Please refer to Response to Comment 5B. In addition, SAWCO has failed to provide, to the satisfaction of the City, any explanation of, substantiation of, or evidence of how it works in conjunction with the San Bernardino County Flood Control District under its water conservation responsibilities@.

Paragraph 7 Since 1967 the Company has continued its water spreading operation on the overlying lands under its reserved easements to do so on lands within the proposed project site@

Please refer to Response to Comment 5B.

Paragraph 8 The applicant proposes to convert 448 acres of basically natural open space functioning as [a] recharge area over the Cucamonga Wash, into less than 100 acres of permeable ground space, replacing 103 acres of pre-existing recharge area with 73 acres of flood control detention facilities with minimal sustained recharge capability compared to the existing condition.

Please refer to Response to Comment 5B. The City disagrees with the numbers assumed by the commenter in this comment, some of which are inconsistent with SAWCO's most reliable written internal documentation. According to SAWCO's Master Plan, SAWCO discharged to an area consisting of only 14 acres, not 70. According to the Master Plan, the 14-acre area was more than adequate for SAWCO's purposes.

The applicant is processing a project of approximately 330 acres, not 440 acres.

Paragraph 8 This proposal appears to assure the reduction of water recharge and little to no capability for conserving those increased storm water flows arriving in the project area of the Wash.

Please refer to Response to Comment 5B.

Paragraph 8 The current recharge capability of the areas known as basin #6 and #7 will be effectively lost from beneficial use for water management in this region unless reasonably mitigated.

Please refer to Response to Comment 5B.

Paragraph 9 The benefits of the proposed project cannot be accomplished at the expense of recharge and management of the groundwater within the Cucamonga Basin

Please refer to Response to Comment 5B.

Paragraph 10 SAWCO has historic and reserved rights over a majority of the land within the Cucamonga Wash including the project area. SAWCO is willing to work toward resolution of such impacts to accomplish the mitigation that will allow for continued conservation of available water in the Cucamonga Basin

Please refer to Response to Comment 5B.

The applicant has filed a quiet title action seeking the court's determination of the extent of SAWCO's right, if one exists, to percolate water in Basin No. 6 on applicant's property.

The applicant, its consultants, City Staff, and representatives of Cucamonga County Water District (CCWD) have held 6 meetings between August 2001 and March 2002, to devise a plan to accommodate the competing demands of the agencies. In designing a project to address the hydrology and drainage demands of the project site, the applicant incorporated into its proposal an Open Space Design Concept, which includes a Vegetation System Plan. (MM 5.8-2a, 5.8-2b, 5.8-2c) Both the Open Space Design Concept and its Vegetation System Plan are designed to provide optimal percolation rates in accordance with established standards for storm water treatment.

12H Response to letter by Robert & Melanie Ingram, dated July 29, 2002

Paragraph 12H Concern re potential effects of flooding in 100-year scenario; Concern that regional funds will be used to subsidize local project; the no-project alternative would eliminate the need for the storm water engineering project.

The extensive storm drain and flood control facilities that will be constructed, as part of the applicant's project will provide improved flood protection to downstream properties. Two detention basins within the Project Area will receive storm water runoff from a severe 100-year storm event. This runoff is detained on-site and released downstream into the Cucamonga Flood Control Channel at a controlled rate that is much lower than the peak discharge of the facilities discharging stormwater onto the project site.

Secondary systems, such as concrete-lined spillway structures and open channels, are designed to pass the full 100-year storm runoff in the unlikely event that the detention basin storage capacities are exceeded. Improvements include rock-lined slopes and flowlines, check dams and concrete structures that convey flow without soil erosion and serve to protect surrounding property from flood damage. In accordance with San Bernardino County Flood Control District design criteria, the detention basins are sized for a special storm event of two back-to-back 100-year storms, and the spillways are designed for a 1,000-year storm event for a large factor of safety. Together, these facilities provide flood protection to surrounding properties for the 100-year storm event. Without the project, downstream of the project would not be afforded the same level of flood control protection. The no-development scenario provides less flood control protection than the project development scenario.

Federal and County funds are being sought because most of the flood flows which reach the property have been directed to the property from off-site, carried to the site by the 19th Street storm drain, and the 20th Street storm drain. In effect, the applicant's land is part of regional flood control facility, which confers a regional benefit. So, public funding for a regional facility is appropriate in this case.

14A Response to letter of attorney for Cucamonga County Water District to City of Upland dated July 29, 2002

This responds to written comments submitted by the attorneys for Cucamonga County Water District dated July 29, 2002, including the attached letters addressed to the applicant's project manager dated September 20, 2001, November 14, 2001, and December 18, 2001.

Paragraph 2 Draft EIR fails to comply with the requirements of Senate Bill 610

Please refer to Response to Comment 9A.

Paragraph 2 The intent of SB 610 is to circulate the Water Supply Assessment for public review and comment

Please refer to Response to Comment 9A.

Paragraph 2 The City improperly deferred analysis of the project's potential impacts on water supply and demand, which are potentially severe, as demonstrated by the fact that the City entered into a contract with the District for sufficient water to meet the minimum fire flow requirements associated with the project.

Please refer to Response to Comment 9A.

Paragraph 2 The impacts of the project on water supply and demand are potentially severe, as demonstrated by the City's contract with CCWD for fire flow needs associated with the Project

In 1998, CCWD and the City executed an agreement in which CCWD agreed to furnish fire flow to Phase I of the Applicant's project. This deferred the necessity of

extending water to serve the Phase I development until later phases were approved, at which time the City's facilities would be extended and improved to meet the requirements of the region. The Agreement was considered by the San Bernardino Local Agency Formation Commission, together with a service boundary adjustment. The agreement does not indicate a deficiency in the City's water supplies; rather, it demonstrates cooperation among governmental agencies.

Paragraph 3 It is not clear that the Project as designed will fully mitigate for the loss of 70 of the approximately 440 acres proposed for development, to accomplish recharge of the Cucamonga Basin by both SAWCO and CCWD

The commenter misstates significant facts.

CCWD claims that the District [CCWD] and SAWCO ... have been using 70 of the approximately 440-acres [sic] proposed for development in the Project as Basin No. 6 to accomplish recharge of the Cucamonga Basin@. First, the project is 330 acres, and not 440 acres. Second, CCWD's assertion that it is using Basin No. 6 for recharge purposes is unsupported by any document, record, court decree, or other evidence, which is credible to the City. The assertion that CCWD is using Basin No. 6 contradicts CCWD's sworn declaration filed in connection with a civil lawsuit on June 28, 2002. Assistant General Manager Martin E. Zvirbulis of CCWD stated under penalty of perjury in Paragraph 11 of his Declaration, that only ASAWCO diverts water to this Basin [No. 6]@. Mr. Zvirbulis made no claim that CCWD diverts water to or uses any part of the applicant's property. Finally, the response to comment 5B explains why SAWCO's and commenter's estimates of historic percolation, and the size of the area to which the water was applied, is unsupported by the facts. In particular, SAWCO's 1994 Master Plan provides that according to SAWCO records, SAWCO spread an average of 4,239 ac-ft/yr into Basin No. 6 between 1984 and 1992; that Basin No. 6 has a maximum surface area of approximately 40 acres; and that the recharge area consisted of only 14 acres, which acreage was fully capable of providing the necessary recharge capacity. The City finds that this 1994 Master Plan is the most persuasive evidence regarding historical recharges. The City disagrees with contradictory evidence submitted by SAWCO and CCWD.

Paragraph 4 The DEIR fails to adequately address the mitigation measures that must be imposed to address the loss of recharge capability within the Project area; absent mitigation measures, there will be long term and short term, current and future water supply deficiencies for the CCWD and SAWCO customers

Please refer to Response to Comment 5B, and 14A. The commenter fails to explain in a manner satisfactory to the City how CCWD customers will be impaired, if SAWCO were to cease discharging water to Basin No. 6. CCWD has never shown to the City's satisfaction a right to, or a real property interest in, the water which SAWCO imports from another watershed and purposefully discharges into Basin No. 6 for percolation into the Cucamonga Basin.

The City interprets the 1958 Decree as providing that water SAWCO puts into the ground is water, which SAWCO and only SAWCO may extract. Other parties to that

litigation are enjoined from extracting the fruits of SAWCO's efforts. That principle is enunciated in *City of Los Angeles v. City of San Fernando*, (1975) 14 C.3d 199. The commenter's assertion that SAWCO's failure to recharge the Cucamonga Basin via No. 6 would result in water deficiencies or water rate increases for its customers is by the City's analysis, meritless.

Paragraph 5 The DEIR fails to adequately address SAWCO's right to use the new recharge facilities to accomplish recharge of the Cucamonga Basin, and impacts if the applicant is successful in its civil action

This is a matter that concerns SAWCO and the project applicant, and is subject to their negotiation and concurrence. If, as a result of the litigation or for any other reason, the applicant redesigns the project in a manner, which requires new approvals from the City, the City will review this EIR under appropriate legal principles to determine whether it is still adequate.

Paragraph 5 The DEIR fails to address the possibility of the effect SAWCO's loss in the quiet title might have on replenishment of the Cucamonga Basin

The purpose of the draft EIR is to analyze the environmental impacts of the applicant's proposed project, not the litigation between SAWCO and the applicant. While SAWCO has asserted that its loss in the quiet title action may have an environmental impact, the City disagrees. SAWCO has provided no evidence satisfactory to the City that its loss in the quiet title action will necessarily mean that the Cucamonga Basin will no longer be replenished to the same degree. It appears to the City that SAWCO has a number of options open to it, which would allow it to continue to recharge the Cucamonga Basin, and these options are completely independent of the City's approval of the applicant's project. For example, SAWCO could (1) cease discharging imported water to Basin No. 6, and restrict its pumping from Cucamonga Basin, consistent with the 1958 Decree; (2) pay the applicant market value for the right to continue to discharge water into the Cucamonga Basin for replenishment by percolation through the project site; and/or (3) increase its recharge to the Cucamonga Basin at other locations, such as golf courses, greenbelt areas, Holliday Rock, and at other locations in the Cucamonga Wash.

Paragraph 6 The DEIR fails to adequately address funding for the development and construction of the new recharge facilities

Please refer to Response to Comment 5B. The comment raises issues, which are beyond the scope of appropriate comments. The financial conditions the City chooses to impose on the applicant to insure that the project will be constructed as analyzed in the EIR do not raise environmental concerns.

15J Response to letter by LSA Associates, Inc., EIR consultant for applicant, dated July 29, 2002

Paragraph 15J Suggested editing changes

This comment proposes editing changes which facilitate reading of the EIR,

substitute a more current data set for Table 5.9-6 on page 5.9-22, distinguish between water supply and water infrastructure (Page 5.9-21, and more accurately portray the process governed by Mitigation Measures 5.8-1 and 5.8-4a at pages 5.8-27 and 5.8-29.)

EPARTMENT OF PUBLIC WORKS
OOD CONTROL • REGIONAL PARKS • SOLID WASTE MGMT • SURVEYOR • TRANSPORTATION

COUNTY OF SAN BERNARDINO
ECONOMIC DEVELOPMENT
AND PUBLIC SERVICES GROUP

5 East Third Street • San Bernardino, CA 92415-0835 • (909) 387-8104
Fax (909) 387-8130

KEN A. MILLER
Director of Public Works

RECEIVED

COMMENT NO. 4

July 8, 2002

Mr. Glenn Lajoie
City of Upland Planning Department
460 North Euclid Avenue
Upland, CA 91786

File#10(ENV)-4.01

RE: NOTICE OF DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT AND SPECIFIC PLAN-THE COLONIES AT SAN ANTONIO– PLAN AMENDMENT

Dear Mr. Lajoie:

Thank you for giving the San Bernardino County Department of Public Works the opportunity to comment on the above-referenced project.

The project is located within the Cucamonga Spreading Grounds, south of 20th Street and west of the Flood Control District's Cucamonga Channel.

The Water Resources Division recommendations and comments are as follows:

1. In general, it appears that the draft Program Environmental Impact Report and the proposed Specific Plan have identified the major concerns of the Flood Control District. **4A**

2. Prior to any activity within the District right-of-way, a permit will be required from the District's Flood Control Operations Division, Permit Section. Site specific recommendations will be made upon the submittal of construction plans and supporting data. **4B**

3. Reference is made to item 4.8 HYDROLOGY AND WATER QUALITY, Part g) of the Initial Study/ Environmental Assessment located in the Appendices for the Program EIR. It is noted that reference is made to Flood Zone "C". FEMA no longer uses the Zone C designation. According to the most current mapping dated March 18, 1996, the area lies with Zone X unshaded. It is recommended that the Program EIR use the current FEMA zone designation. **4C**

4. Reference is made to the Specific Plan Amendment Program EIR, item 5.8 HYDROLOGY AND DRAINAGE, page 5.8-10, San Bernardino County Drainage Easements. The San Bernardino County Flood Control District, not the "County", holds the easements related to the operation and maintenance of flood control works within the project site. It is recommended that the Program EIR use the correct nomenclature. **4D**

Should there be any changes to this project, please notify our Department so that we may have the opportunity to comment on the changes. If you have any questions or need additional information please contact, Kelly Rozich, Senior Associate Planner at (909) 387-8114.

Sincerely,

NARESH P. VARMA, Chief
Environmental Management Division

NPV:KAR/COLONIESSANANTONIO-RESPONSE.DOC

cc: Mike Fox, Water Resources
Kelly Rozich, EMD
KAM/PJM Reading File

Response to Comment No. 4

Naresh Varma, County of San Bernardino Department of Public Works
July 8, 2002

4A. Comment is noted. No additional response is required.

4B. As referenced in Subsection 3.6, *Agreements, Permits and Approvals*, and in Section 5.8, *Hydrology and Drainage*, permitting is required with the San Bernardino County Flood Control District.

4C. It is acknowledged that the subject site is within Zone X. Zone C, previous referenced in the Notice of Preparation/Initial Study dated April 10, 2001, is no longer utilized by FEMA. It is further noted that page 5.8-2 of the Draft EIR states that according to FEMA, the site is not located within the boundaries of a 100-year flood zone.

4D. Page 5.8-19, Paragraph 6, of the Final EIR has been revised to reflect that the San Bernardino County Flood Control District and not the "County" holds the referenced easements. In addition, Mitigation Measure 5.8-3d has been revised to reflect this correction.

The ~~County of~~ San Bernardino County Flood Control District currently holds a total of 7 easements relating to the operation and maintenance of flood control works within the project site. Construction of the project site would require review and possible modification to reflect ownership and maintenance agreements reached for the proposed detention basin system.

5.8-3d Existing easements held by the ~~County of~~ San Bernardino County Flood Control District for on-site flood control shall be reviewed in consideration of ownership and maintenance agreements that are to be established.

COMMENT NO. 5

MWD
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Executive Office

RECEIVED
JUL 22 2002
RBF CONSULTING

July 8, 2002

Mr. Glenn Lajoie, AICP
RBF Consulting
14725 Alton Parkway
Irvine, CA 92618-2027

Dear Mr. Lajoie:

Draft Environmental Impact Report and the Colonies at San Antonio Specific Plan

The Metropolitan Water District of Southern California (Metropolitan) has received a Draft Program Environmental Impact Report (EIR) for the Colonies at San Antonio and a copy of the Colonies at San Antonio Specific Plan for the City of Upland (City). The proposed project involves the development of 447.8-acres of land located south of 20th Street, east of Campus Avenue, west of Cucamonga Creek Flood Control Channel, and north of 16th Street. The implementation of the project requires the approval of a Specific Plan Amendment (SPA-01), General Plan Amendment to the Transportation Element (GPA-00-02), amendments to Zoning Districts (ZC-00-01) and Zoning Regulations (ZA-180), Design Guidelines, a Master Tentative Tract Map, and tentative tract maps for residential areas.

Metropolitan's Foothill Feeder-Rialto Pipeline traverses the proposed project area in a generally east-west direction. Metropolitan requests that the Final EIR evaluate potential impacts to Metropolitan's ability to access, operate and conduct maintenance to the existing Metropolitan Foothill Feeder-Rialto Pipeline. In addition, the EIR must further explain potential impacts to groundwater recharge, including an explanation and analysis of a project design that accommodates the local water purveyor's request to maintain the groundwater basin. **5A** **5B**

In order to avoid potential conflicts with Metropolitan's rights-of-way, we request that any preliminary engineering design drawings or improvement plans for any activity in the area of Metropolitan's pipelines and rights-of-way be submitted for our review and written approval. The applicant may obtain detailed prints of drawings of Metropolitan's pipelines and rights-of-way by calling Metropolitan's Substructures Information Line at (213) 217-6564. Please note that all submitted designs or plans must clearly identify Metropolitan's facilities and rights-of-way. **5C**

Additionally, Metropolitan encourages projects within its service area to include water conservation measures. Water conservation, reclaimed water use, and groundwater recharge programs are integral components to regional water supply planning. Metropolitan supports mitigation measures such as using water efficient fixtures, drought-tolerant landscaping, and reclaimed water to offset any increase in water use associated with the proposed project.

We appreciate the opportunity to provide input to your planning process and we look forward to receiving future environmental documentation on this project. If we can be of further assistance, please contact me at (213) 217-6242.

Very truly yours,

Laura J. Simonek

Laura J. Simonek
Manager, Environmental Planning Unit

CDM/LAS:rdl
(Public Folders/EPU/Letters/08-JUL-02E.doc – Glenn Lajoie)

Response to Comment No. 5

Laura Simonek, Metropolitan Water District of Southern California
July 8, 2002

5A. All work within the MWD right of way requires a grant of entry from the District. Prior to granting this permit, MWD staff reviews the plans and issues corrections, as necessary, to ensure that the District's right of access, maintenance, and ownership are protected.

5B. The City is committing to ensuring that the project preserves historic levels of ground water recharge in the Cucamonga groundwater basin. To that end the City intends to impose the following condition of approval on the project:

> *"In using Lot 20 for groundwater recharge, the project shall be capable of perpetually recharging to the groundwater table an amount of water equal to the sum of the following:*
>
> - *All historic storm water volumes from the 19th Street storm drain and other drainage areas historically tributary to Pit #6 and #7.*
> - *All historic rainfall volumes falling on the project area.*
> - *All historic volumes of water imported to Pit #6 and Pit #7 by the San Antonio Water Company.*
>
> *For purposes of this section, the term "historic" shall mean the forty-two year period from the adjudication of the Cucamonga Basin (1958) through 1999, the year before the 20th Street drain was constructed. The analysis of historic storm flows shall be based on a daily time step of local rainfall for the forty-two year period. The analysis of imported water flows shall be based upon the records of the San Antonio Water Company for the forty-two year period, or as far back in the period as the records exist and such other credible records deemed appropriate by the City of Upland and in accordance with professional engineering standards.*
>
> No individual tract maps shall be recorded for Lots 13, 14, 15, 16, 17, 18 and/or 19 unless and until all water recharge improvements to Lot 20 have been completed to the satisfaction of the Public Works Director."

The City is working cooperatively with San Antonio Water Company, Cucamonga County Water District, and the developer to quantify the historic recharge levels and ascertain realistic sustainable design percolation rates for the basin.

The City of Upland believes that the analysis contained in the Draft EIR is sufficient in addressing hydrologic and drainage impacts pursuant to the provisions of Section 15168 of the CEQA Guidelines (Program EIR).

Mitigation Measures are presented in the EIR which assure proper design and implementation of drainage and percolation systems, based upon available data. Based upon final design of the drainage and percolation system, it is to the discretion of the City of Upland, serving as the Lead Agency, to determine if additional review pursuant to the CEQA Guidelines is warranted. Should additional review be required, this EIR serves as the "Tiering" document in accordance with Section 15152 of the CEQA Guidelines.

Included as an attachment to this response is a letter from the Law Offices of Susan M. Trager which represents the Developers' position on water recharge to be provided by the project. The letter does not represent the position of the City on the matter.

5C. Comment is noted. As stated on page 3-39 of the Draft EIR, the Metropolitan Water District is listed as an outside agency which may have approval/permit authority for the project.

Law Offices of
SUSAN M. TRAGER
A Professional Corporation

19712 MacArthur Blvd., Suite 120
Irvine, California 92612

TELEPHONE
(949) 752-8971

FACSIMILE
(949) 863-9804

E-MAIL
SMT @ tragerlaw.com

SUSAN M. TRAGER
AAAAAAAA
OF COUNSEL
ERIC S. NORBY

MEMORANDUM

TO: Peter Pitassi

FR: Susan M. Trager

DT: August 15, 2002

RE: Responses to Comments

CL: Colonies

You have asked for our input to assist in the City of Upland (City) staff's responses to comments 3A, 3C, 3D, 3E, and 3G; 5B; 7A; 8A; 9A; 11A; 12H; 14A; and 15J on the draft Environmental Impact Report for the Colonies of San Antonio. Attached are our draft responses to comments. Please review and revise the material where appropriate, and forward it to the appropriate person. Please double check the drainage numbers we used, for consistency. We stuck generally with Draft EIR figures. If you or the preparer has questions, I can be reached at the office, 949 752-8971, at home at 949 497-3431, or on my cell at 949 267-7282.

3A Response to California Regional Water Quality Control Board

The RWQCB urges the following principles and policies be followed: (1) avoid disturbance to natural water bodies; (2) avoid disturbance to natural drainage systems; (3) conserve natural areas; (4) protect slopes; (5) protect drainage systems; (6) protect water bodies; (7) encourage riparian vegetation in drainage systems; (8) provide adequate vegetated buffers to capture storm flows, lessen erosion and protect water quality; and (9) mitigate disturbances to natural waters and drainages.

1. Avoid Disturbance to Natural Water Bodies:

There are no natural water bodies on the project site. The site generally involves two geographical areas: the area north and the area south of 19th Street. The area north of 19th Street has no natural water bodies on it. (DEIR, at p. 5.1-1.) The area south of 19th Street is largely disturbed, due to past sand and gravel mining. (DEIR, at p.

5.1-2.) While standing water in the area south of 19th Street can be found, it appears from the topography that all of this water is collecting in old mining pits. (DEIR, at p. 5.1-2.)

It should also be noted that the U.S. Army Corps of Engineers, which is required by law to protect Waters of the United States@ has declined jurisdiction over the project.

2. Avoid Disturbance to Natural Drainage Systems:

The project is located on the southern portion of the Cucamonga Creek alluvial fan. (DEIR at p. 5.8-1.) The fan has been used historically to conserve water, and to capture debris from storm flows. At various times, continuing into present times, the project site has been improved with flood control facilities and with artificial weirs to allow for spreading and conservation of flood water. (DEIR, at p. 5.8-1.) Cucamonga Creek has been confined to a concrete boxed flood control channel running along the eastern edge of the project site. Between the flood control and recharge facilities, on the one hand, and the commercial sand and gravel mining, on the other, there are no natural drainage systems of any significance left to avoid. In confirmation of the City' s conclusion that no natural drainage systems remain, the U.S. Army Corps of Engineers, declined to exercise jurisdiction over the project.

3. Conserve Natural Areas.

The project site contains approximately 224 acres of alluvial fan sage scrub and alluvial fan chaparral. The remainder of the project site consists of disturbed land, or riparian habitat associated with the artificially created ponds. (DEIR at p. 5.6-2.) The alluvial scrub and chaparral is of little long-term habitat value, because it is a vegetation type adapted to occasional flooding. Also, the construction of the I-210 freeway has already isolated the project site from the large expanses of natural open space to the north of the property. (DEIR, at p.5.6-19.) Due to the existing changes in land use around the project site, and the confinement of Cucamonga Creek, this habitat will never again be subject to that kind of flooding or connect to larger areas of open space. (DEIR, at p. 5.6-4.)

The project proponent will mitigate for the loss of the higher value alluvial scrub (that north of the I-210). (DEIR at p. 5.6-22.) Also, the project will create a 58-acre open space area with 18 acres of riparian habitat. (DEIR at p. 5.6-17.)

4. Protect slopes

As may be expected in an alluvial fan, the project site is largely flat. The proposed project will grade the entire site to direct stormwater runoff toward the planned open space element in the center of the site called Basin A. (DEIR Exhibit 5.8-3 [Storm Drain Concept].) Basin A will be built as a series of sub-basins with appropriately graded and vegetated slopes to manage stormwater flows as planned. (DEIR Exhibit 5.8-1 [Open Space Concept].)

5. Protect drainage systems

One of the key issues driving the design of the proposed project, especially

Basin A, is the need to manage stormwater flows, which are directed to the property from off-site. The watershed for the project encompasses a total of 2,563 acres, including 1,755 acres draining into the County's 20th Street Storm Drain, 343 acres into the City's 19th Street Storm Drain (both of which discharge onto the project site), drainage from the I-210 freeway, and drainage within the 330-acre project site. The design of the Cucamonga Creek Channel allows for the addition of only 658 cfs from the project site, even during 100-year storm events. (DEIR, at p.5.8-2.) Extensive modeling has been done to design a system, which will detain the stormwater flows without exceeding the capacity of the Cucamonga Creek Channel. (DEIR Table 5.8-1 and related discussion.) (For further discussion, please refer to Response to Comment 12H.)

6. Protect water bodies

Stormwater discharge into Basin A from its 2,563-acre watershed is expected to carry typical urban water pollutants, such as oil and grease residues, fertilizers, pesticides, and animal waste. (DEIR 5.8-20.) One role of Basin A is to act as a filter for those discharges so that the water flowing into the Cucamonga Creek Channel complies with all applicable water permits. (DEIR 5.8-20 to 22.) Basin A would act as a back-up system to water, which is subject to NPDES requirements. Basin A will thus serve to protect downstream water bodies from the urban pollutants in the project site's watershed.

7. Encourage riparian vegetation in drainage systems

One component of the design of Basin A is the placement of vegetation adjacent to the channels and in tributary bio-swales to act as bio-filters, removing contaminants from first-flush storm flows and from nuisance flows. (DEIR at p. 5.8-21.)

8. Provide adequate vegetated buffers to capture storm flows, lessen erosion and protect water quality

See discussion in paragraph 6, above.

9. Mitigate disturbances to natural waters and drainages.

See discussion in paragraph 3 above on applicant's mitigation obligation.

3C <u>Response to California Regional Water Quality Control Board</u>

The RWQCB encourages the use of pervious materials such as vegetated swales and permeable pavement for runoff channels and parking areas to mitigate for increase in amount of area covered with pavement and structures.

As noted above, vegetated swales play an important role in the design of Basin A for the very purpose suggested by the RWQCB. (DEIR at 5.8-21.)

Also, tracts north of Basin A will be designed to dewater in-tract sump areas for 100-year storm flows. (Mitigation Measure 5.8-3c.) The City believes that the existing project design adequately mitigates for the increase in pavement and structures.

3D Response to California Regional Water Quality Control Board

The RWQCB encourages the use of native vegetation in replanting and the preservation and protection of existing natural vegetation to the maximum extent possible.

See Response to Comment 3A.3 and 3A.6.

3E Response to California Regional Water Quality Control Board

The RWQCB requests implementation of appropriate BMPs to control discharge of pollutants and to avoid the tracking of sediments into streams and water conveyance channels.

The management of stormwater will be done pursuant to a series of permits issued pursuant to the National Pollution Discharge Elimination System (NPDES) program of the Clean Water Act, among other statutory authority, that will impose the obligation to use BMPs. (Draft EIR, at 5.8-22.)

3G Response to California Regional Water Quality Control Board

The RWQCB requests that the project be designed and constructed to protect and improve underlying groundwater quality.

See Response to Comment 3A. One key feature of the entire project is managing stormwater and other flows of water onto the project site in a manner that will effectively recharge the underlying groundwater basin while using surface features such as natural vegetation to take up pollutants.

5B Response to Metropolitan Water District of Southern California

1. Comments

Paragraph 5B The EIR must further explain potential impacts to groundwater recharge, including an explanation and analysis of a project design that accommodates the local water purveyor's request to maintain the groundwater basin

The local water purveyor for the project and within the City's boundaries, is the City of Upland, and not the San Antonio Water Company (SAWCO), or Cucamonga County Water District (CCWD), and the project has been designed to accommodate the City's request to maintain the groundwater basin. In the interest of full disclosure regarding the unresolved issues among the City, the project applicant, SAWCO and CCWD regarding this project, this response also addresses certain comments submitted by SAWCO and CCWD.

The City has interpreted the comments from SAWCO and CCWD as a request that the City exercise its police powers to exact from the applicant a commitment to set aside a substantial amount of valuable real property beyond that which has been used historically for artificial recharge, so that SAWCO may continue to artificially recharge

imported water to the Cucamonga Basin without actually buying the land.

The project applicant has already incorporated into its project a plan to retain sufficient land in open space to accommodate what it and the City believe to be SAWCO's historic spreading requirements, based upon the most reliable data obtainable. Historically, as best the City can determine, the water remained at the discharge point in a pond of approximately 14 acres. Not only would the design concept serve to allow the continuation of recharge to the Cucamonga alluvial fan, but also it would facilitate SAWCO's compliance with the terms of the 1958 Decree. It would do so by creating a permeable pathway B a bio-swale B from SAWCO's discharge point at the 19th Street storm drain, (which discharges to a point on the Chino Basin side of the political and judicial demarcation line established by the Court in the 1958 decree) so that water can be carried over the political/judicial demarcation into an area overlying the Cucamonga Basin, where it sinks into the ground to recharge the basin.

In an effort to resolve the conflicting demands on the applicant's land, the City, the applicant, SAWCO, CCWD and others have met repeatedly between August 2001 and March 2002 to discuss the participants' demands. SAWCO and CCWD were asked to present support for their demands that the artificial recharge component of the applicant's project be expanded to accommodate greater quantities of water for recharge over a much larger area than had actually been SAWCO's historic practice.

In reviewing the data furnished, SAWCO's estimates of quantities artificially percolated in Basin No. 6 on the applicant's property are conflicting and uncorroborated. The City was never able to learn just how much of the water exported from the San Antonio Creek area was percolated into Basin No. 6. The lack of correlation in the data, at least in part, results from the fact that SAWCO did not meter the amount discharged to Basin No. 6. Data are inconsistently reported, and the correlation of data from one set with data from another set can only lead to speculative results.

SAWCO has furnished no information useful to the City to assist the City in the analysis of the data, some of which represent flows diverted from San Antonio Canyon; some appear to represent total amounts percolated. This is important, because SAWCO has asserted that it has, on occasion, percolated up to 20,000 acre feet per year.

City staff has evaluated SAWCO's estimates of water it asserts is artificially recharged to Basin No. 6. Staff has also reviewed published reports of water diversions, tabulations of water percolated, engineering reports, studies, SAWCO records, the public records, and publications of other agencies to independently evaluate the comments and other submissions of both SAWCO and CCWD as to the quantities of water which SAWCO and CCWD claim have been spread at this location.

The City has taken into account analysis and data from the City's *Urban Water Management Plan, Year 2000 Update*, prepared jointly by regional water purveyors and by the Inland Empire Utilities Agency; Metropolitan Water District of Southern California's *Report on Metropolitan Water Supplies*, February 11, 2002, prepared by the Metropolitan Water District of Southern California; Metropolitan Water District of Southern California's *Regional Urban Water Management Plan*, December 2000; City of Upland's *Colonies at San Antonio Water Supply Evaluation* (November 6, 2001) prepared by

RBF Consulting; City of Upland's *Water Recharge Report for San Antonio Lakes* (October 1990) prepared by NBS/Lowry Engineers & Planners; City of Upland's *Water System Master Plan* (1992); *City of Upland's Water Supply Assessment for the Colonies at San Antonio,* April 2002, prepared by Associated Engineers Inc., as reviewed by the City of Upland; *Water Facilities Master Plan for the San Antonio Water Company,* Water Master Plan Report, March 21, 1994, prepared by Camp Dresser & McKee; historic water supply and water use records of the City, SAWCO, and West End Consolidated Water Company; oral and written accounts of water quantities spread by SAWCO; annual reports of the San Antonio Water Company; Resolutions and Minutes of the City of Upland; reports of operations of the water treatment plants; pleadings on file in the three groundwater adjudications which govern the groundwater resources for the City and for SAWCO; records of historic groundwater production and surface water deliveries; Open Space Preliminary Design Documents (February, 2002) prepared by Natural Systems International, LLC.; and various engineering studies and reports of SAWCO, CCWD, and the City. These data sources are available at the City of Upland.

The City has concluded that SAWCO and CCWD are unable to justify their demands by data, facts, or an approved plan for recharge to support their demands that the project applicant provide more recharge opportunities than have been incorporated into the project, the environmental impacts of which have been analyzed in this Draft EIR.

The project proponent has presented a project design which the City believes more than accommodates SAWCO's recharge requirements as described in SAWCO's 1994 Master Plan. SAWCO's master plan, *Water Facilities Master Plan for the San Antonio Water Company,* Water Master Plan Report, March 21, 1994, prepared by Camp Dresser & McKee, provides that [a] ccording to water company records, an average of 4, 239 ac-ft/yr. of water from the canyon were spread in [Basin No. 6] between 1984 and 1992, as shown in Table 2-11. In reviewing Table 2-11 entitled, Monthly Spreading in the Cucamonga Basin (ac-ft), and Table 2-7, entitled Monthly Deliveries to Holliday Rock, showing water sold and delivered to Holliday Rock for its gravel operations just north of the applicant's proposed project, it is clear to the City that the amounts discharged by SAWCO to Basin No. 6 combined with the quantities delivered to Holliday Rock, average 4, 239 ac-ft/yr. Holliday Rock receives more than 270 ac/ft per year. (Master Plan, Table 2-7.) Thus, the quantities discharged by SAWCO to Basin No. 6 may well be less than the 4,239 ac-ft/yr. average reported in the Master Plan.

It is not clear from the Master Plan Report, or from SAWCO, whether the quantities SAWCO asserts it discharges to the Cucamonga Basin for recharge include water delivered for use at traditional spreading areas such as golf courses, which overlie the Cucamonga Basin.

Nevertheless, the Master Plan reported that Basin No. 6 has a maximum surface area of approximately 40 acres; however the main recharge area consists of only 14 acres. According to the Master Plan, [t] he existing Basin No. 6 is fully capable of providing the necessary recharge capacity ... and the area of the basin is more than adequate. Section 5.3.6, Pages 5-17, and 5-18.

SAWCO's Master Plan also identified other basins in which SAWCO

deliberately applies water for artificial recharge, basins No. 3 and 4, which are located north of Basin No. 6, and within Holliday Rock's Campus Avenue rock quarry.

CCWD's claims likewise appear to the City to be unsupportable, although its comment letter appears to make such claims (see Comment 14A, letter from Best Best & Krieger LLP dated July 29, 2002, page 2), CCWD does not, to the best of the City's knowledge, artificially recharge water to the Cucamonga Basin in Basin No. 6, nor has it acquired from the applicant any right or permission to do so. CCWD's assertions that it uses Basin No. 6 for artificial recharge activities, are unsupported by evidence persuasive to the City. Similarly, CCWD's assertions that a reduction in SAWCO's percolation activities will directly result in financial penalty, or water shortfalls to CCWD's customers are also not factually supported by evidence persuasive to the City.

CCWD's assertion that Basin No. 6 is the only location, at which artificial recharge does, or can, take place, is also unsupported. CCWD has shown to the City no adequate basis to support a demand that the City require the project applicant to continue to accept SAWCO's existing quantities of imported water for artificial recharge on the applicant's property, or that it set aside more land to accommodate increases in the volume of water for percolation.

Neither SAWCO nor CCWD owns the land on which they demand that artificial water recharge activities be conducted and expanded. SAWCO asserts that it reserved to itself the right to spread water in Basin No. 6 of the applicant's property even after it sold the property. The viability and extent of SAWCO's reservations is being tested in a quiet title action brought by the applicant, which case is now pending in the Superior Court. The City has been advised by the applicant's counsel, Miller, Starr & Regalia, that CCWD's threats to litigate if its demands are not satisfied are nothing short of inverse condemnation of the applicant's property. In addition, it is Miller, Starr & Regalia's opinion that SAWCO's use of Basin No. 6 for artificial recharge is beyond the scope of the rights SAWCO reserved in selling the land. The reservation allows SAWCO to spread water in facilities in existence in 1966. The location of SAWCO's recharge activities on the applicant's land, now called Basin No. 6, did not come into existence until after SAWCO created the reservation and sold the land.

According to the City's reading, the Decree entered in 1958 following a stipulated settlement in a case brought by SAWCO against other local pumpers for pumping rights, does nothing more than establish that SAWCO and only SAWCO may extract from the Cucamonga Basin that quantity of water which it imports from the San Antonio Creek watershed to the west, and which SAWCO spreads in the Cucamonga Creek alluvial fan. CCWD was not a party to that decree, although it claims to be the successor to the parties in the litigation sued by SAWCO.

The City is a SAWCO shareholder, holds seats on SAWCO's board of directors and produces from the Cucamonga Basin pursuant to rights which SAWCO licenses to it. It is in the City's interest that SAWCO continue its artificial recharge of the Cucamonga Basin, and that the basin is well managed.

The City has closely reviewed the issues raised in the comments from SAWCO and CCWD. The City believes that the issues raised in those letters are largely

substantially eliminating that water recharge and conservation capacity from the site

Please refer to Response to Comment 5B.

Paragraph 3 Losses or reduction in the groundwater recharge capacity or depletion of quality of the groundwater will substantially impact the Company's supply, unless reliable mitigation measures are implemented

Please refer to Response to Comment 5B.

As to the protection of water quality from the impacts of the project itself, mitigation measures have been proposed requiring the implementation of standard water quality mitigation during construction, operation and maintenance of the Project. Please refer to mitigation measures 5.8-1a, through 5.8-5. Storm Water Pollution Prevention Plans (SWPPP) may be submitted concurrently to the City Engineer. Approval is by the Water Quality Control Board, prior to grading.

The quality of water which drains to the property from off-site, including drainage and flood flows from Upland, the County Flood Control, from County unincorporated areas, and from Interstate 210, is subject to the jurisdiction of the Regional Water Quality Control Board, and the State Water Resources Control Board, which regulated discharges through National Pollution Discharge Elimination System programs permits which have been issued.

The project's open space design concept is designed to provide some measure of water filtration and treatment, and as such would also mitigate the effects of drainage from offsite, which is not treated to the levels required by the NPDES permits in effect.

Paragraph 4 Hydrology and drainage mitigation measures are tied to applicable (undefined) State or City Standards and/or subjective decisions at a future time of permit issuance for then specific elements of the project

Please refer to Response to Comment 11A (Paragraph 3), above, and to DEIR Section 5.8-1 **Water Quality - Construction**, which provides an analysis and explanation of the sources of State and City standards taken into account in the issuance of permits. The Regional Water Quality Control Board by Order R8-2002-0012 adopted a new NPDES permit for San Bernardino County and its incorporated cities including Upland. The new permit includes programs and policies the permittees are proposing to implement. The 2000 management plan and other requirements specified in the Order have been adopted to protect beneficial uses of all receiving waters. Treatment of storm water runoff according to volume-based calculations or flow-rate based calculations is not a requirement for new development. However, meeting the storm water discharge requirements may require some form of treatment controls to be employed in new development projects, on the basis of requiring Best Available Technology and Best Conventional Technology. The BMP selection is guided by the California Storm Water Best Management Practice Handbooks for Construction Activity, and the ASCE Urban Runoff

Quality Management, WEF Manual of Practice No. 23 and 87.

Paragraph 4 The overlooked practice of existing and historic water percolation and production in the area, compared with the proposed drainage/percolation mentioned, but vaguely defined in the document, does not constitute adequate mitigation of the impacts that will be likely as required under Appendices Section 4.0 (Environmental Analysis)(Baseline not adequately described)

Please refer to Response to Comment 5B, and 11A.

Paragraph 5 Project will substantially conform to the Clean Water Act (Section 404) through design concepts that which are intended to protect water resources and enhance water quality

While this may be accurate, it should be noted, however, that the U.S. Army Corps of Engineers (Corps) has declined to exercise jurisdiction over the Project. This means that state and local water agencies will have the lead in determining such things as the appropriate best management practices (BMPs). It is possible, therefore, that had the Corps asserted jurisdiction under section 404, and certain measures would be implemented differently. Because the Corps has waived jurisdiction, inconsistencies between the ways that the Regional Board and the City implement their authority and the ways that the Corps would have implemented its authority, had it chosen to do so, do not create significant impacts and do not mean that the project proponent is violating the Clean Water Act.

Paragraph 5 Section 5.8 of the EIR provides that the average annual recharge capacity within the project is effectively 18 to 32 percent less then [sic] the average annual recharge data presented by this company.

Please see Response to Comment 5B. SAWCO's recharge data submitted for consideration was found by the City to be uncorroborated, uncorrelated, unreliable, and inconsistent with visual observations. The City declines to rely on the data submitted by SAWCO and instead elects to rely on data in SAWCO's Master Plan, and the data it and the applicant generated.

Paragraph 5 The project design does not accommodate the local purveyor's request to maintain the groundwater basin as a long-term water storage facility, and to offset any groundwater basin recharge losses [Page 5.8-7].

Please refer to Response to Comment 5B, which is identical to this comment.

Paragraph 5 The project as designed, would further deplete the capability of recharge and storage of water for the consumers in this region, including those proposed to be benefiting from within the

project and appears to conclude that the project

Please refer to the Response to Comment 5B.

Paragraph 6 What assurance is there that the required SWPPP and BMPs will be implemented and maintained in order to protect water resources and enhance water quality as required?

The Regional Water Quality Control Board has enforcement powers under the California Water Code. Criminal and civil proceedings can be initiated for enforcement. Both the County and the City adopt ordinances from time to time to reduce litter, and to prohibit contamination of water supplies.

Paragraph 7 Since the 1940s spreading and recharge activities have been conducted by SAWCO in conjunction with the San Bernardino County Flood Control District under its water conservation responsibilities

Please refer to Response to Comment 5B. In addition, SAWCO has failed to provide, to the satisfaction of the City, any explanation of, substantiation of, or evidence of how it works in conjunction with the San Bernardino County Flood Control District under its water conservation responsibilities@.

Paragraph 7 Since 1967 the Company has continued its water spreading operation on the overlying lands under its reserved easements to do so on lands within the proposed project site@

Please refer to Response to Comment 5B.

Paragraph 8 The applicant proposes to convert 448 acres of basically natural open space functioning as [a] recharge area over the Cucamonga Wash, into less than 100 acres of permeable ground space, replacing 103 acres of pre-existing recharge area with 73 acres of flood control detention facilities with minimal sustained recharge capability compared to the existing condition.

Please refer to Response to Comment 5B. The City disagrees with the numbers assumed by the commenter in this comment, some of which are inconsistent with SAWCO's most reliable written internal documentation. According to SAWCO's Master Plan, SAWCO discharged to an area consisting of only 14 acres, not 70. According to the Master Plan, the 14-acre area was more than adequate for SAWCO's purposes.

The applicant is processing a project of approximately 330 acres, not 440 acres.

Paragraph 8 This proposal appears to assure the reduction of water recharge and little to no capability for conserving those increased storm water flows arriving in the project area of the Wash.

Please refer to Response to Comment 5B.

Paragraph 8 The current recharge capability of the areas known as basin #6 and #7 will be effectively lost from beneficial use for water management in this region unless reasonably mitigated.

Please refer to Response to Comment 5B.

Paragraph 9 The benefits of the proposed project cannot be accomplished at the expense of recharge and management of the groundwater within the Cucamonga Basin

Please refer to Response to Comment 5B.

Paragraph 10 SAWCO has historic and reserved rights over a majority of the land within the Cucamonga Wash including the project area. SAWCO is willing to work toward resolution of such impacts to accomplish the mitigation that will allow for continued conservation of available water in the Cucamonga Basin

Please refer to Response to Comment 5B.

The applicant has filed a quiet title action seeking the court's determination of the extent of SAWCO's right, if one exists, to percolate water in Basin No. 6 on applicant's property.

The applicant, its consultants, City Staff, and representatives of Cucamonga County Water District (CCWD) have held 6 meetings between August 2001 and March 2002, to devise a plan to accommodate the competing demands of the agencies. In designing a project to address the hydrology and drainage demands of the project site, the applicant incorporated into its proposal an Open Space Design Concept, which includes a Vegetation System Plan. (MM 5.8-2a, 5.8-2b, 5.8-2c) Both the Open Space Design Concept and its Vegetation System Plan are designed to provide optimal percolation rates in accordance with established standards for storm water treatment.

12H Response to letter by Robert & Melanie Ingram, dated July 29, 2002

Paragraph 12H Concern re potential effects of flooding in 100-year scenario; Concern that regional funds will be used to subsidize local project; the no-project alternative would eliminate the need for the storm water engineering project.

The extensive storm drain and flood control facilities that will be constructed, as part of the applicant's project will provide improved flood protection to downstream properties. Two detention basins within the Project Area will receive storm water runoff from a severe 100-year storm event. This runoff is detained on-site and released downstream into the Cucamonga Flood Control Channel at a controlled rate that is much lower than the peak discharge of the facilities discharging stormwater onto the project site.

Secondary systems, such as concrete-lined spillway structures and open channels, are designed to pass the full 100-year storm runoff in the unlikely event that the detention basin storage capacities are exceeded. Improvements include rock-lined slopes and flowlines, check dams and concrete structures that convey flow without soil erosion and serve to protect surrounding property from flood damage. In accordance with San Bernardino County Flood Control District design criteria, the detention basins are sized for a special storm event of two back-to-back 100-year storms, and the spillways are designed for a 1,000-year storm event for a large factor of safety. Together, these facilities provide flood protection to surrounding properties for the 100-year storm event. Without the project, downstream of the project would not be afforded the same level of flood control protection. The no-development scenario provides less flood control protection than the project development scenario.

Federal and County funds are being sought because most of the flood flows which reach the property have been directed to the property from off-site, carried to the site by the 19th Street storm drain, and the 20th Street storm drain. In effect, the applicant's land is part of regional flood control facility, which confers a regional benefit. So, public funding for a regional facility is appropriate in this case.

14A Response to letter of attorney for Cucamonga County Water District to City of Upland dated July 29, 2002

This responds to written comments submitted by the attorneys for Cucamonga County Water District dated July 29, 2002, including the attached letters addressed to the applicant's project manager dated September 20, 2001, November 14, 2001, and December 18, 2001.

Paragraph 2 Draft EIR fails to comply with the requirements of Senate Bill 610

Please refer to Response to Comment 9A.

Paragraph 2 The intent of SB 610 is to circulate the Water Supply Assessment for public review and comment

Please refer to Response to Comment 9A.

Paragraph 2 The City improperly deferred analysis of the project's potential impacts on water supply and demand, which are potentially severe, as demonstrated by the fact that the City entered into a contract with the District for sufficient water to meet the minimum fire flow requirements associated with the project.

Please refer to Response to Comment 9A.

Paragraph 2 The impacts of the project on water supply and demand are potentially severe, as demonstrated by the City's contract with CCWD for fire flow needs associated with the Project

In 1998, CCWD and the City executed an agreement in which CCWD agreed to furnish fire flow to Phase I of the Applicant's project. This deferred the necessity of

extending water to serve the Phase I development until later phases were approved, at which time the City's facilities would be extended and improved to meet the requirements of the region. The Agreement was considered by the San Bernardino Local Agency Formation Commission, together with a service boundary adjustment. The agreement does not indicate a deficiency in the City's water supplies; rather, it demonstrates cooperation among governmental agencies.

Paragraph 3 It is not clear that the Project as designed will fully mitigate for the loss of 70 of the approximately 440 acres proposed for development, to accomplish recharge of the Cucamonga Basin by both SAWCO and CCWD

The commenter misstates significant facts.

CCWD claims that the District [CCWD] and SAWCO ... have been using 70 of the approximately 440-acres [sic] proposed for development in the Project as Basin No. 6 to accomplish recharge of the Cucamonga Basin@. First, the project is 330 acres, and not 440 acres. Second, CCWD's assertion that it is using Basin No. 6 for recharge purposes is unsupported by any document, record, court decree, or other evidence, which is credible to the City. The assertion that CCWD is using Basin No. 6 contradicts CCWD's sworn declaration filed in connection with a civil lawsuit on June 28, 2002. Assistant General Manager Martin E. Zvirbulis of CCWD stated under penalty of perjury in Paragraph 11 of his Declaration, that only ASAWCO diverts water to this Basin [No. 6]@. Mr. Zvirbulis made no claim that CCWD diverts water to or uses any part of the applicant's property. Finally, the response to comment 5B explains why SAWCO's and commenter's estimates of historic percolation, and the size of the area to which the water was applied, is unsupported by the facts. In particular, SAWCO's 1994 Master Plan provides that according to SAWCO records, SAWCO spread an average of 4,239 ac-ft/yr into Basin No. 6 between 1984 and 1992; that Basin No. 6 has a maximum surface area of approximately 40 acres; and that the recharge area consisted of only 14 acres, which acreage was fully capable of providing the necessary recharge capacity. The City finds that this 1994 Master Plan is the most persuasive evidence regarding historical recharges. The City disagrees with contradictory evidence submitted by SAWCO and CCWD.

Paragraph 4 The DEIR fails to adequately address the mitigation measures that must be imposed to address the loss of recharge capability within the Project area; absent mitigation measures, there will be long term and short term, current and future water supply deficiencies for the CCWD and SAWCO customers

Please refer to Response to Comment 5B, and 14A. The commenter fails to explain in a manner satisfactory to the City how CCWD customers will be impaired, if SAWCO were to cease discharging water to Basin No. 6. CCWD has never shown to the City's satisfaction a right to, or a real property interest in, the water which SAWCO imports from another watershed and purposefully discharges into Basin No. 6 for percolation into the Cucamonga Basin.

The City interprets the 1958 Decree as providing that water SAWCO puts into the ground is water, which SAWCO and only SAWCO may extract. Other parties to that

litigation are enjoined from extracting the fruits of SAWCO's efforts. That principle is enunciated in *City of Los Angeles v. City of San Fernando*, (1975) 14 C.3d 199. The commenter's assertion that SAWCO's failure to recharge the Cucamonga Basin via No. 6 would result in water deficiencies or water rate increases for its customers is by the City's analysis, meritless.

Paragraph 5 The DEIR fails to adequately address SAWCO's right to use the new recharge facilities to accomplish recharge of the Cucamonga Basin, and impacts if the applicant is successful in its civil action

This is a matter that concerns SAWCO and the project applicant, and is subject to their negotiation and concurrence. If, as a result of the litigation or for any other reason, the applicant redesigns the project in a manner, which requires new approvals from the City, the City will review this EIR under appropriate legal principles to determine whether it is still adequate.

Paragraph 5 The DEIR fails to address the possibility of the effect SAWCO's loss in the quiet title might have on replenishment of the Cucamonga Basin

The purpose of the draft EIR is to analyze the environmental impacts of the applicant's proposed project, not the litigation between SAWCO and the applicant. While SAWCO has asserted that its loss in the quiet title action may have an environmental impact, the City disagrees. SAWCO has provided no evidence satisfactory to the City that its loss in the quiet title action will necessarily mean that the Cucamonga Basin will no longer be replenished to the same degree. It appears to the City that SAWCO has a number of options open to it, which would allow it to continue to recharge the Cucamonga Basin, and these options are completely independent of the City's approval of the applicant's project. For example, SAWCO could (1) cease discharging imported water to Basin No. 6, and restrict its pumping from Cucamonga Basin, consistent with the 1958 Decree; (2) pay the applicant market value for the right to continue to discharge water into the Cucamonga Basin for replenishment by percolation through the project site; and/or (3) increase its recharge to the Cucamonga Basin at other locations, such as golf courses, greenbelt areas, Holliday Rock, and at other locations in the Cucamonga Wash.

Paragraph 6 The DEIR fails to adequately address funding for the development and construction of the new recharge facilities

Please refer to Response to Comment 5B. The comment raises issues, which are beyond the scope of appropriate comments. The financial conditions the City chooses to impose on the applicant to insure that the project will be constructed as analyzed in the EIR do not raise environmental concerns.

15J Response to letter by LSA Associates, Inc., EIR consultant for applicant, dated July 29, 2002

Paragraph 15J Suggested editing changes

This comment proposes editing changes which facilitate reading of the EIR,

substitute a more current data set for Table 5.9-6 on page 5.9-22, distinguish between water supply and water infrastructure (Page 5.9-21, and more accurately portray the process governed by Mitigation Measures 5.8-1 and 5.8-4a at pages 5.8-27 and 5.8-29.)

Department of Toxic Substances Control

Edwin F. Lowry, Director
5796 Corporate Avenue
Cypress, California 90630

ston H. Hickox
ncy Secretary
ifornia Environmental
rotection Agency

Gray Davis
Governor

COMMENT NO. 6

RECEIVED

July 9, 2002

Ms. Sylvia Scharf, AICP
City of Upland
460 North Euclid Avenue
Upland, California 91786-4732

NOTICE OF COMPLETION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE COLONIES AT SAN ANTONIO PROJECT (SCH #1998051075)

Dear Ms. Scharf:

The Department of Toxic Substances Control (DTSC) has reviewed the Notice of Completion (NOC) of a draft Environmental Impact Report (EIR) for the above-mentioned Project.

It should be noted that DTSC reviewed the Notice of Preparation of a draft EIR for the subject project and provided comments on May 4, 2001, which is already included in Appendix 15.1 of the draft EIR. DTSC's aforementioned comments have not been adequately addressed in the currently submitted draft EIR. Prior to approve the draft EIR, please address the DTSC comments appropriately. **6A**

If you have any questions regarding this correspondence or need further information, please contact Mr. Johnson P. Abraham, Project Manager at (714) 484-5476.

Sincerely,

Haissam Y. Salloum, P.E.
Unit Chief
Southern California Cleanup Operations Branch
Cypress Office

cc: See next page

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at www.dtsc.ca.gov.

Printed on Recycled Paper

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044

Mr. Guenther W. Moskat, Chief
Planning and Environmental Analysis Section
CEQA Tracking Center
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806

Department of Toxic Substances Control

Edwin F. Lowry, Director
5796 Corporate Avenue
Cypress, California 90630

inston H. Hickox
gency Secretary
alifornia Environmental
Protection Agency

Gray Davis
Governor

RECEIVED

MAY 15 2001

COMMUNITY DEVELOPMENT

May 4, 2001

Ms. Sylvia Scharf
City of Upland
460 North Euclid Avenue
Upland, California 91786-4732
~~San Bernardino, California 92415-0182~~

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT - SCH # 2001041048

Dear Ms. Scharf:

The Department of Toxic Substances Control (DTSC) has received your Notice of Preparation (NOP) of a draft Environmental Impact Report (EIR) for the above-mentioned Project.

Based on the review of the document, DTSC's comments are as follows:

1) The draft EIR needs to identify and determine whether current or historic uses at the Project site have resulted in any release of hazardous wastes/substances at the Project area. **6B**

2) The draft EIR needs to identify any known or potentially contaminated sites within the proposed Project area. The NOP indicates the presence of a mining site near the project area. For all identified sites, the draft EIR needs to evaluate whether conditions at the site pose a threat to human health or the environment. **6C**

3) The draft EIR should identify the mechanism to initiate any required investigation and/or remediation for any site that may require remediation, and which government agency will provide appropriate regulatory oversight. **6D**

4) An environmental assessment should be conducted at the site to evaluate whether the site is contaminated with hazardous substances from the potential past and current uses including storage, transport, generation, and disposal of **6E**

toxic and hazardous waste/materials. Potential hazard to the public or the environment through routine transportation, use, disposal or release of hazardous materials should be discussed in the draft EIR. **6E**

5) Although the NOP shows less than significant hazard impact is expected, the potential exists for the inadvertent release of hazardous materials from the future uses and storage of hazardous material. It should be addressed in detail in the draft EIR. **6F**

6) The NOP indicates the presence of a school within one-quarter of a mile from the project area. Even though less than significant impact is expected from the proposed project, a study should be conducted to provide basic information for determining if there is a potential threat of the release of any hazardous materials at the site that may pose a health risk to students and faculty members attending the school. **6G**

7) The NOP indicates that a 10.2 acres school will be constructed on the project site. During the proposed school's property acquisition and/or construction utilizing state funding, it should be in compliance with the Assembly Bill 387 (Wildman) and Senate Bill 162 (Escutia) which require a comprehensive environmental review process and that DTSC's approval is required. DTSC's role in the assessment, investigation, and cleanup of proposed school sites is to ensure that the selected properties are free of contamination, and if the property is contaminated, that it is cleaned up to a level that is protective of the students and faculty who will occupy the new schools. A study of the site is to be conducted to provide basic information for determining if there has been a release, or if there is a threatened release of a hazardous material including agricultural chemicals or if there maybe a naturally occurring hazardous material present at the site, that may pose a risk to human health or the environment. Even though the proposed school's construction may not be using state fund, the purpose of the bill is to protect the children who will be attending the school. Therefore, proper environmental studies should be conducted to provide basic information for determining if there is a potential threat of the release of a hazardous material at the site that may pose a health risk to students and faculty members attending the school. **6H**

8) The project construction may require soil excavation and soil filling in certain areas. Appropriate sampling is required prior to disposal of the excavated soil. If the soil is contaminated, properly dispose them rather than placing them in another location. Land Disposal Restrictions (LDR) are applicable to these soils. Also, if the project is planning to import soil to backfill the areas excavated, proper sampling should be conducted to make sure that the imported soil is free of contamination. **6I**

9) The NOP indicates that there was prior vegetation or agricultural use on the project site, therefore, onsite soils could contain pesticide residue. The site may have contributed to soil and groundwater contamination. Proper investigation and remedial actions should be conducted at the site prior to the new development. As long as the proposed project is for the development of residential dwellings, proper environmental studies to be conducted to evaluate the health risks associated with these chemicals. **6J**

10) A groundwater investigation may also be necessary based on the nature of on-site contaminants and the depth to the groundwater. **6K**

11) The NOP mentions that the project site is largely altered from sand and gravel mining activities. Prior to initiate any construction activities, an environmental investigation should be conducted to evaluate whether the site is contaminated with hazardous chemicals from the mining operations. Existing or abandoned mines and associated mining wastes may pose both physical and chemical hazards. Many of these hazards are the result of historic mining practices, ore processing techniques, improper closure procedures, or the surface exposure of ore deposits. Potential hazards vary greatly from one mine to the next. Each abandoned mine and associated mine waste piles need to be evaluated individually to determine which concerns are associated with it. Some abandoned mine land sites may only pose physical hazards and have no chemical hazards associated with the mine wastes. Chemical hazards are usually associated with heavy metals and/or acid mines drainage. More information will be available from the Department of Toxic Substances Control's guidance document entitled, "Abandoned Mine Lands Preliminary Assessment Handbook," dated January 1998. Human health threats and environmental degradation can exist at or near abandoned mine sites, owing to toxic, corrosive, radioactive, or otherwise noxious metals, chemicals, or materials, or unusual environmental conditions resulting from past mining, milling, and/or smelting operations. The hazards may or may not represent violations of present day environmental laws. Toxic hazards are associated with elevated levels of some metals (e.g., chromium, copper, lead, mercury, nickel), metalloids (arsenic, selenium), nonmetallic minerals such as asbestos (especially amphibole asbestos). Pursuant to Section 66262.11 of the California Code of Regulations, Title 22, it is the responsibility of the generator to determine if that waste is a hazardous waste. If the property is abandoned, the primary responsible person is the owner or operator. **6L**

12) Although the NOP shows that less than significant hazard to the public is expected with future uses of the site, potential uses and storage of hazardous materials at the site should be addressed in the draft EIR. Remember to obtain a hazardous material's storage permit from an appropriate regulatory agency that has jurisdiction to regulate hazardous substances handling, storage, **6M**

treatment and/or disposal. Contact the Certified Unified Program Agency (CUPA) to evaluate the permit requirements. Include that information in the draft EIR. **6M**

13) Household hazardous waste management has not been addressed in the NOP for the draft EIR. It is evident that the proposed project will increase household hazardous wastes. **6N**

14) If during construction of the project, soil contamination is suspected, construction in the area should stop and appropriate Health and Safety procedures should be implemented. If it is determined that contaminated soil exists, the draft EIR should identify how any required investigation and/or remediation will be conducted, and which government agency will provide appropriate regulatory oversight. **6O**

DTSC provides guidance for the Preliminary Endangerment Assessment (PEA) preparation and cleanup oversight through the Voluntary Cleanup Program (VCP). For additional information on the VCP or to meet/discuss this matter further, please contact Ms. Rania Zabaneh, Project Manager at (714) 484-5479.

Sincerely,

Haissam Y. Salloum, P.E.
Unit Chief
Southern California Cleanup Operations Branch
Cypress Office

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044

Mr. Guenther W. Moskat, Chief
Planning and Environmental Analysis Section
CEQA Tracking Center
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806

Response to Comment No. 6

Haissam Salloum, California Department of Toxic Substance Control
July 9, 2002

6A. The May 4, 2001 response to the Notice of Preparation by the Department of Toxic Substance Control has been included with this comment and each of the 14 items listed is further responded to in this Section, beginning with Response 6B.

6B. The government maintains lists of reported hazardous materials spills and releases, hazardous material storage, underground storage tanks, and both surface and subsurface contamination. RBF reviewed governmental sources (provided by Environmental Data Resources, Inc.) on August 1, 2002. Based on information presented within the EDR database report, the project area has no reported releases of hazardous wastes/materials. No releases of hazardous wastes/substances are known to currently exist within the boundaries of the project site. It should be noted that a hazardous materials release was reported at Eastgate Street (on-site) on July 25, 1990; however, this release was limited to the ground surface (no subsurface contamination). The case was closed/completed on the same date. It should also be noted that the subject site is not listed in any additional government databases. There has been no notice of violation, cease and desist order, or the like issued with respect to the subject site. No corrective action, restoration, or remediation has been planned, is currently taking place, or has been completed on the project site. The project site has not been under investigation for violation of any environmental laws, regulations, or standards identified in the databases.

6C. As stated in Response to Comment No. 6B, EDR provided RBF with their findings dated August 1, 2002. Two (2) identified properties were listed within the boundaries of the project site and are as follows: 1639 19th Street (Fite Corp) was listed as a small quantity generator; a hazardous material release (motor oil) was reported at Eastgate street, immediately south of 19th Street. Although the two (2) listed properties are considered to be within the boundaries of the project site, the concern for an environmental condition on the project site because of these two (2) properties is considered to be low based on the following: (1) no contamination or violations have been reported for the property at 1639 19th Street; (2) the hazardous materials release reported at Eastgate Street was limited to the ground surface and the case was closed/completed on the release date.

The lists identified fifteen (15) listed regulatory sites located within a one-mile radius of the subject site. Environmental contamination on the project site caused by one or more of these properties is considered to be low due to the groundwater flow direction; the distance and direction from the subject site; and/or the status of the identified site.

6D. Based on the records and other data reviewed during the response to comments, the presence of hazardous material contamination is not

readily apparent on the project site. Therefore, no remedial investigation is anticipated at this time.

6E. A site inspection was conducted to verify the current on-site conditions on August 6, 2002. A majority of the project site was restricted during the inspection, specifically areas adjoining the historic and current sand and gravel operation. No hazardous waste/materials were noted within areas of open access.

6F. As stated in the Notice of Preparation/Initial Study, dated April 10, 2001, the proposed project is subject to established health and safety regulations as would be set forth for any type of development project. This would include all local, State and Federal regulations set forth for the use of storage and transport of hazardous materials. The primary land uses associated with the proposed project include residential, open space and commercial uses. Hazardous material usage for commercial and retail operations is regulated thus, impacts as previously noted in the Initial Study, are less than significant and do not warrant further analysis.

6G. As previously stated in the Initial Study and Draft EIR, the proposed project description includes a potential school (Planning Area 15) east of Campus Avenue and south of Colonies Parkway. Potential retail and commercial uses are proposed to the north of Planning Area 15, within Planning Areas 17, 18, 19, 20 and 21. Future uses would be regulated by local, State and Federal requirements and are not anticipated to utilize large quantities of hazardous chemicals which could be deemed as a safety risk to nearby residents or students attending the school. No further analysis is warranted.

6H. As stated in Response to Comment No. 6F, no existing hazard has been identified within the project area. Future construction of a school facility may be subject to further review requirements as set forth by the State of California and any applicable funding source/provider.

6I. Comment is noted. No known soil contamination condition occurs within the project area.

6J. On-site uses have primarily been limited to open space and mining (sand and gravel) land uses.

Agricultural issues have historically been located to the east and west of the project site. No agricultural uses were noted on-site during review of the 1928 through 1994 historical aerial photographs. Since the project site has consisted of mining operations, and due to the scoured nature of the project site, on-site agricultural activities did not appear to be present. Therefore, the potential for residual pesticide contamination to be present is considered to be low.

6K. Section 5.8, *Hydrology and Drainage*, of the Draft EIR provides a complete evaluation of impacts which include groundwater affects. No additional response is required.

6L. Refer to Response to Comment Nos. 6B through 6K.

6M. Comment is noted. Refer also to Response to Comment No. 6F.

6N. Refer to Response to Comment No. 6F. No additional response is required.

6O. As stated in Response to Comments Nos. 6B through 6E, no potential hazard as referenced by the Commentor is known to exist. Should a soil contamination condition occur which is identified during construction, an evaluation and any necessary remediation shall be implemented in accordance with local, State and Federal regulation. No additional response is required.

Cucamonga County Water District

10440 Ashford Street
Rancho Cucamonga, CA 91729-0638
P.O. BOX 638 • (909) 987-2591 • Fax (909) 476-8032

Robert A. DeLoach
General Manager
Chief Executive Officer

COMMENT NO. 7

Rec'd at P.C. Mtg. 7/24/02

July 23, 2002

Upland Planning Commission
Jeffrey A. Bloom, Secretary
CITY OF UPLAND
460 N. Euclid Avenue
Upland, CA 91786

Re: Comments for July 24, 2002 Public Hearing
Colonies at San Antonio Specific Plan and Environmental Impact Report

Dear Mr. Bloom and Members of the Planning Commission:

The Cucamonga County Water District (CCWD) would like to provide the following comments on the proposed Colonies at San Antonio Specific Plan and Environmental Impact Report (EIR). Our agency is planning to present to the City of Upland more detailed comments specific to the environmental document itself at a later date. However, at this time it is important to state for the record concerns that we have with respect to the current environmental review process.

7A

As the City of Upland is well aware, the Colonies Partners, L.P. ("Colonies") has filed an action against the San Antonio Water Company and the San Bernardino County Flood Control District relative to their ability to recharge storm water in the Cucamonga Basin. The Cucamonga Basin is located in the upper Santa Ana River watershed in the City of Rancho Cucamonga and underlies portions of the cities of Upland, Fontana, and western San Bernardino County. The Colonies property is located on the southern portion of the Cucamonga Basin.

CCWD provides water service to well over 140,000 customers and the Cucamonga Basin is our primary source of groundwater. We rely heavily on the Cucamonga Basin and the recharge activity in order to pump groundwater to serve our customer needs. Groundwater recharge is an essential element to maintain our production capacity. Recharge is a method in which storm water runoff and often imported water diverted from existing pipelines is

DONALD J. KURTH President | *HENRY L. STOY* Vice President | *JAMES V. CURATALO, JR.* Director | *ROBERT NEUFELD* Director | *JEROME M. WILSON* Director

transported through storm drains or other facilities into a recharge basin where the water percolates back into the ground. This water is then available for pumping for residential and other uses. The District is very concerned with the groundwater quality of the Cucamonga Basin and we rely heavily on an element of recharge in the Basin in order to provide our customers with safe drinking water.

Our rights to produce and pump water from within the Cucamonga Basin are set forth in a 1958 stipulated judgment, which resulted from a lawsuit brought by San Antonio against multiple water companies. Pursuant to that judgment, CCWD has an adjudicated right to produce water within the basin in excess of 15,000 acre feet per year.

The action brought by the Colonies Partners seeks to prevent San Antonio Water Company from replenishing groundwater in the Cucamonga Basin. Unless San Antonio Water Company can exercise its reserve rights to replenish groundwater, our District's ability to extract water from the Cucamonga Basin would be severely impaired, costing our District and our customers millions of dollars annually. At the present time, there is only one active recharge basin in the Cucamonga Basin and that basin is located directly in the middle of the Colonies project area. San Antonio currently diverts water to this basin. As I had noted previously, our District plans to provide more detailed comments on the EIR. It is also important to note that our agency is supportive of the development project in concept, but is extremely concerned about the environmental impacts to precious groundwater resources. It has been indicated that the Colonies Partners and the City of Upland have requested that other parties, including the San Bernardino County Flood Control District, be financially responsible for development of the new recharge facilities located on the Colonies property. Although the environmental review process will not look at the merits of any particular legal process, or who is financially responsible, the effect and potential outcome of that process on the environment should be considered as a part of the CEQA process.

7A

Our agency is respectfully requesting that the Upland Planning Commission review this carefully, and take into consideration the potential actions of the lawsuit.

Again, we thank you for the opportunity to respond and provide these comments. We will be providing additional comments at the appropriate time.

Respectfully,

Robert A. DeLoach
General Manager/CEO

c: Best Best & Krieger

Response to Comment No. 7

Robert DeLoach, Cucamonga County Water District
July 23, 2002

7A. Refer to Response to Comment No. 5B.

7/24 PLANNING COMMISSION

Colonies Public Comments

- Robert DeLouche – Cucamonga County Water District. •Supported the idea of ground water recharge in the basin, but was concerned that the anticipated volume of recharge would be inadequate to support CCWD's demands on groundwater. •Stated that the District was preparing formal comments on the EIR, and they would be in by Monday (7/29). •Was concerned that the lawsuit by the applicant against San Antonio Water Company and SB County Flood Control could adversely impact the recharge plan. **8A**

- Donna McConnahay – 1662 Garland Court. •Expressed concerns over potential for glare and light spill from the new commercial development, especially given that there's only minimal nighttime lighting in the area currently. •Inquired as to whether the area could support such a development, given the perception of higher commercial vacancy rates in the City. •Inquired as to the existence of any Development Agreements between the developer(s) and the City, and wanted the City to make great efforts to ensure compliance by the developer(s) with standards, conditions, obligations, etc. within the DA. •Also wondered if there were any formally organized opposition groups regarding the Colonies project. **8B**

- Pete Vorhies – 1140 Viewpoint. •Inquired as to whether and when a traffic signal was to be installed at Campus and Viewpoint. •Inquired as to whether any improvements were planned for Campus Avenue south of the project site. •Inquired as to the appropriateness of a traffic signal at Campus and 20th, given that the street is to be a dead-end at both ends. •Also inquired as to what would happen to traffic patterns and how could 20th be included in the circulation patterns, when 19th street was closed for the storm drain and realignment procedures. **8C**

- Mike Donovan 1853 North Second. •Had been informed some time ago that the developers, the City, and other parties would definitely contact him to keep him apprised of plans. He stated that nobody had contacted him. •Expressed concerns regarding the architecture. •It seems too "trendy" in light of the fact that the architectural styles in Upland tend towards more of a "traditional" or "vintage" style. •Is opposed to large scale freeway signs. Does not want a large pylon sign "in his back yard. •Is concerned that there will be glare and light spill into an area where there is currently little nighttime illumination. •Inquired as to whether any modifications or improvements (i.e. traffic signal) were anticipated for 18th Street. •Expressed concern over whether the community could support a large scale commercial development, especially given the perceived higher commercial vacancy rates. •Was concerned that the essence of Upland would be diluted by allowing higher density, postage-stamp lot developments. **8D**

- Larry Henderson – Principal Planner, Rancho Cucamonga. •Wanted to ensure that Rancho had received copies of all pertinent documents and would be provided with copies of all future documents, including the minutes from the meetings. **8E**
- Bill Melzer – Off of Eastgate. •Is concerned about closing 19th Street for construction, utility and realignment purposes. •Feels as though the altered traffic patterns would be a burden to his and other surrounding neighborhoods. •Expressed a desire to have more detail regarding the residential Planning Areas. •Wondered why the details were available for the commercial but not residential developments. **8F**
- Bill Gardner – 1168 Winged Foot Drive. •Concerned about school crowding at Upland High School. Was concerned that the development didn't adequately analyze impacts to the school system. **8G**
- Dick Waddington – 1815 North First Avenue. •Inquired as to whether there was enough water available to support the proposed development. **8H**
- Kathy Zolenderby – 1872 North ######. •Inquired as to whether active play areas were anticipated for children. •Inquired as to whether the individual residential planning areas would have individual parks. •Wanted to know whether there would be anything that the kids could access on their own (i.e. not have to cross a major street, etc.). •Inquired as to where the closest such park with active-use fields and such was. **8I**
- Ray Harper – 6204 Indigo (Rancho Cucamonga). •Inquired as to whether there was a timeline established for the completion of PA 20 and 21. •Also wondered about surrounding improvements (i.e. 20th street). •Had complaints about the "Mount Upland" dust mound in the area. **8J**

Response to Comment No. 8

City of Upland Planning Commission Hearing
July 24, 2002

8A. Please refer to response to comment No. 5B.

8B. Environmental review comments pertaining to lighting and glare are addressed in this response to comment. Other comments that are not associated with the environmental review and analysis have been addressed separately by the City of Upland.

With regard to lighting and glare affects resulting from the proposed project, Subsection 5.2-4 of the Draft and Final EIR provides an evaluation of lighting and glare impacts. The Section acknowledges that the proposed project would create new sources of lighting and glare which would affect day and nighttime views of the area. Analysis concludes that compliance with the Specific Plan Development Regulation, Design Guidelines and City Municipal Code Requirements, impacts would be reduced to less than significant levels. The proposed Specific Plan Amendment includes a performance standard pertaining to light and glare (Section 7.9.5) which states that "except for on-site lighting and project identification signage, no operation, activity or lighting fixture shall create illumination exceeding 0.5 foot candles outside any commercial area, whether the illumination is direct or indirect light from the source." This would ensure that impacts are reduced to less than significant.

8C. A signal warrant analysis was conducted, and it was concluded that the intersection of Campus and Viewpoint does not currently meet the minimum peak hour criteria for installation of a signal. By Year 2020, the intersection is forecasted to meet the minimum peak hour criteria for a signal in the morning peak hour only. The recommendation is to monitor the intersection as the Colonies at San Antonio project develops, to determine whether signalization of this intersection is warranted under future conditions.

The Colonies project will incorporate the realignment of Campus Avenue through the project site, in conjunction with the construction of the I-210 Freeway. The project will re-construct the Campus/19th Street intersection as an offset intersection, and will provide necessary turning lanes on Campus Avenue through the intersection of Campus Avenue and Colonies Parkway. The intersection analysis did not forecast the need for any additional intersection improvements on Campus Avenue south of the project.

The intersection of Campus and 20th will carry all of the traffic generated by the commercial development north of the I-210 Freeway, as well as any traffic to and from other development to the north. At build-out of the project, this intersection will more than meet the peak hour criteria for signalization in both the morning and the evening peak hour.

8D. Environmental review comments pertaining to aesthetics are addressed in this response to comment. With regard to comments pertaining to lighting and glare, please refer to Response to Comment No. 8B. Other comments that are not associated with the environmental review and analysis have been addressed separately by the City of Upland.

With regard to aesthetics and comments pertaining to architectural design, Section 5.2 of the Draft and Final EIR provides a detailed description of the proposed Design Guidelines for both the commercial and residential components of the project. The analysis focuses specifically on the modifications to the viewshed and visual characteristics of the area. Significant and unavoidable impacts have been identified for viewshed alterations involving existing residents to the north, south and northeast of the project site.

8E. The project does not propose any changes to the existing 18th Street west of Campus Avenue, and does not propose a signal.

8F. Analysis is based upon data and information contained in the draft Specific Plan Amendment. The traffic study addresses the realignment of 19th Street and affects on surrounding roadways.

8G. Section 5.9 of the Draft and Final EIR addresses school facilities and the affects upon the Upland Unified School District (UUSD). It is noted that several schools within the District are presently over capacity. The District has augmented the existing school facilities with portable classrooms to accommodate the over-crowded conditions. It is the intention of the District to utilize portable facilities until adequate funding is made available for the construction of permanent school facilities.

Based on this student generation rate and the proposed development of 1,150 dwellings, project implementation has the potential to generate approximately 805 new students for the UUSD. The District's current overcrowding would be further exacerbated by implementation of the proposed project. With several school facilities presently over capacity, implementation of the proposed project would impact UUSD schools.

The project proposes to offer the UUSD the opportunity to purchase a 10.2-acre school site located at the southeast corner of the Campus Avenue/Colonies Parkway intersection (Planning Area 15). It should be noted that construction of the school site is not a part of the proposed project and future construction of such a facility would be subject to separate environmental review.

In lieu of offer of a school site, the Project Applicant may pay fees pursuant to Section 8111.010 of the Municipal Code, *Payment of Fees, Charges and Other Requirements Against a Development Project,* and Assembly Bill 2926. The EIR concludes that the offer of a school site and/or payment of fees by the Project Applicant would reduce impacts associated with the increased enrollment and required additional classrooms to a less than significant level.

8H. As stated in Section 5.9 of the Draft and Final EIR, the City's available water resources are sufficient to serve the project and all of the City's customers throughout project buildout, and for the next 20 years, through normal, single dry years, and multiple dry years. Even without water conservation and expanded use of recycled water, the City has sufficient water supplies available to it to meet the demands of its service area. The City also has the option of developing alternative water management strategies for future implementation, including curtailment of the sale of its surplus water to others outside the City, the increased use of recycled water, and the imposition of water conservation practices.

The project would be supplied from the City's Pressure Zone III. The project's average daily demand would represent approximately 20 percent of Zone III's existing average daily demand of 4.72 MGD. The existing water demands for Pressure Zone III were determined by using land use designations and recommended density factors supplied by the City. City Atlas maps, USGS maps, and field investigations were used to identify the different land uses in Zone III. The total water demands were tabulated and compared to the Preliminary Water Sub-Area Master Plan (PWSMP) as well as the existing water production reports.

The City is deficient in Zone III storage volume. The project would represent a 20 percent increase in Zone III's demands. This would be considered a significant impact unless mitigated. Mitigation has been recommended which requires the Applicant to provide the necessary system operational storage and transmission facilities (i.e., upsized pipelines and pressure-reducing stations) to transport water from Zone IV and/or Zone V.

8I. Although the proposed project includes an approximately 59-acre central open space area within Planning Area 16, the City of Upland has determined that the project would have a significant impact on parks, since no new parks within the development are proposed. The City of Upland does not consider the proposed open space to be a parks and recreation facility. As such, the City would require the Applicant to pay park impact fees in the amount of $1.5 million dollars to permit the City to construction improvements to existing parks. Implementation of recommended mitigation would reduce impacts to a less than significant level.

8J. Although the Specific Plan does not set forth any particular order of development, for the purposes of conducting this environmental review, three scenario phases have been established. Phase 1 consists of the 305 single-family homes currently under construction within the eastern portion of the Specific Plan area. Phase 2, which is analyzed based upon completion in Year 2011, consists of developing the remaining project area south of the future I-210 freeway. This includes 350 condominium/ townhomes, 495 single-family residences, an elementary school, 786,000 square feet of regional and local shopping center uses, a 3,800-seat theater and 80,000 square feet of office space. Phase 3, which is analyzed based upon opening year 2015, consists of developing the

project area north of the I-210 freeway. This includes a 150-room hotel, a 40,000 square foot Health Club, a daycare center, two service/gasoline stations, restaurants and auto sales lots.

The following is a possible sequence for development of the Planning Areas which is consistent with the three scenario phases discussed above:

- Planning Areas 1, 2, 3 (single-family residential); Planning Area 16C (open space flood control basin).
- Planning Area 18 and the east half of Planning Area 19 (highway commercial).
- Planning Areas 16, 16A, and 16B (Open Space); Planning Area 17 (neighborhood commercial) and the west half of Planning Area 19 (highway commercial).
- Planning Areas 5, 6, and 7 (single-family residential).
- Planning Areas 20 and 21 (highway commercial north of the freeway).
- Planning Areas 10, 11, 12, and 13 (single-family residential).
- Planning areas 8 and 9 (single-family residential).
- Planning Area 4 (luxury attached housing).

BEST BEST & KRIEGER LLP

A CALIFORNIA LIMITED LIABILITY PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS

LAWYERS
3750 UNIVERSITY AVENUE
POST OFFICE BOX 1028
RIVERSIDE, CALIFORNIA 92502-1028
(909) 686-1450
(909) 686-3083 FAX
BBKLAW.COM

INDIAN WELLS
(760) 568-2611

ONTARIO
(909) 989-8584

SAN DIEGO
(619) 525-1300

ORANGE COUNTY
(949) 260-0982

SACRAMENTO
(916) 325-4000

COMMENT NO. 9

FILE NO. 04342.00051

July 24, 2002

VIA FACSIMILE

Upland Planning Commission
Jeffrey A. Bloom, Secretary
City of Upland
460 North Euclid Ave.
Upland, CA 91786-4732

Sylvia Scharf, AICP
City of Upland
460 North Euclid Ave.
Upland, CA 91786-4732

Re: *Comments for July 24, 2002 Public Hearing*
Colonies at San Antonio Specific Plan Amendment and Draft Environmental Impact Report

Dear Mr. Bloom and Ms. Scharf:

Cucamonga County Water District (the "District") has asked us to review and comment on the above-referenced Draft Environmental Impact Report ("EIR"). This letter is intended to supplement the July 24, 2002 letter submitted by Robert DeLoach, General Manager/CEO of the Cucamonga County Water District. This letter is not intended to provide a comprehensive analysis of the issues the District may raise with respect to the Draft EIR. Rather, this letter provides an overview of some of the District's concerns. We understand that the public review and comment period for the Draft EIR does not close until July 29, 2002, and that the City Council will be considering this issue in August. However, we wanted to bring the following issues to your attention prior to the Planning Commission's consideration of the Draft EIR and associated Project. The District will submit additional detailed comments on the Draft EIR at the appropriate time. **9A**

First, the Draft EIR fails to comply with the requirements of Senate Bill (SB) 610, which requires that a detailed Water Supply Assessment be included with the environmental documents for projects authorizing more than 500 dwelling units. The Draft EIR acknowledges that SB 610 applies to the Project but does not incorporate the Water Supply Assessment. Rather, the Draft EIR states that the Water Supply Assessment will be incorporated in the Final EIR. The intent of SB 610 is for the Water Supply Assessment to be circulated for public review. Obviously, this cannot be accomplished when the Water Supply

Assessment is not added to the document until after the expiration of the public review period. Moreover, the City has improperly deferred its analysis of the Project's potential impacts on water supply and demand. The purpose of the Water Supply Assessment is to provide the City with the data needed to determine whether the project will have significant impacts on water demand and supply. Without this data, the EIR cannot properly evaluate the Project's potential impacts on water. By failing to conduct the Water Supply Assessment and to include the Assessment in the Draft EIR, the City has improperly deferred this analysis. The Assessment should be provided, and the Draft EIR should be recirculated for public review and comment.

Second, as the City of Upland is aware, for the past 25 years, the District and San Antonio Water Company ("San Antonio") have been using 70 of the approximately 440 acres proposed for development in the Project as Basin No. 6 to accomplish recharge of the Cucamonga Basin. The Project, as described in the Draft EIR, purports to restore approximately 62 acres of the spent gravel pit through the adoption of the Open Space Design Concept. The Draft EIR states that "[t]he Open Space has been designed to provide surface recharge areas to accommodate San Antonio Water Company's groundwater recharge requirements," among other things. (See, Draft EIR p. 5.8-7). It is not clear that the development of the Open Space, along with other mitigation measures described in the Draft EIR, will be sufficient to effectively mitigate the Project's significant environmental impact to groundwater supplies and groundwater recharge. Moreover, the Draft EIR fails to address adequately San Antonio's right to use the new recharge facilities to accomplish recharge of the groundwater in the Cucamonga Basin. The Colonies Partners, L.P. ("Colonies") has filed a lawsuit against San Antonio and the San Bernardino County Flood Control District challenging their right to recharge groundwater and to control stormwater in the Cucamonga Basin. If San Antonio is not permitted to exercise its right to replenish groundwater in the Cucamonga Basin, the Project will substantially deplete groundwater supplies and substantially interfere with groundwater recharge. This will severely impact the District's ability to extract groundwater from the Basin. Thus, the EIR must discuss in greater detail San Antonio's right to use the new recharge facilities and what impacts will result if the Project Applicant's attempt to prevent San Antonio from exercising this right is successful. 9

Third, the Draft EIR fails to address adequately the funding for the development and construction of the new recharge facilities. Apparently, the Colonies and the City of Upland have requested that other parties accept financial responsibility for the construction of the new recharge facilities. At this time, there is no funding mechanism to ensure that the mitigation proposed in the EIR will actually occur. Given this uncertainty, the Open Space mitigation measure is not definite and certain enough for the City to rely upon it to mitigate fully the Project's potentially significant impacts on groundwater supply and recharge. To ensure that the proposed mitigation is effective, the EIR must fully address this issue.

Thank you for this opportunity to provide preliminary comments on the Draft EIR. We will be providing additional detailed comments at the appropriate time. Please feel free to contact me at (909) 686-1450 if you have any questions about the District's position. 9A

Sincerely,

Jennifer T. Buckman
for BEST BEST & KRIEGER LLP

cc: Robert A. DeLoach
Martin Zvirbulis
Ray Wellington

Response to Comment No. 9

Jennifer Buckman, Best Best & Krieger LLP
July 24, 2002

9A. Commentor states that the Draft EIR fails to comply with the requirements of Senate Bill (SB) 610 in that it failed to include a Water Supply Assessment (WSA) for circulation and comment by the public.

The Draft EIR contains the information and analysis required by applicable law, including the California Environmental Quality Act, Pubic Resources Code section 21000, et seq., and the Water Supply Planning Act, Water Code section 10910, et seq. Neither CEQA nor the Water Supply Planning Act required the inclusion of the WSA in the draft EIR prior to the adoption of SB 610, and that SB 610 did not impose that requirement.

Refer also to Response to Comment No. 5B.

THE CITY OF
RANCHO CUCAMONGA

July 25, 2002

COMMENT NO. 10

Sylvia Scharf, Senior Planner
Planning Department
City of Upland
460 Euclid Avenue
Upland, CA 91786-4732

SUBJECT: THE COLONIES AT SAN ANTONIO SPECIFIC PLAN AMENDMENT – DRAFT ENVIRONMENTAL IMPACT REPORT

Dear Ms. Scharf:

We appreciate the opportunity to comment on the Draft Environmental Report (EIR) for the above referenced project. The City is generally supportive of the project, however, the EIR should be revised to disclose and evaluate the following issues:

1. **Delineation of City of Rancho Cucamonga Boundaries and Resultant De-annexation/ Annexation Actions:**

Several exhibits contained in the EIR incorrectly delineate the city boundaries for Upland and Rancho Cucamonga. For example, Exhibit 5.1-1 (Existing Land Uses) on page 5.1-3 and Exhibit 5.1-2 (Existing General Plan Designations and Zoning Districts) on page 5.1-9, show that the city boundaries for Upland and Rancho Cucamonga, immediately north of 19th Street, meet at the Cucamonga Creek Channel. In actuality, the boundaries for the two cities extend about 2.5 acres further west of the channel. Please refer to the attached exhibit, which identifies those areas that are actually within Rancho Cucamonga, but are shown in the EIR to be located in Upland. **10A**

This may be problematic, since the 2.5 acres encroach into a future commercial/retail center, as shown in Exhibit 5.5-1 (Commercial Planning Areas) on page 5.5-25. If the Colonies Specific Plan is implemented as presently proposed, those 2.5 acres included in the future commercial/retail center must be de-annexed from the City of Rancho Cucamonga and annexed into the City of Upland. Accordingly, the EIR must be revised to correct any errors to the exhibits and/or text that erroneously delineate the city boundaries of Rancho Cucamonga. Furthermore, any resultant de-annexation and annexation activities and procedures must be disclosed and evaluated in the EIR, in accordance with CEQA Guidelines.

2. **Intersection Improvements and Mitigation:**

The Traffic and Circulation section concludes that ultimate projected traffic by the year 2020, will contribute to congestion on three Rancho Cucamonga intersections, including Base Line Road at Carnelian Street during morning and afternoon peak hours, Base Line Road at Archibald **10B**

Mayor William J. Alexander
Mayor Pro-Tem Diane Williams
Jack Lam, AICP, City Manager

Councilmember Paul Biane
Councilmember Bob Dutton
Councilmember Grace Curatalo

10500 Civic Center Drive • P. O. Box 807 • Rancho Cucamonga, CA 91729 • (909) 477-2700 • FAX (909) 477-2849
www.ci.rancho-cucamonga.ca.us

Avenue during afternoon peak hours, and 19th Street at Sapphire Street during morning peak hours. The traffic study for the EIR (Appendix 15.2), entitled "Traffic Study for The Colonies At San Antonio in the City of Upland," prepared by Kimley-Horn and Associates in June 2002, recommends signal modifications and additional lanes to help alleviate future congestion on Rancho Cucamonga intersections. Costs for these improvements are also described. **10B**

A fair share contribution program or some other financial agreement should be established between the Cities of Upland and Rancho Cucamonga. The EIR should suggest how said program and/or agreement could be established between the cities.

3. Light and Glare Disturbances:

The EIR on page 5.2-23 finds that "Light sources from on-site commercial sites have the potential to have a significant impact on adjacent residential areas." The EIR however, does not offer any mitigation measures to at least lessen the severity of this potential impact. The issue of light and glare disturbances is sensitive to the City, since residential development exists east of the Cucamonga Creek Channel, north of 19th Street. To date, these Rancho Cucamonga residents have not experienced any significant development immediately west of the channel and therefore, ultimate implementation of the Colonies project, especially the future 1,070,519 square foot commercial/retail center along the channel, would increase public perception of and sensitivity to project-generated light and glare. Light and glare disturbances could also be generated by future monumentation and signage. The Specific Plan shows that auto dealerships are anticipated for areas north of the I-210 Freeway. These particular uses typically utilize highly illuminated signs to attract potential buyers. The EIR should further evaluate the issue of light and glare, especially since the site is currently vacant and undeveloped, and focus on potential disturbances to Rancho Cucamonga residents that reside east of the Colonies site and channel. Mitigation measures, including screening, setback controls, landscaping, and other methods should be recommended to ensure that any disturbances to Rancho Cucamonga residents are alleviated to the greatest extent feasible. **10C**

4. Noise:

The significance threshold used in the EIR is consistent with the City of Rancho Cucamonga's General Plan EIR, which defines a "significant increase" in noise at 5 dBA. Based on this threshold, the EIR indicates that additional noise experienced in Rancho Cucamonga as a result of increased project traffic are not considered significant. The EIR, however, does indicate that noise from stationary sources, such as parking areas, loading areas, outdoor paging, and drive-thru speakers could potentially generate new noise that disturbs neighboring residences and other sensitive receptors. As discussed in the previous section on Light and Glare, those Rancho Cucamonga residences that are located east of the Cucamonga Creek Channel could be disturbed by these stationary sources. The EIR recommends mitigation measures to alleviate noise impacts resulting from these stationary sources. However, given that final design plans, pad locations, building sizes, site plans, etc., have not yet been formulated for the commercial development that comprises Planning Areas 18, 19, 20, and 21, it is difficult at this time to create effective and practical mitigation. Therefore, we suggest that Mitigation Measure 5.6-3a which requires preparation of future noise studies for the commercial development, to also include additional language which obligates said noise studies to evaluate project impacts **10D**

on neighboring Rancho Cucamonga residences, and allows the City of Rancho Cucamonga to review and comment on any future noise study. 10D

5. Parks and Recreation:

This area of discussion in the EIR is inadequate in that there is no analysis of impacts to Rancho Cucamonga facilities. The City of Rancho Cucamonga has a goal of 5 acres of developed park per 1,000 population generated by a development. In this case, a requirement for 18.4 acres of developed park land. The previous San Antonio Lakes Project proposed a combined 16.8-acre school/park site. It appears approximately 6 acres of that previous plan would have been for Park Development. Please note that Park Facilities in Rancho Cucamonga are currently in use at the maximum potential. We urge the City of Upland to consider other alternatives, such as enlarging the school site back to the original size, and/or reserving the 10-acre school site for a park if not used by the School District. 10E

We hope the foregoing comments are constructive and would appreciate being notified of any future developments occurring with the Colonies project. We also reserve the right to comment on the proposed "The Colonies at San Antonio Specific Plan," dated June 13, 2002, at a later date during the Public Hearing process.

If you have any further questions, please contact me or Larry Henderson at (909) 477-2750, Monday through Thursday, from 7:00 a.m. to 6:00 p.m.

Sincerely,

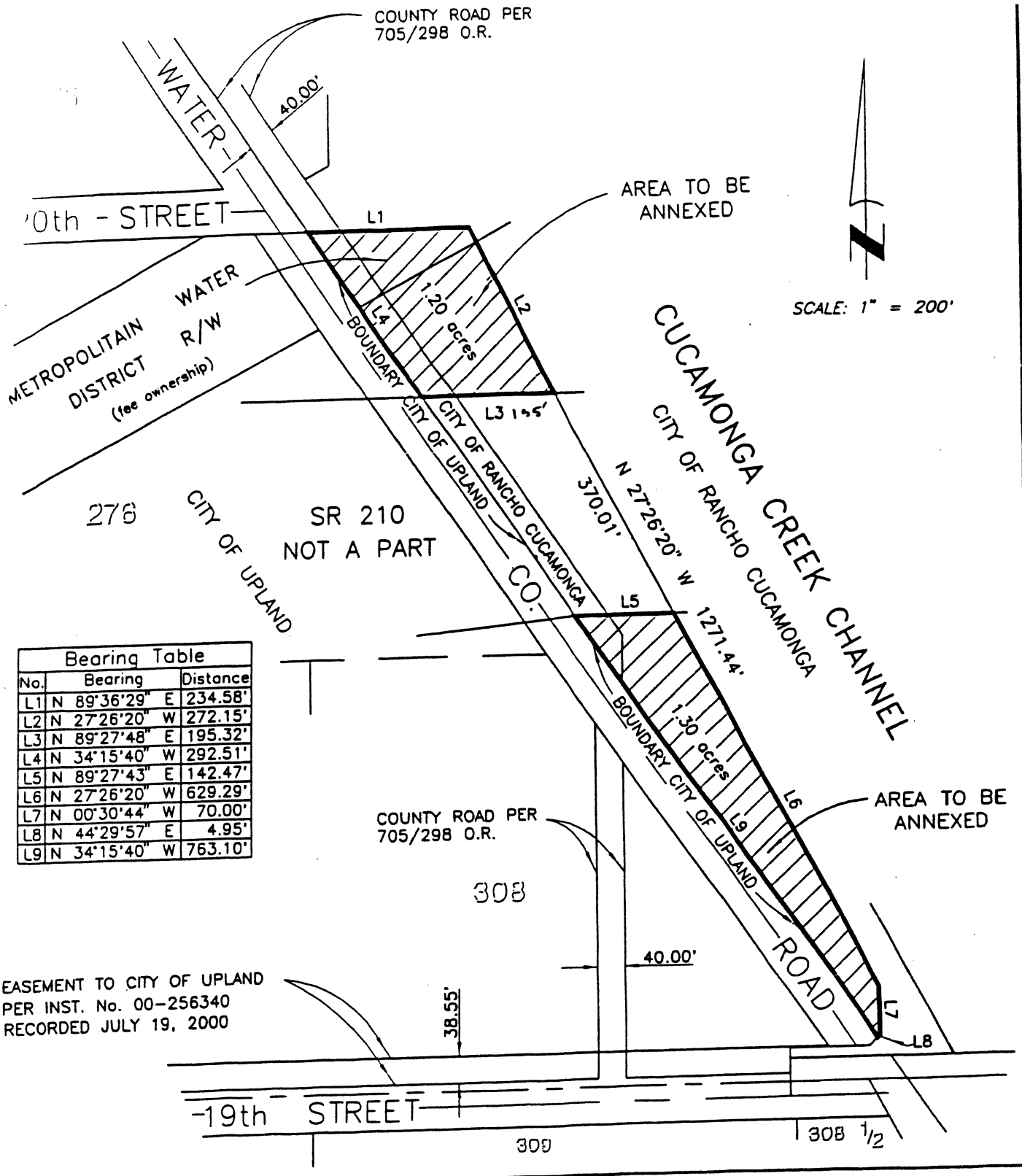
PLANNING DEPARTMENT

Brad Buller
City Planner

BB:DM/jc

Enclosure

cc: Mayor and Members of City Council
Jack Lam, City Manager
Chairman and Members of the Planning Commission



Bearing Table			
No.	Bearing		Distance
L1	N 89°36'29"	E	234.58'
L2	N 27°26'20"	W	272.15'
L3	N 89°27'48"	E	195.32'
L4	N 34°15'40"	W	292.51'
L5	N 89°27'43"	E	142.47'
L6	N 27°26'20"	W	629.29'
L7	N 00°30'44"	W	70.00'
L8	N 44°29'57"	E	4.95'
L9	N 34°15'40"	W	763.10'

PREPARED BY:

ASSOCIATED ENGINEERS, INC.
3311 E. SHELBY ST.
ONTARIO, CALIFORNIA 91764
TEL: (909)980-1982 • FAX: (909)941-0891

PREPARED FOR: COLONIES

APRIL 4, 2001

Response to Comment No. 10

Brad Buller, City of Rancho Cucamonga
July 25, 2002

10A. The City of Rancho Cucamonga is correct in its assessment that the Colonies at San Antonio Specific Plan, as currently proposed, incorporates a portion of land along the westerly side of the Cucamonga Creek Channel north of 19th Street that is currently within the City of Rancho Cucamonga. It is the City of Upland's desire to come to a mutually satisfactory agreement that would permit the area in question to be detached from Rancho Cucamonga and annexed into Upland. Whether such detachment and annexation occurs, however, does not affect the analysis or adequacy of the Draft EIR prepared for the project. The Draft EIR evaluated the maximum allowable amount of commercial square footage. The 1.2 million square feet of commercial development allowed by the Specific Plan and analyzed in the EIR could occur whether or not a detachment/annexation action is approved by LAFCO and completed.

To accurately reflect the actual current boundaries of the City of Upland, the Specific Plan and Final EIR will be revised to note that the easterly 1.3 acres of land within Planning Area 19 and the easterly 1.2 acres of Planning Area 21 are currently located within the City of Rancho Cucamonga. The Final EIR and Specific Plan will also note that negotiations to annex these areas into Upland are ongoing. Should such annexation be completed, the Colonies Specific Plan will address all of the area within the ownership of the project applicant. Should the annexation not be completed, the easterly 2.5 acres would remain within the City of Rancho Cucamonga. In either case, the maximum commercial development allowed by the Specific Plan (1.2 million square feet) will be unaffected.

10B. The City has imposed conditions of approval that require the developer to contribute to the City of Upland those monies the City deems necessary to fund the identified traffic improvements. The City of Upland shall cooperate as reasonably as necessary to implement regional traffic management programs.

10C. With regard to lighting and glare affects resulting from the proposed project, Subsection 5.2-4 of the Draft and Final EIR provides an evaluation of lighting and glare impacts. The Section acknowledges that the proposed project would create new sources of lighting and glare which would affect day and nighttime views of the area. Analysis concludes that compliance with the Specific Plan Development Regulation, Design Guidelines and City Municipal Code Requirements, impacts would be reduced to less than significant levels. The proposed Specific Plan Amendment includes a performance standard pertaining to light and glare (Section 7.9.5) which states that "except for on-site lighting and project identification signage, no operation, activity or lighting fixture shall create illumination exceeding 0.5 foot candles outside any

commercial area, whether the illumination is direct or indirect light from the source." This would ensure that impacts are reduced to less than significant.

10D. Section 5.5 of the Draft and Final EIR includes a comprehensive review of stationary noise impacts to all surrounding uses adjacent to the site. This includes the area east of the site, within the jurisdiction of the City of Rancho Cucamonga. Based on the project's preliminary site plan for the commercial uses, the distance from the nearest residential uses to the parking areas, loading areas, and potential outdoor order menu/speaker were addressed in Section 5.5. The following summarizes the conclusions.

Parking Lot Noise. Typical parking lot noise from conversation and door slamming of 60 dBA L_{max} at 50 feet would be reduced to 49 dBA L_{max} at 175 feet. Because these event occur intermittently and lasting only a very short time period (i.e., a few seconds), they are compared to the maximum noise level standard specified in the City's Noise Ordinance. For residential uses, the maximum noise level standard is 75 dBA L_{max} during daytime hours and 65 dBA L_{max} during nighttime hours. Therefore, typical parking lot noise generated at the project site would be below both the daytime and nighttime noise standards at the nearest existing and proposed residential uses. No mitigation measures are recommended.

Loading/Unloading Noise. Noise from loading/unloading activities of 75 dBA L_{max} would be reduced by distance attenuation alone to 63 dBA L_{max} (Pad 34), 62 dBA L_{max} (Major 29), 61 dBA L_{max} (Major 27), 54 dBA L_{max} (Major 32 to south), and 57 dBA L_{max} (Major 32 to east) at the nearest existing or proposed residences. Noise from loading area at the Major 32 site would be blocked partially to the south by the wall on the north side of a proposed outdoor garden center and fully blocked by the Cucamonga Creek (22 feet higher in elevation). Loading/Unloading noise at Major 32 loading area would be reduced to 48 dBA L_{max} (residences to the south), and 38 dBA L_{max} (residences to the east) at the nearest existing or proposed residences Therefore, the loading/unloading noise would not exceed the nighttime (10 p.m. to 7 a.m.) maximum noise standard of 65 dBA L_{max} at the nearest residences. Mitigation measures are not recommended.

Outdoor Paging Noise. Outdoor paging at the proposed Major 32 garden center would generate up to 85 dBA L_{max} at 50 feet. It is located approximately 575 feet (-21 dBA) to the nearest residences to the south and 450 feet (-19 dBA) to the nearest residences to the east across Cucamonga Creek. Proposed and existing residences would experience outdoor paging noise from the garden center up to 64 and 66 dBA L_{max}, respectively. The noise levels at residences to the south would potentially exceed the City's nighttime noise standard of 65 dBA L_{max} but would be below the daytime noise standard of 75 dBA L_{max}. Mitigation is recommended to reduce potential impacts to a less than significant level.

Drive-Thru Speaker Noise. The outdoor speaker at a proposed pharmacy at Pad 18 is approximately 350 feet from the nearest residential area in PA-4. A source level of 65 dBA L_{max} at 15 feet would be attenuated to 38 dBA L_{max}. This maximum noise level is lower than the 75 and 65 dBA L_{max} noise standards specified in the City's noise ordinance. It should be noted that, during the remainder of the time when the speaker is not in use, sound levels attributed to the pharmacy operation would be lower than when it is in use. Therefore, the sound averaged over that time period would be lower than the maximum level used in this analysis.

Assuming that during a busy hour, a total of 20 customers (one every three minutes) would drive through and pick up their prescription orders from the drive-thru window, each time the speaker would be in use for 20 seconds (from pharmacy staff responding to customer). This would result in a cumulative time of 400 seconds, or 6.6 minutes, over the entire hour for the speaker in use. As previously stated, for events lasting more than 5 minutes but less than 15 minutes in any hour (L_{25}), the maximum noise levels allowed are 60 and 50 dBA, respectively, during daytime and nighttime hours. Noise from the outdoor drive-thru speaker would be below the City's daytime and nighttime noise standards. The proposed gas station/drive-thru window on Pad 10 is more than 1,250 feet from the nearest residences in PA-4, and would receive a minimum of 38 dBA in noise reduction compared to the level measured at 15 feet. Therefore, outdoor speaker noise at Pad 10 would be attenuated to 27 dBA L_{max} or lower. Potential outdoor speaker use at Pads 8 and 9 would receive a minimum of 36 dBA in noise attenuation from distance divergence, and would be attenuated to 27 dBA L_{max} or lower. This range of maximum noise levels is below the City's noise ordinance standard of 75 and 65 dBA L_{max} for daytime and nighttime hours, respectively. No mitigation measures are recommended.

Although several noise sources would be introduced in the Specific Plan area, most would occur for only very brief time periods, including truck movements, parking lot sweepers and trash compactors. Trucks could potentially make deliveries to commercial operations at numerous access points via 19th Street. Parking lot sweepers typically operate during the early morning hours when parking lots are empty. Trash compactors are often located near loading docks and usually operate a few times per day for 1 to 2 minutes during each compaction cycle. These types of sources and/or activities usually do not operate concurrently and can meet the hourly permitted standards described in the City of Upland noise regulations. Other noise sources, such as air conditioning equipment, parking lot traffic, and loading dock activities operate for comparatively longer periods of time. Loading dock activities that generate noise include truck movements, idling trucks, P.A. systems, roll-up doors and talking employees. The Specific Plan Amendment would be required to comply with City noise standards and demonstrate adherence to Chapter 4.5, *Unnecessary Noise*, of the City of Upland Municipal Code (refer to Table 5.5-3, *City Noise Standards* and Table 5.5-4, *Noise Levels and Duration*). Compliance with City Noise Standards and recommended

mitigation would reduce stationary noise impacts to a less than significant level.

Furthermore, a subsequent noise analysis shall be prepared for the Commercial Planning Areas prior to Final Development Plan approval. Noise studies shall demonstrate that stationary noise sources would not exceed Code criteria and would not significantly impact adjacent noise sensitive areas (i.e., residential areas). With the preparation of a noise analysis and adherence to the recommended mitigation measures, long-term stationary noise impacts generated within the Specific Plan area would be reduced to a less than significant level.

10E. The evaluation of impacts on parks undertaken in the EIR compared the demand for parks that would be created by the proposed development to the open space area being provided by the project. As such, the EIR addresses impact on park demand, regardless of the specific location of that demand. Thus, additional analysis specific to the City of Rancho Cucamonga, as requested in Comment 10E, is unnecessary. As noted in the Draft EIR, potential impacts on park facilities will be mitigated through payment of park fees to the City of Upland. The City has considered other means of mitigating park impacts, and has determined the payment of fees to be the most appropriate means of mitigation available. The City is also requiring the inclusion of active open space in the form of trails; scenic overlooks, the natural basin and related amenities. These features will assist in providing public recreational spaces for enjoyment on a regional basis.

COMMENT NO. 11

San Antonio Water Company

Incorporated October 25, 1882

Serving the original Ontario Colony Lands

(Communities of Ontario - San Antonio Heights - Upland)

July 26, 2002

City of Upland
460 No. Euclid Avenue
Upland, CA 91786

Via Fax & U.S. Mail
(909) 931-4123

Attn: Ms. Sylvia Scharf, AICP

Re: **The Colonies at San Antonio - Draft Program EIR and Proposed Specific Plan**
SCH No. 2001041048

Thank you for the Notice of Completion with a copy of the draft EIR and proposed Specific Plan for 'The Colonies at San Antonio'. We've reviewed the documents and have continuing concerns about the project impacts upon groundwater within the Cucamonga Wash. Many of our concerns about the project's impacts have been previously expressed in our letters of June 15, 1998, February 20, 2001 and May 3, 2001. Further, our discussions and information exchange with the project's representatives and other involved parties, between August 2001 and March 2002, has not yet resulted in a resolution of mutual satisfaction. Therefore, workable mitigations remain undefined.

The Cucamonga Wash is and has been a beneficial water recharge area and source of water supply for the surrounding communities. Unfortunately, both the recent and historic uses of the area for water percolation and production are not clearly identified and defined in the background and existing conditions descriptions of the draft EIR document. Therefore, the 'No Project' alternative lacks correct definition necessary for realistic comparison with the proposed alternative. Hence the resulting impact mitigation would be deficient. This is specifically true of the percolation areas known as basins # 6 and # 7. Under Section 3.3 (Project Characteristics) the remaining portion of basin # 6 is proposed as a temporary stormwater detention facility, when needed, with landscaping and passive use elements in what is otherwise designated as 'open space'. The area known as basin # 7 is to be filled-in and built upon thereby reducing percolation of water into the ground and substantially eliminating that water recharge and conservation capacity from the site. 11A

The Cucamonga Basin is one of the major water supply sources for the Company and its shareholders as well as the adjacent Cucamonga County Water District. Losses or reduction in the groundwater recharge capacity or depletion of quality of the groundwater will substantially impact the Company's supply, unless reliable mitigation measures are implemented.

Unfortunately, the mitigation measures contained in the document, under the Hydrology and Drainage Impacts section, are tied to applicable (undefined) State or City Standards and/or subjective decisions at a future time of permit issuance for then specific elements of the project. The overlooked practice of existing and historic water percolation and production in the area, compared with the proposed drainage/percolation mentioned, but vaguely defined in the document, does not constitute adequate mitigation of the impacts that will be likely as required under Appendices Section 4.0 (Environmental Analysis). What will be the obligations (requirements) for the project to adequately mitigate the impacts under section 4.8 (b), (f), (k) and (n) as compared to the 'No Project' once it is correctly included in the existing conditions for a comparable baseline?

Within Section 5.1-3 (Applicable Plans, Policies, and Regulations) it appears to conclude that the project will substantially conform to the Clean Water Act (Section 404) through design concepts which are intended to protect water resources and enhance water quality. However, after review of Section 5.8 (Hydrology and Drainage) we find that the average annual recharge capacity within the project is effectively 18 to 32 percent less then the average annual recharge data presented by this company. Therefore, the design does not "accommodate the local purveyor's request to maintain the groundwater basin as a long-term water storage facility, and to offset any groundwater basin recharge losses" [Page 5.8-7]. Conversely, it would further deplete the capability of recharge and storage of water for the consumers in this region, including those proposed to be benefiting from within the project. 11B

Further review of this section, under water quality discussions, we find that various pollutants in the stormwater runoff from existing drainage, the yet to be completed freeway drainage, the proposed project drainage and the runoff from irrigation of the landscaped 'open space' (including fertilizer and pest control chemicals) will flow into or be applied within the 'open space' detention basin on the site. What assurance is there that the required SWPPP and BMP's will be implemented and maintained in order to "protect water resources and enhance water quality" as required? Only a plan and a Regional State entity process are listed as mitigation. Without a sustainable action for implementation and maintenance of those plans, the risk and liability for water quality degradation could be very costly. 11C

The San Antonio Water Company has been actively involved in the spreading of water, for the purpose of recharge, in the Cucamonga Wash since the early 1900's. Since the 1930's this activity has been conducted in conjunction with the San Bernardino County Flood Control District under its water conservation responsibilities. Since 1967 the Company has continued its water spreading operation on the overlying lands under its reserved easements to do so on lands within the proposed project site. 11D

The project (Colonies at San Antonio) proposes to convert 448 acres of basically natural open space, excluding 19th Street, that is functioning as recharge area over the Cucamonga Wash, into less than 100 acres of permeable ground space. The project also proposes to replace about 103 acres of pre-existing recharge area with 73 acres of flood control detention facilities with minimal sustained recharge capability compared to the existing condition. This proposal appears to assure the reduction of water recharge and little to no capability for conserving those increased storm water flows arriving in the project area of the Wash. In essence, the current recharge capability of the areas known as basin # 6 and # 7 will be effectively lost from beneficial use for water management in this region unless reasonably mitigated. 11E

San Antonio Water Company acknowledges the potential community benefits of a project such as The Colonies at San Antonio. But those benefits cannot be accomplished at the expense of recharge and management of the groundwater within the Cucamonga Basin. 11F

As previously mentioned, the Company has historic and reserved rights over a majority, if not all, of the land within the Cucamonga Wash including that of the proposed development project. Notwithstanding those rights, the Company is willing to work toward resolution of such development impacts with the developer, the City, the County Flood Control District and Cucamonga County Water District in order to accomplish mitigation's that will allow for continued conservation of available water in the Cucamonga Basin. 11C

Please feel free to contact the undersigned regarding the above response. If the Company can be of help in resolving the water-related issues affecting the proposed project, please contact the undersigned.

Sincerely,

Ray Wellington, P.E.
General Manager/CEO

Cc: Company Directors & General Counsel
General Manager/CEO, CCWD
Flood Control Engineer, SBdo. Co.

Response to Comment No. 11

Ray Wellington, San Antonio Water Company
July 26, 2002

11A. Refer to Response to Comment No. 5B.

As to the protection of water quality from the impacts of the project itself, mitigation measures have been proposed requiring the implementation of standard water quality mitigation during construction, operation and maintenance of the Project. Please refer to mitigation measures 5.8-1a, through 5.8-5. Storm Water Pollution Prevention Plans (SWPPP) may be submitted concurrently to the City Engineer. Approval is by the Water Quality Control Board, prior to grading.

The quality of water which drains to the property from off-site, including drainage and flood flows from Upland, the County Flood Control, from County unincorporated areas, and from Interstate 210, is subject to the jurisdiction of the Regional Water Quality Control Board, and the State Water Resources Control Board, which regulated discharges through National Pollution Discharge Elimination System programs permits which have been issued.

The project's open space design concept is designed to provide some measure of water filtration and treatment, and as such would also mitigate the effects of drainage from offsite which is not treated to the levels required by the NPDES permits in effect.

Section 5.8-1 Water Quality – Construction of the Draft EIR, provides an analysis and explanation of the sources of State and City standards taken into account in the issuance of permits. The Regional Water Quality Control Board by Order R8-2002-0012 adopted a new NPDES permit for San Bernardino County and its incorporated cities including Upland. The new permit includes programs and policies the permittees are proposing to implement. The 2000 management plan and other requirements specified in the Order have been adopted to protect beneficial uses of all receiving waters. Treatment of storm water runoff according to volume-based calculations or flow-rate based calculations, is not a requirement for new development. However, meeting the storm water discharge requirements may require some form of treatment controls to be employed in new development projects, on the basis of requiring Best Available Technology and Best Conventional Technology. The BMP selection is guided by the California Storm Water Best Management Practice Handbooks for Construction Activity, and the ASCE Urban Runoff Quality Management, WEF Manual of Practice No. 23 and 87.

11B. While this may be accurate, it should be noted, however, that the U.S. Army Corps of Engineers ("Corps") has declined to exercise jurisdiction over the Project. This means that state and local water agencies will have the lead in determining such things as the appropriate best management practices (BMPs). It is possible, therefore, that had the

Corps asserted jurisdiction under section 404, certain measures would be implemented differently. Because the Corps has waived jurisdiction, inconsistencies between the ways that the Regional Board and the City implement their authority and the ways that the Corps would have implemented its authority, had it chosen to do so, do not create significant impacts and do not mean that the project proponent is violating the Clean Water Act.

Refer also to Response to Comment No. 11A.

11C. The Regional Water Quality Control Board has enforcement powers under the California Water Code. Criminal and civil proceedings can be initiated for enforcement. Both the County and the City adopt ordinances from time to time to reduce litter, and to prohibit contamination of water supplies.

11D. Please refer to Response to Comment No. 11A.

11E. Please refer to Response to Comment No. 11A.

11F. Please refer to Response to Comment No. 11A.

11G. Please refer to Response to Comment No. 11A.

COMMENT NO. 12

Robert & Melanie Ingram
8021 Rosebud Street
Alta Loma, California 91701

Mr. Jeffrey Bloom
Director, Upland Community Development Department
Ms. Sylvia Scharf
Senior Planner, Upland Planning Department
City of Upland
460 Euclid Avenue
Upland, California 91786-4732

RE: Colonies at San Antonio Specific Plan Amendment – Draft Environmental Impact Report (July 29 deadline for public comment)

Dear Mr. Bloom and Ms. Scharf:

My family resides in the Alta Loma area of Rancho Cucamonga north of 19th Street and west of Sapphire. For some time, many of us heard unofficially that Upland would be developing residential areas south of the 210 freeway. It has only been recently that residents of Alta Loma, in this adjacent area, were provided any formal notification by the City. As such, we now find ourselves in a scramble to meet legal deadlines to comment on issues that will have a permanent effect on us and the environment in which we live.

PRIMARY RECOMMENDATION:

Put a hold on, and extend the timeframe of, the EIR approval process until effective notification to and communication with affected residents of the area can be accomplished. **12A**

Communication:

The first notification to Alta Loma residents (in anyone's memory that I have found) was an invitation to attend a community meeting at the Carnegie Library on July 11, which I did. This was the first time we learned of the following: commercial development north of the freeway between existing Campus and the Cucamonga Channel; the significant expansion of commercial development south of the freeway; the extension of 20th Street to the Cucamonga Channel; the re-location of Campus Street and, more importantly, the re-routing of 19th Street; and, finally, the plans for an auto mall between the freeway and 20th Street up against our neighborhoods. This July 11th meeting was primarily a "marketing" meeting to convince all of us how wonderful this would be. I can guarantee you that it came as a sad surprise to those of us from Alta Loma and, as I observed, it was a surprise to a number of Upland residents as well.

My questions and concerns made to Colonies Crossroads managing partner, Dan Richards, were met with a level of arrogance and detectable derision. In a question regarding prior notification to Alta Loma residents, Richards essentially responded that they were under no obligation to do so. I found this response on his part to be disingenuous at best. My sense is that this attitude bothered you as well, Mr. Bloom. You spoke with me as I left the meeting. You advised me of the upcoming Planning Commission meeting on July 16, to be followed by public hearings later in July. You advised it was a City decision to include us in the mailing for the July 11 meeting and the upcoming meetings. You may not be aware of this, but your mailer for July 16 arrived after 5:30 p.m. on July 16 to some of my neighbors. It arrived at my home after 5:30 p.m. on July 17.

With respect to the first public hearing on the plan amendment and EIR on July 24, another neighbor participated on behalf of those who could not. This was the first time we heard that public comment on the EIR would terminate at close-of-business today. 12A

The EIR itself is not an easy document to access. As I found through your reference librarian, it is also a series of volumes in several binders. She had difficulty even locating it. She advised that the City Clerk had a copy but, if I needed photocopying, it would be expensive and likely take a couple weeks. A lengthy internet search produced several pages of what might be construed as an executive summary, but no additional pages, appendices, maps or testimony from prior public hearings could be included in that website, and referred back to the library or city hall.

In conclusion, the communication process about the EIR, and the Colonies Crossroads plans, to all who might be affected has been less than adequate, compartmentalized, confusing, and seemingly designed to preclude public comment.

Concerns and comments:

Due to the lack of time, my comments below may seem somewhat out of order. In view of speed, I know I will leaves things out. It is difficult to separate the issues. Let me apologize in advance for that. As an overarching statement, I would also add that these comments have nothing to do with the freeway itself. We have always known the freeway would be built, and we have worked with issues as they have come up. Ideally, the preference would have been to only have that ribbon of highway through the open area between existing Campus and Sapphire and to leave the open area alone. Less than ideally, the following comments are offered:

Reconsider, and decide on no commercial development north of the freeway. Leave the view and the environment unobstructed and retain that quality of life for those who live here, as well as for those who will pass through our two cities. 12B

If there is to be development, eliminate the plan for an auto mall. There is no one we have spoken with who disagrees – this is an appalling idea. It is understood that Upland needs added revenue, but an auto mall in this geographic area will cheapen the atmosphere of Upland as well as Rancho Cucamonga, notwithstanding the permanent effect of chipping away at the open space. 12B

Light and noise effects:

As stated above, there is no one who does not understand that the freeway itself brings these effects with it. (There may yet be a need to argue for more sound walls from Cal Trans.) But the added commercial development, in particular an auto mall, significantly changes things. I do not want to be misunderstood – the first recommendation is "no auto mall". If we are unable to affect that decision, the much remains to be done to ensure that there are no added light and noise effects as a result of it. It is my understanding that the EIR does not adequately address these issues. 12C

The type of lights and signage commonly associated with auto malls would be an abomination near residential areas and open space. It obliterates the night-time. It is the type of business that should be near all-commercial or industrial areas. I have also found out that the city intends amending its own ordinances in order to permit 100' tall illuminated signage of unknown dimensions for the auto mall.

My understanding of the content of the EIR is that it does not contemplate any significant increase in noise. I do not think there is sufficient information to make this determination. Before these plans become permanent, and implementation takes place, this entire issue needs more consideration. 12D

If the auto mall is going to exist, we don't want to see it from north of its location or hear it. Its lighting and signage should be significantly lower than your current ordinances, and it should not be permitted to use PA systems or anything that could be heard from the closest neighborhoods, let alone further north. Perhaps compelling the developer to erect a sound wall for the auto mall itself, to protect the affected area, would be in order. The Colonies south of 19th Street already has wall construction, etc. to protect itself from the proposed auto mall and other commercial development north of the freeway. 12E

Just because we are going to have a freeway through this area does not mean that we simply have to rollover and accept ill-considered commercial development, and other negative effects on our neighborhoods and surrounding open environment.

Shifting the Holliday operations eastward:

We heard at the July 11 meeting that Holliday will be moving its gravel operation closer to the Cucamonga Channel. It is unclear exactly where this will occur, and what the ramifications of this move may be. It is equally unclear whether the EIR addresses this either. The managing partners said it only involves their current development plans. If 12F

the EIR does not include this, then our request would be how to find out more information about what is happening with this. 12F

Changing the location of 19th Street

This was completely new to all Alta Loma residents who attended the July 11 meeting, and also to some Upland residents who live below Sapphire. This leaves no direct east-to-west route for those of us, and the only option is to get on the freeway as a short-cut to areas that are currently easily accessible. This is unacceptable, and needs further consideration before the EIR is approved, and before the Colonies Crossroads people are allowed to continue. 12G

Public Safety Issues:

While I am clearly not an engineer, I was unconvinced by the July 11 discussion of the work that has been done to mitigate the potential effects of flooding, and particularly of a 100-year flood scenario. Colonies Crossroads wants to build this development, but apparently wants others to finance what is necessary in order for them to build (i.e., their lawsuit against County Flood Control to regain their $25 million storm-related expenditures.) If we had no development at all, which would have been the ideal scenario, there would be no need for the storm water engineering project. If their work is subsequently found lacking, we will all bear the costs. 12H

Finally:

I am not alone in expressing the above issues to you. I am also not alone in sharing with you that the short and long-range preference is that there be no development north of the freeway all the way to the mountains. Whatever can be done to prevent this now and in the future will have our support. We would have hoped this concept would have your support as well. The future of Upland and Rancho are intertwined at a number of junctures, including what we thought was a desire to retain the open country-like atmosphere we want, and which drew us here. There has been substantial development in both cities over the years, but we are coming to the point where we now all have a responsibility to protect the open spaces that are still left, and characterize our quality of life. 12I

Please do not permit the EIR to be approved at this time. Provide more time to re-consider the planned development in light of the comments I am aware you are receiving.

Sincerely,

Melanie Ingram

Melanie Ingram
8021 Rosebud Street
Alta Loma, California 91701
(909) 944-5988
(909) 948-8330
(909) 944-0573 fax

Response to Comment No. 12

Melanie Ingram, Alta Loma Resident
July 29, 2002

12A. Public notices for this project were mailed out to approximately 3,800 residents of the cities of Upland and Rancho Cucamonga in compliance with the California Environmental Quality Act (CEQA) requirements prior to the Planning Commission Hearing of July 24, 2002. The notice of public hearing was also published in the local newspaper. This public notice is in addition to the Notice of Preparation filed for the Draft EIR through the State Clearinghouse. The State Clearinghouse assigned a number (2001041048) for the EIR. A project mailing list has been established identifying the names and addresses of the residents receiving notices for this project.

The Planning Commission held a public workshop on July 16, 2002, which was also noticed. No decisions were made at the workshops but the Planning Commission obtained public testimony at the July 16, 2002 workshop.

CEQA Section 15105 identifies the public review period of a Draft EIR. The Draft EIR was sent to the State Clearinghouse on June 10, 2002 for a 45-day public comment period, which expires July 29, 2002. All comments received during this review period are being responded to as required by CEQA.

12B. Comment 12B expresses the opinion of the commentor regarding the proposed development itself, and does not raise any substantive issues regarding the adequacy of the Draft EIR. The opinions expressed in this comment will be considered by the City in its deliberations over the project.

12C. The comment primarily expresses the opinion of the commentor regarding the commercial aspect of the proposed Specific Plan Amendment north of the 210 freeway. Lighting and noise impacts of the commercial development that would be permitted by the Colonies at San Antonio Specific Plan are addressed in the Draft EIR. The Draft EIR notes that the Specific Plan sets forth standards for lighting to limit the spillover of light and glare from proposed commercial development to adjacent lands. The noise analysis undertaken for the Draft EIR addresses noise from mobile sources (e.g., traffic), as well as stationary sources (e.g., outdoor speakers). In addition, the City of Upland maintains noise standards, which all uses development within the Specific Plan area (including automobile dealerships) would be required to meet.

12D. Detailed noise studies were undertaken as part of the Draft EIR, and are included in Section 5.5. This section documents anticipated increases in noise from construction, mobile (traffic) and stationary sources (e.g., outdoor speakers). Based on the technical analyses that were undertaken, applicable noise standards, and the mitigation measures set

forth in the EIR, the City has concluded that noise impacts, although they would occur, would be below the thresholds of significance set forth in the Draft EIR.

12E. As noted in response to comment 12C and 12D, commercial development within the Specific Plan area would be required to comply with Upland's noise standards, noise-related provisions of the Specific Plan, and EIR mitigation measures. Based on the technical noise analysis undertaken for the EIR, the City has determined that the proposed development would be able to meet these standards.

12F. The Holliday gravel operation is not a part of this project and there are no pending applications to move the gravel operation closer to the Cucamonga Channel. Any request to move the gravel operation would be considered consistent with prevailing zoning requirements.

12G. Comment is noted. Modification to the alignment and modifications to the local and regional transportation pattern have been evaluated in Section 5.3 of the Draft and Final EIR.

12H. The extensive storm drain and flood control facilities that would be constructed as part of the applicant's project would provide improved flood protection to downstream properties. Two detention basins within the Project Area would receive storm water runoff from a severe 100-year storm event. This runoff is detained on-site and released downstream into the Cucamonga Flood Control Channel at a controlled rate that is much lower than the peak discharge of the facilities discharging stormwater onto the project site. Secondary systems, such as concrete-lined spillway structures and open channels, are designed to pass the full 100-year storm runoff in the unlikely event that the detention basin storage capacities are exceeded. Improvements include rock-lined slopes and flowlines, check dams and concrete structures that convey flow without soil erosion and serve to protect surrounding property from flood damage. In accordance with San Bernardino County Flood Control District design criteria, the detention basins are sized for a special storm event of two back-to-back 100-year storms, and the spillways are designed for a 1,000-year storm event for a large factor of safety. Together, these facilities provide flood protection to surrounding properties for the 100 year storm event. Without the project, downstream of the project would not be afforded the same level of flood control protection. The "no-development" scenario provides less flood control protection than the project development scenario.

Federal and County funds are being sought because most of the flood flows which reach the property have been directed to the property from off-site, carried to the site by the 19th Street storm drain, and the 20th Street storm drain. In effect, the applicant's land is part of regional flood control facility, which confers a regional benefit. So, public funding for a regional facility is appropriate in this case.

12l. There are no pending applications to change the land use north of this project boundary. The property north of the project boundary is currently zoned OS (Open Space) and is being actively mined for sand and gravel under long-standing permits. Any changes to the use of the property would require a General Plan Amendment and Zone Change.

COMMENT NO. 13

July 29, 2002

Gabriel Elliott
Community Development Department
City of Upland
460 N. Euclid Avenue
Upland, CA 91786

Re: Colonies at San Antonio Specific Plan Amendment and Environmental Impact Report

Dear Mr. Elliott:

Please accept this letter as formal notice of concerns, questions, and comments regarding the above referenced project, per the comment deadline of July 29, 2002.

As you can see, I am an Alta Loma resident residing in the most westerly area of Alta Loma. It is my understanding that only a very few residents of Alta Loma were included in the City of Upland mailing notifying us of the public hearing for this project. The first meeting on the notice was Tuesday, July 16, 2002. Unfortunately it was not possible for most of us in the mailing to attend since your notices were not received until as early as that afternoon and in many cases several days after the meeting. I did however, attend the July 24, 2002 meeting. **13A**

In the July 24 meeting we were informed that today, July 29 was the deadline for submitting in writing any issues we may have regarding the EIR. Unfortunately, again, this did not allow sufficient time to digest a very lengthy document and prepare an educated response. Therefore it is my hope that the City consider the following items before there is approval of any item that involves this project.

1. One of the biggest concerns is the designated commercial acreage, specifically the Highway Commercial. The comment was made several times at the July 24 meeting that the type of commercial development that goes into this area is up to the commercial broker. This is a great concern and I would like the City of Upland to be more active in this decision. We DO NOT want auto dealerships to be allowed to go in anywhere in this project. **13B**

2. In reviewing the existing general plan from 1988 it does not indicate that Campus Avenue would be relocated to the east. If this new projected plan has not yet been approved, why is it that the freeway **13C**

Jul 29 02 02:04p

construction for Campus has already been relocated to the east? At what point was this approved? **13C**

3. What will be done to prevent all surrounding residential neighborhoods from suffering from noise, lighting, and traffic pollution? These would not be such serious concerns if the proposed commercial building were more of a "residential" type project. Ex: grocery stores, banks, etc. But the magnitude of the proposed project and apparent commitments already received from some stores (Home Depot, Target, and Chicks) makes these issues potentially very serious. **13D**

4. The area above 20th Street is zoned Open Space. I have been told that this will not change with this proposed amendment or any future amendments. Is this correct? Will there be some sort of sound protection wall built on the northern side of 20th Street? What will the height of the wall be along the northern side of the freeway? What other buffering actions do you propose taking? **13E**

The above items certainly do not address all my questions and concerns about this project. I understand that the freeway has been a long time coming but we all have known for many years that it would someday go through. At the same time we all had faith that our respective cities would do everything in their power to prevent a freeway from making any major changes to the beautiful area that we are fortunate enough to live in. I would like to believe that the City of Upland has those same goals.

Although I am not a resident of Upland, I look at all of our cities bordering these mountains as being home. Thank you for the opportunity to submit my questions and concerns.

Sincerely,

Linda J. Yoder
8007 Rosebud Street
Alta Loma, California 91701
Home: 909-980-7592, Work: 909-628-3049

Response to Comment No. 13

Linda Yoder, Alta Loma Resident
July 29, 2002

13A. Refer to Response to Comment No. 12A.

13B. Comment is noted.

13C. The City of Upland General Plan Circulation Element, which was adopted April 8, 1996, includes the realignment of Campus Avenue to its present location, based on the circulation plan of the San Antonio Lakes Specific Plan, which was adopted by the City in 1988.

13D. A detailed traffic impact analysis and supplemental traffic analyses were undertaken for the Draft EIR, based on the requirements of the San Bernardino County Congestion Management Plan and additional requirements of the City of Upland. The results of these studies are documented in Section 5.3 of the Draft EIR. The full text of the traffic impact analysis is presented in the appendices to the Draft EIR. These studies document in detail the anticipated traffic impacts of the proposed development, and conclude that adequate roadway capacity will be developed within and adjacent to the project site to accommodate future traffic. As set forth in the proposed Specific Plan amendment and Draft EIR, the project developer will construct roadway improvements, including traffic signals, within the project site. EIR Mitigation Measure 5.3-1 requires the payment of the project's fair share for improvements to offsite intersections, including 16th Street at Mountain Avenue, Baseline Road at Carnelian Avenue, Baseline Road at Archibald Avenue, and 19th Street at Sapphire Avenue.

The larger commercial uses cited in the comment will be located adjacent to the 210 freeway, and would be separated from residential development by an SCE right-of-way to the west, 19th Street to the south, and the Cucamonga Creek channel to the east. As noted in response to Comment 12C, detailed noise studies were undertaken as part of the Draft EIR. These analyses conclude that the project will comply with applicable Upland and Specific Plan noise standards. In addition, the proposed Specific Plan sets forth standards to limit the lighting impacts proposed commercial development might have on neighboring residential areas.

13E. Refer to Response to Comment No. 12I.

COMMENT NO. 14

BEST BEST & KRIEGER LLP
A CALIFORNIA LIMITED LIABILITY PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS
LAWYERS

ARTHUR L. LITTLEWORTH*
WILLIAM R. DEWOLFE*
RICHARD T. ANDERSON*
JOHN D. WAHLIN*
JOHN E. BROWN
MICHAEL T. RIDDELL*
MICHAEL GRANT*
FRANCIS J. DAUM*
GEORGE M. REYES*
WILLIAM W. FLOYD, JR.
GREGORY L. HARDKE
KENDALL M. MACVEY
CLARK H. ALSOP
DAVID J. ERWIN*
MICHAEL J. ANDELSON*
DOUGLAS E. PHILLIPS*
GREGORY K. WILKINSON
GENE TANAKA
VICTOR L. WOLF
DANIEL E. OLIVIER
HOWARD B. GOLDS
STEPHEN P. DEITSCH
JOHN R. ROTTSCHAEFER
MARTIN A. MUELLER
J. MICHAEL SUMMEROUR
SCOTT C. SMITH
JACK B. CLARKE, JR.
BRIAN M. LEWIS*
BRADLEY E. NEUFELD

PETER M. BARMACK
JEFFREY V. DUNN
STEVEN C. DEBAUN*
ERIC L. GARNER*
DENNIS M. COTA
P.H.W.F. PEARCE
ROBERT W. HARGREAVES
C. MICHAEL COWETT
BRUCE W. BEACH
ARLENE PRATER
MARK A. EASTER
MICHELLE OUELLETTE
KEVIN K. RANDOLPH
CYNTHIA M. GERMANO
MARGUERITE S. STRAND
KYLE A. SNOW
JAMES D. GILPIN
KIM A. BYRENS
DEAN DERLETH
SONIA RUBIO CARVALHO
JOHN O. PINKNEY
PIERO C. DALLARDA
DWIGHT M. MONTGOMERY
RICHARD T. EGGER
FRANKLIN C. ADAMS
WILLIAM WOOD MERRILL
PAUL F. DAUER
JAMES E. THOMPSON
WILLIAM D. DANLING, JR.

G. HENRY WELLES
DAVID J. HANCOCK
ROGER K. CRAWFORD
SHAWN D. HAGERTY
JAMES P. MORRIS
KEVIN T. COLLINS
DAVID W. NEWMAN
JENNIFER T. BUCKMAN
MARIA E. GLESS
GLEN W. PRICE
MARYMICHAEL MCLEOD
JAMES R. TOUCHSTONE
STEVEN M. ANDERSON
ROBERT L. PATTERSON
JAMIE L. RAYMOND
PAULA C.P.de SOUSA
LYSA M. SALTZMAN
MARCO A. MARTINEZ
JOHN F. WALSH
JEFFRY F. FERRÉ
DORINE LAWRENCE-HUGHES
BRIAN P. HICKEY
ALISON D. ALPERT
JAMES C. TURNEY
MICHAEL D. DOLIDA
KAREN M. FREEMAN
JOHN D. HIGGINBOTHAM
USI N. BOTROS
CRAIG M. MARSHALL

JEFFREY S. BALLINGER
THERESA E. ANTONUCCI
MELISSA W. WOO
E. SEAN ARTHER
TRANG T. TRAN
TRACIE PHAM
WILLIAM J. PRIEST
DANIEL S. ROBERTS
MARY BETH COBURN
DANIELLE E. GERBER
CHRISTINA A. HENRY
ELISE L. CHÉNO
KRISTIN C. VARNER
DEAN J. BILLIMAN
CHARISSE L. SMITH
ANGELICA Y. CASTILLO
CATHY S. HOLMES
WESLEY A. TONEL
REAGAN L. BRENNEMAN

RAYMOND BEST (1888-1957)
JAMES H. KRIEGER (1913-1975)
EUGENE BEST (1893-1981)

3750 UNIVERSITY AVENUE
P.O. BOX 1028
RIVERSIDE, CALIFORNIA 92502-1028
(909) 686-1450
(909) 686-3083 FAX
(909) 682-4612 FAX
BBKLAW.COM

OF COUNSEL
CHRISTOPHER L. CARPENTER
MICHAEL D. HARRIS*
ANNE T. THOMAS
DONALD F. ZIMMER*
CHRISTINA L. DYER
D. BRIAN REIDER
DINA D. HARRIS
WARREN B. DIVEN
ROBERT J. HANNA
DANIEL O. STEVENSON
JENNIFER DAUER McCREADY

OFFICES IN
INDIAN WELLS (760) 568-2611
ONTARIO (909) 989-8584
SAN DIEGO (619) 525-1300
ORANGE (714) 939-5940
SACRAMENTO (916) 325-4000

*A PROFESSIONAL CORPORATION

JENNIFER T. BUCKMAN
(909) 826-8268
JTBUCKMAN@BBKLAW.COM
FILE NO. 04342.00051

July 29, 2002

VIA FACSIMILE TRANSMISSION

Sylvia Scharf, AICP
City of Upland
460 North Euclid Ave.
Upland, CA 91786-4732

Re: *The Colonies at San Antonio Specific Plan Amendment and Draft Environmental Impact Report*

Dear Ms. Scharf:

Cucamonga County Water District (the "District") has asked us to review and comment on the above-referenced Draft Environmental Impact Report ("EIR"). This letter is intended to supplement our letter submitted for the July 24, 2002 Public Hearing before the City's Planning Commission and the July 24, 2002 letter submitted by Robert DeLoach, General Manager/CEO of the Cucamonga County Water District. Those letters are incorporated herein by reference. The District also incorporates by reference its May 16, 2001 letter to Sylvia Scharf, AICP, commenting on the Notice of Preparation of a Draft EIR for the Colonies at San Antonio Project (the "Project"). **14A**

Based on its review of the Draft EIR, the District would like to raise the following issues. First, as stated in our July 24, 2002 letter, the Draft EIR fails to comply with Senate Bill (SB) 610, which requires that a detailed Water Supply Assessment be included with the environmental documents for projects authorizing more than 500 residential units. The Draft EIR acknowledges

that SB 610 applies to the Project, but does not incorporate the Water Supply Assessment. Rather, the Draft EIR states that the Water Supply Assessment will be incorporated in the Final EIR. The intent of SB 610 is for the Water Supply Assessment to be circulated for public review. Obviously, this cannot be accomplished when the Water Supply Assessment is not added to the document until after the expiration of the public review period. Moreover, the City has improperly deferred its analysis of the Project's potential impacts on water supply and demand. These impacts are potentially severe, as demonstrated by the fact that the City had to enter into a contract with the District in order to obtain sufficient water to meet the minimum fire flow needs associated with the Project. In May 2002, construction of an interconnection was completed at the District's reservoir site at Sapphire and 19th Street. The Draft EIR does not even mention this agreement. (See, Draft EIR, p. 5.9-7). The purpose of the Water Supply Assessment is to provide the City with the data needed to determine whether the project will have significant impacts on water demand and supply. By failing to conduct the Water Supply Assessment and to include the Assessment in the Draft EIR, the City has improperly deferred the analysis of the Project's potential impacts on water. The Assessment should be provided, and the Draft EIR should be recirculated for public review and comment. 14A

Second, as also stated in our July 24, 2002 letter, for the past 25 years, the District and San Antonio Water Company ("San Antonio") have been using 70 of the approximately 440 acres proposed for development in the Project as Basin No. 6 to accomplish recharge of the Cucamonga Basin. Indeed, the Draft EIR acknowledges the historic use of Basin No. 6 for groundwater recharge. (See, Draft EIR, pp. 5.8-1, 5.8-2). The Project, as described in the Draft EIR, purports to restore approximately 62 acres of the spent gravel pit through the adoption of the Open Space Design Concept. The Draft EIR states that "[t]he Open Space has been designed to provide surface recharge areas to accommodate San Antonio Water Company's groundwater recharge requirements," among other things. (See, Draft EIR, p. 5.8-7). However, it is not clear that the development of the Open Space, along with other mitigation measures described in the Draft EIR, will be sufficient to effectively mitigate the Project's significant environmental impact to groundwater supplies and groundwater recharge. 14B

The District has reviewed the Open Space Design Documents and met with the Project Applicant's design team on several occasions. The District has expressed its concerns with the Project as presented and has provided numerous suggestions regarding ways in which the potentially significant adverse impacts to groundwater supplies and groundwater recharge may be effectively mitigated. (See, e.g., attached letters dated September 20, 2001; November 14, 2001; and December 18, 2001). While it is apparent that the proposed Open Space design does include a component of potential recharge capabilities, it is clear that groundwater recharge and water conservation are not the primary objectives of the proposed Open Space Design Concept. For example, the Draft EIR describes the Open Space as a "60-acre flood control detention facility" with no reference to the recharge capabilities of the proposed Open Space. (See, Draft EIR, p. 3-12; see also, Draft EIR, p. 3-22). The District has indicated on numerous occasions its objection to "flow-through" stormwater retention facilities. (See, e.g., attached letter dated November 14, 2001). Similarly, the Draft EIR fails to include in its description of "Open Space Objectives" the replacement of the existing recharge 14C

facilities and the mitigation of potentially significant adverse impacts on groundwater supplies and recharge. (See, Draft EIR, pp. 3-30, 3-31). In short, the Draft EIR does not adequately address the mitigation measures that must be imposed to address the loss of recharge capability within the Project area. Without such mitigation, the Project would have significant adverse impacts on both short-term and long-term management of the Cucamonga Groundwater Basin as well as the current and future water supply to the District's and San Antonio's customers. The loss of recharge capabilities would also place significant limitations on existing water production facilities operated by the District and San Antonio. (See, attached letter dated September 21, 2001). 14C

In addition, the Draft EIR fails to address adequately San Antonio's right to use the new recharge facilities to accomplish recharge of the groundwater in the Cucamonga Basin. The Colonies Partners, L.P. ("Colonies") has filed a lawsuit against San Antonio and the San Bernardino County Flood Control District challenging their right to recharge groundwater and to control stormwater in the Cucamonga Basin. If San Antonio is not permitted to exercise its right to replenish groundwater in the Cucamonga Basin, the Project will substantially deplete groundwater supplies and substantially interfere with groundwater recharge. This will severely impact the District's ability to extract groundwater from the Basin. Thus, the EIR must discuss in greater detail San Antonio's right to use the new recharge facilities and what impacts will result if the Project Applicant's attempt to prevent San Antonio from exercising this right is successful. 14D

Third, the Draft EIR fails to address adequately the funding for the development and construction of the new recharge facilities. Apparently, the Colonies and the City of Upland have requested that other parties accept financial responsibility for the construction of the new recharge facilities. At this time, there is no funding mechanism to ensure that the mitigation proposed in the EIR will actually occur. Given this uncertainty, the Open Space mitigation measure is not definite and certain enough for the City to rely upon it to mitigate fully the Project's potentially significant impacts on groundwater supply and recharge. To ensure that the proposed mitigation is effective, the EIR must fully address this issue. Specifically, the Detention Basin Study proposed in the Draft EIR as a mitigation measure should not only "account for optimal percolation rates" but should also include provisions for financing the construction of the new recharge facilities. (See, Draft EIR, p. 5.8-28). The Project's potential impacts on groundwater supply and recharge cannot be considered mitigated below a level of significance unless the conditions of Project approval require such financing to be in place before initiating any ground-disturbing activities that potentially interfere with the existing recharge operations. 14E

Thank you for this opportunity to provide comments on the Draft EIR. The District wishes to reaffirm its willingness to work with the City, the Project Applicant, San Antonio and San Bernardino County Flood Control District to find a mutually acceptable means of ensuring permanent

facilities for providing adequate recharge of groundwater to the Cucamonga Basin. Please feel free to contact me at (909) 686-1450 if you have any questions about the District's position.

Sincerely,

Jennifer T. Buckman

Jennifer T. Buckman
for BEST BEST & KRIEGER LLP

cc: Robert A. DeLoach, General Manager/CEO
Martin E. Zvirbulis, Assistant General Manager/COO
Ray Wellington, San Antonio Water Company
Tom McPeters, Esq.
Charles Scolastico, Deputy County Counsel

COPY

Cucamonga County Water District
10440 Ashford Street
Rancho Cucamonga, CA 91729-0638
P.O. BOX 638 • (909) 987-2591 • Fax (909) 476-8032

Robert A. DeLoach
General Manager

September 20, 2001

Mr. Peter J. Pitassi, AIA
Architect
8439 White Oak Avenue, Suite 105
Rancho Cucamonga, CA 91730

Re: **The Colonies at San Antonio Project**
Upland, California

Dear Mr. Pitassi:

This letter is in response to our meeting of August 20, 2001, and the Cucamonga County Water District's (CCWD) review of the latest versions of the Land Use and Preliminary Open Space Plan for the proposed Colonies project located in Upland, California.

As you know, the proposed development is located within an area overlying the Cucamonga Basin, a local groundwater aquifer that is a vital source of water supply for CCWD and the San Antonio Water Company (SAWCO). CCWD and SAWCO are extremely concerned with the impact the proposed project will have on the overall management of the groundwater basin and its potential impact on the local groundwater supply. The development as shown on the above referenced maps, in addition to eliminating the existing percolation basins (6 and 7) south of 19th Street will eliminate the natural percolation capabilities in the area. During the last 40 years the natural storm water run-off tributary to the area within the proposed Colonies development has contributed to approximately 650 acre-feet of annual recharge into the Cucamonga Basin in addition to other water supplies diverted to the area specifically for recharge. At present, approximately 5,000 to 11,000 acre-feet of water is recharged annually via the storm drain system known as the 19th Street and 20th Street storm drains. The potential capacity for recharge within these basins is estimated to be over 20,000 acre-feet per year. A portion of this, 2,000 acre-feet, is recharged by SAWCO as a requirement of the stipulated agreement for operation and management of the Cucamonga Basin. The loss of any recharge capability will have a significant impact on the short and long term management of the basin, the current and future water supply to CCWD and SAWCO customers and would place limitations on operation of water production facilities located within the Cucamonga Basin. In addition, diversion of storm water flows and elimination of percolation capabilities within the development area could impact similar activities within the adjacent Chino Basin. The loss of this local groundwater supply would require deliveries in State Project Water at substantial additional cost, up to three times the cost

JEROME M. WILSON, President | DONALD J. KURTH, Vice President | ROBERT NEUFELD, Director | HENRY L. STOY, Director | JAMES V. CURATALO, JR, Director

of pumping groundwater from Cucamonga Basin, and is not a viable option. Also, adequate facilities do not currently exist for delivery of additional quantities of State Project Water to this area and new facilities would need to be constructed at substantial expense.

As we indicated at the recent meeting, it is imperative that, as a condition of the development, the existing recharge facilities be preserved. As an alternative, new facilities could be constructed with similar capacity and in a configuration and at a location acceptable to CCWD and SAWCO. Replacement facilities must be provided at no expense to CCWD or SAWCO. The proposed basin design combined with the "open space" elements as shown on the preliminary drawings is unacceptable to CCWD and SAWCO.

CCWD and SAWCO are committed to ensuring a reliable long-term water supply to the area while preserving and responsibly managing the valuable local water resource in the Cucamonga Basin. In addition, CCWD and SAWCO have reviewed various options for preserving and/or replacing the important recharge capabilities within Cucamonga Basin and look forward to working with you and your consultants to explore possible options that will address the needs of the development as well as those of CCWD and SAWCO.

If you have any question or would like to discuss this project further, please call me.

Yours truly,

CUCAMONGA COUNTY WATER DISTRICT

Robert A. DeLoach
General Manager/CEO

RAD:mlw

Cc: Dick Anderson, BB&K
Ray Wellington, SAWCO

Cucamonga County Water District
10440 Ashford Street
Rancho Cucamonga, CA 91729-0638
P.O. BOX 638 • (909) 987-2591 • Fax (909) 476-8032

Robert A. DeLoach
General Manager

COPY

November 14, 2001

Mr. Peter J. Pitassi, AIA
The Colonies at San Antonio
10621 Civic Center Drive, 2nd Floor
Rancho Cucamonga, California 91730

Re: The Colonies at San Antonio Project
Upland, California

Dear Mr. Pitassi:

This letter refers to the Preliminary Open Space Design Documents for the proposed Colonies project located in Upland, California. We appreciate the opportunity to review the preliminary plans and the studies prepared by Natural Systems International, Inc. and the RMA Group.

After a review of these documents it is apparent that the conceptual design for this project as presented may indeed include a component of potential recharge capability up to 3,940 acre-feet. However, the report also indicates that an estimated 1,810 acre-feet would "flow-by" due to the inability of the basins to retain all of the anticipated storm flows. Additionally, it is important to note that the estimated annual average rainfall data used to estimate the run-off volumes may not be representative of the actual rainfall for the local canyon areas and that "flow-by" volumes could be anticipated to be much greater. As indicated in the District's previous letter dated September 20, 2001, it is estimated that between 5,000 and 11,000 acre-feet of water is recharged annually in this area via the local storm drain system. Any quantity of storm water flows allowed to flow by the proposed basins will have a long-term negative impact on this valuable local groundwater resource and must be mitigated.

Also, the report indicates that in order to optimize percolation within the proposed basins, the soils would need to be regularly manipulated to maintain recharge capability. As

JEROME M. WILSON, President | DONALD J. KURTH, Vice President | ROBERT NEUFELD, Director | HENRY L. STOY, Director | JAMES V. CURATALO, JR, Director

CUCAMONGA COUNTY WATER DISTRICT • P.O. BOX 638 • RANCHO CUCAMONGA, CA 91729-0638 • (909) 987-2591

designed, the open space area is designated as a riparian habitat and is not conducive to soil manipulation. As we explained to you at our first meeting in August of this year, in order to facilitate long-term operation and maintenance of these facilities, the proposed recharge basins must be free of braided channels and riparian vegetation. Also, provisions for securing the basin facilities and vehicular access must be provided. With further modifications to the open space area, the District believes there may be opportunities for improving the recharge capability of the project and for satisfying the needs of all parties involved.

We look forward to meeting with you later this week to further discuss possible resolutions for addressing the environmental concerns surrounding your project. If you have any questions, please call me.

Yours truly,
CUCAMONGA COUNTY WATER DISTRICT

Martin E. Zvirbulis
Assistant General Manager/COO

Cc: Ray Wellington, SAWCO
Richard Anderson, BB&K
Ken Miller, SBCFCD
Rob Turner, City of Upland
John Rossi, CBWM
Barry Kehl, CBWCD

Cucamonga County Water District
10440 Ashford Street
Rancho Cucamonga, CA 91729-0638
P.O. BOX 638 • (909) 987-2591 • Fax (909) 476-8032

Robert A. DeLoach
General Manager

December 18, 2001

COPY

Mr. Peter J. Pitassi, AIA
8439 White Oak Avenue, Suite 105
Rancho Cucamonga, CA 91730

Re: The Colonies at San Antonio Project
Upland, California

Dear Mr. Pitassi:

This letter refers to the recent meeting with your project team on November 15, 2001, and the subsequent meeting with the San Bernardino Flood Control District staff on December 7, 2001, regarding the proposed Colonies project located in Upland, California.

Thank you for the opportunity to participate in these discussions. As you know, and as I explained to you at our November 15, 2001, meeting the proposed project will have a significant impact on the existing recharge capabilities of the area being developed by the Colonies. Although the project may include design elements that may provide recharge capabilities, it is apparent that recharge and water conservation are not the primary objectives of the proposed design for the open space area. In fact, the basins have been described as "passive in nature" with their intended primary use being the flow-through routing and detention of storm flows. As we have previously discussed, it has always been the objective of the District and San Antonio Water Company to maximize the recharge of local storm runoff and imported local canyon water to provide a reliable low cost source of water to our customers. Consistent with our discussions, we have enclosed herewith a copy of the Open Space Grading Plan showing possible changes that would help to address the issues of increasing total recharge storage capacity, maintenance and access.

In pursuing the successful completion of this project it is important for the Colonies to acknowledge the potential impact this project will have on the reliability of the local groundwater supply. By utilizing opportunities for improving the recharge capability of the project the long-term negative impact can be mitigated to satisfy the needs of all parties involved.

JEROME M. WILSON, President | DONALD J. KURTH, Vice President | ROBERT NEUFELD, Director | HENRY L. STOY, Director | JAMES V. CURATALO, JR, Director

We look forward to further discussing possible resolutions for addressing the environmental concerns surrounding your project. If you have any questions, please call me.

Yours truly,

CUCAMONGA COUNTY WATER DISTRICT

Martin E. Zvirbulis
Assistant General Manager/COO

Cc: Ray Wellington, SAWCO
Richard Anderson, BB&K
Ken Miller, SBCFCD
Rob Turner, City of Upland
John Rossi, CBWM
Barry Kehl, CBWCD

Response to Comment No. 14

Jennifer Buckman, Best Best & Krieger LLP
July 29, 2002

14A. Commentor states that the Draft EIR fails to comply with the requirements of Senate Bill (SB) 610 in that it failed to include a Water Supply Assessment (WSA) for circulation and comment by the public.

Regarding the City's contract with CCWD for fire flow needs associated with the Project, in 1998, CCWD and the City executed an agreement in which CCWD agreed to furnish fire flow to Phase I of the Applicant's project. This deferred the necessity of extending water to serve the Phase I development until later phases were approved, at which time the City's facilities would be extended and improved to meet the requirements of the region. The Agreement was considered by the San Bernardino Local Agency Formation Commission, together with a service boundary adjustment. The agreement does not indicate a deficiency in the City's water supplies; rather, it demonstrates cooperation among governmental agencies.

14B. Please refer to Response to Comment No. 5B.

14C. Please refer to Response to Comment No. 5B.

14D. Please refer to Response to Comment No. 5B.

14E. Please refer to Response to Comment No. 5B.

LSA

LSA ASSOCIATES, INC.
1650 SPRUCE STREET, SUITE 500
RIVERSIDE, CALIFORNIA 92507

909.781.9310 TEL
909.781.4277 FAX

OTHER OFFICES:
BERKELEY
IRVINE
FT. COLLINS
PT. RICHMOND
ROCKLIN

COMMENT NO. 15

July 29, 2002

Mr. Jeff Bloom
City of Upland
460 North Euclid Avenue
Upland, CA 91786

Subject: Comments on the Colonies at San Antonio Specific Plan Amendment EIR (SCH 2001011048)

Dear Jeff:

The following comments on the Colonies at San Antonio Specific Plan Amendment EIR are offered on behalf of the applicant for this project, Colonies Crossroads, Inc. Overall, the Draft EIR adequately addresses all of the issues required by CEQA. There are, however, some areas which may require clarification. It is hoped that these comments will be of assistance in the preparation of a Final EIR for the project.

1. *Page 3-8, Final Paragraph of Section 3.2.2.* The Supplemental EIR for the Colonies project was certified in October 1998, as noted in the Draft EIR. However, the developer of the project is unaware of any action taken in December of that year. The final sentence of this paragraph should be removed from the Final EIR. **15A**

2. *Page 5.2-18, First Paragraph following Impact 5.2-3.* EIR No. 800 was prepared for the original Specific Plan in 1988. **15B**

3. *Page 5.8-14, Description of Basin B.* There is no landscaping within Basin B. **15C**

4. *Page 5.8-27, Mitigation Measure 5.8-1 and Page 5.8-29, Mitigation Measure 5.8-4a.* While the Storm Water Pollution Prevention Plan (SWPPP) may be submitted concurrently to the City Engineer, its approval is by the Water Quality Control Board, not the City. Approval of permits required by law, such as the SWPPP, do not constitute mitigation under CEQA, and this measure should be removed from the EIR. To ensure that a SWPPP will be approved prior to grading, the requirement for this permit should be added to the Specific Plan, as the applicant has requested in its Specific Plan revisions proposed in July 2002. Finally, the components of the SWPPP are under the jurisdiction of the Regional Water Quality Control Board, and should not be required by the City. **15D**

5. *Page 5.9-7.* The Water discussion is fragmented. The discussion found on this page focuses on facilities, but inaccurately describes them as sources of supply. Detail about the actual sources of water supply (e.g., groundwater in the Chino Basin) are described in great detail in the reference sources shown on the attached list. Also, the first paragraph of this discussion following the bullet points presents an inaccurate picture of regional water supply, since MWD reports that its supply of imported water *is* reliable as a supplemental source for locally available groundwater. The 300 gallons per capita per day water consumption figure cited on this page is inconsistent with the 510 gallons per day per household figure cited on Page 5.9-21. **15E**

6. *Page 5.9-8, Senate Bills 221 and 610.* This discussion duplicates a more detailed discussion on Page 5.9-25. The duplicate discussion at Page 5.9-8 should be removed from the Final EIR. **15F**

7. *Page 5.9-17, third Paragraph following Impact 5.9-6.* In addition to the central open space area, the Colonies development will provide an extensive trails system. The trails serving the central open space area will be open to the public. The mitigation measure does not correctly reflect the agreement reached between the applicant and City staff (see discussion under item number 11, below). This paragraph should be revised accordingly. **15G**

8. *Page 5.9-21, Impact 5.9-8.* The word "infrastructure" should be added after water in the first sentence. **15H**

9. *Page 5.9-22, Table 5.9-6.* The 0.91 mgd average day water consumption figure does not include irrigation demand, which should be added to the Table. We understand that this Table has been superceded. **15I**

10. *Page 5.9-26.* Various bullet points and the conclusion on this page should be clarified. Suggested wording is as follows. **15J**

    a. *Second full bullet.* Approved a Water System Master Plan, together with sub-area plans, which identify water facilities~~, which should~~ to be constructed ~~to continue~~ to furnish water to existing and proposed customers

    b. *Third full bullet.* ... In this way, it is kept abreast of ~~the~~ water supply availability regionally, as well as on the state level. ~~The City is also kept abreast of the supply which will be made available to it through the Chino Basin Judgment.~~...

    c. *Fourth full bullet.* Participated recently with other groundwater producers to adjudicate its pumping rights in the Claremont Heights Basin~~ in the Six Basin Judgment~~, and to develop a basin management plan. The adjudication in the Six Basin Judgment paves the way for the City to develop additional water management options.

    d. *Fifth full bullet.* Works closely with the San Antonio Water Company ~~concerning~~ about matters concerning water quality monitoring, facilities, and groundwater production.

    e. *Last paragraph.* In conclusion, the City has a sufficient water supply available to it to meet the demands of its existing and future customers through normal, dry, and multiple dry year conditions. Tthe proposed project...

11. *Page 5.9-29, Mitigation Measure 5.9-6.* This mitigation measure does not correctly reflect the agreement reached between the applicant and City staff. To accurately reflect this agreement, the mitigation measure should read as follows. "The applicant is paying a park impact fee to the City of Upland in the amount of $2,052 per dwelling unit as each building permit is issued within Phase 1 (Planning Areas 1-3). Buildings within Planning Areas 17-21 will pay $0.75 per square foot of gross leasable area upon issuance of a building permit for each structure." **15K**

12. *Page 5.9-29, Mitigation Measure 5.9-2b.* The agreement reached between the applicant and the Upland Police Department is that space would be provided at no rent to the Police Department for establishment of a satellite facility, if the Department so chose. To accurately reflect this agreement, the Mitigation Measure should be revised as follows. "The Developer shall provide to the Upland Police Department up to 1,500 square feet of space within a retail building in Planning Area 17, 18, or 19, as approved by the Upland Police Chief, at no rent to establish a satellite police facility. Tenant improvement shall be by the City of Upland." **15L**

13. *Page 5.9-30, Mitigation Measure 5.9-8b.* This mitigation measure does not correctly reflect the agreement reached between the applicant and City staff. To accurately reflect this agreement, the actual fee is to be $690 per dwelling unit built in Planning Areas 4-13 and $0.60 per square foot of gross leasable commercial area built in Planning Areas 17-21. This is equivalent to $1.3 million if the project is built out at its maximum allowable intensity. **15M**

14. *Page 5.9-30, Mitigation Measure 5.9-8c.* The fees specified in Mitigation Measure 5.9-8b are intended for the construction of the facilities described in this measure. Thus, Mitigation Measure 5.9-8c duplicates the other measure, and should be removed from the Final EIR. **15N**

The preceding comments are intended to assist in clarifying the information and analysis provided in the Draft EIR. If you have any question, please call.

Sincerely,

LSA ASSOCIATES, INC.

(for)

Lloyd Zola, Principal

Attachment

The analysis and conclusions discussed in this Section are based on data from the City's *Urban Water Management Plan, Year 2000 Update*, prepared jointly by regional water purveyors and by the Inland Empire Utilities Agency; Metropolitan Water District of Southern California's *Report on Metropolitan Water Supplies*, February 11, 2002, prepared by the Metropolitan Water District of Southern California; Metropolitan Water District of Southern California's *Regional Urban Water Management Plan*, December 2000; City of Upland's *Colonies at San Antonio Water Supply Evaluation* (November 6, 2002) prepared by RBF Consulting; City of Upland's *Water Recharge Report for San Antonio Lakes* (October 1990) prepared by NBS/Lowry Engineers & Planners; City of Upland's *Water System Master Plan* (1992); *City of Upland's Water Supply Assessment for the Colonies at San Antonio,* April 2002, prepared by Associated Engineers Inc., as reviewed by the City of Upland; historic water supply and water use records of the City of Upland, San Antonio Water Company, and West End Consolidated Water Company; annual reports of the San Antonio Water Company; Resolutions and Minutes of the City of Upland; reports of operations of the water treatment plants; pleadings on file in the three groundwater adjudications which govern a portion of the City of Upland's groundwater resources; City of Upland's records of historic groundwater production and surface water deliveries; Open Space Preliminary Design Documents (February, 2002) prepared by Natural Systems International, LLC.; the City of Upland's 2000 Consumer Confidence Report, available at the City of Upland's Web Site which data has been certified by the City's Water Operations Manager; and various engineering studies and reports of the City of Upland. These data sources are available at the City of Upland.

Response to Comment No. 15

Lloyd Zola, LSA Associates
July 29, 2002

15A. The final sentence of Paragraph 2, Page 3-8, of the Draft EIR has been deleted as follows:

> The City Council certified The Colonies at San Antonio Specific Plan Supplemental EIR (EIR No. 1222), and adopted The Colonies at San Antonio Specific Plan Amendment in October 1998. A Statement of Overriding Considerations was included in the City Council's certification of the Supplemental EIR. In September 1998, the Planning Commission approved Tentative Tract 14983 with Resolution No. 3982, which allowed a Master Tentative Tract Map to create four lots intended for future residential, and flood control facility and to establish a circulation system in accordance with the Colonies at San Antonio Specific Plan (SPR-7). ~~In December 1998, the City Council certified the EIR for Tentative Tract 14983 with Resolution No. 4186.~~

15B. Page 5.2-18, Paragraph 2, of the Draft EIR has been corrected in the Final EIR to indicate that EIR No. 800 was prepared for the original Specific Plan in 1988, not 1998.

> With development of the proposed project, the viewshed and visual characteristics of the area would be permanently modified. Currently, the area consists primarily of residential neighborhoods and vacant land. With the introduction of the large-scale commercial uses and associated structures, current viewshed characteristics would be modified and the uses would in some cases dominate the visual features of the area. Distant views of the mountain ranges to the north and valley to the south would be affected by the proposed uses. As previously stated, aesthetic impacts can have a certain amount of subjectivity and without adopted viewshed thresholds by a lead agency, such as the City of Upland, the determination can be subject to discussion. It is noted that EIR No. 800, prepared for the original Specific Plan in ~~1998~~ 1988, did not conclude a significant impact resulting from the change in use. Nevertheless, based upon the proposed Specific Plan specifications involving a higher intensity for commercial uses and current view simulation data, such as depicted in Exhibit 5.2-4, *Transect A – View from South*, and Exhibit 5.2-5, *Transect B – View from South*, it is concluded that viewshed characteristic impacts are significant and unavoidable, given the current characteristics of the area. The alteration of appearance would be permanent and would continue throughout the life of the project. The following sections describe the views of and across the project site with implementation of the Specific Plan Amendment.

15C. Page 5.8-14 of the Draft EIR has been revised in the Final EIR to delete the reference of "and 90% landscaping" for Basin B.

Basin B: 100% paved roads/structures/slope protection ~~and 90% landscaping~~.

15D. The City of Upland has determined to be appropriate to identify the requirements of a Storm Water Pollution Prevention Plan (SWPPP) within the Mitigation Subsection in order to confirm that appropriate and applicable actions and requirements are complied with for water quality. The measure is further assured through the procedures set forth in the Mitigation Monitoring and Reporting Program for the project.

Page 5.8-12, Mitigation Measure No. 5.8-1c, has been revised as follows:

5.8-1c Concurrent with grading permit application submittal, the Applicant shall submit a Storm Water Pollution Prevention Plan (SWPPP), subject to approval by the Regional Water Quality Control Board, which would include the following BMPs:

- Development of temporary stream crossings to minimize potential increases in sediment transport and wetlands impacts.
- Construction road utilizing aggregate over geotextile fabric stabilization to minimize erosion.
- Utilization of sand bags, straw bales and silt fences to divert and slow storm water run-off.
- Utilization of temporary earth dikes, drains and swales as a form of spill protection and storm water run-off control.
- Development of a maintenance plan for grading equipment.
- Development of a Spill Prevention and Control Plan for construction-related substances.
- Development of a Use and Disposal Plan for hazardous materials.

Page 5.8-29, Mitigation Measure No. 5.8-4a, has been revised as follows:

5.8-4a The project applicant shall prepare a Storm Water Pollution Prevention Plan (SWPPP), subject to approval by the Regional Water Quality Control Board, which shall cite water quality control measures for the project. The approved SWPPP shall be submitted concurrent with grading permit application to the City Engineer. The SWPPP may include the following components:

- Description of significant potential sources of pollutants in storm water discharges.
- A listing of all chemicals which may contact storm water and estimates of concentrations.
- An estimate of the area of impervious surfaces.
- Source controls.
- Isolation/separation of hazardous from non-hazardous pollutant sources.
- Treatment/conveyance structures and their impacts on groundwater quality.
- Design criteria for the structures/ conveyances.
- Maintenance schedules.
- Erosion control measures.
- An estimate of pollutant reduction levels expected from implementing the controls.
- Establishment of internal record keeping and internal reporting procedures.
- Eliminate illicit discharges of storm water to storm water system.
- Develop and implement a storm water monitoring, sampling, testing, and reporting program.
- Develop a special management plan for loading dock areas and vehicle refueling and maintenance areas.
- Installation and maintenance of oil/water separators for all parking lot areas.

15E. The City's existing sources of water supply are presented accurately in the EIR. However, the City intends to develop water supply from Chino Basin to meet the demands of the project.

During the 1990's, the City water supply consisted of 71 percent local groundwater, 12 percent local surface water, 16 percent imported water and one percent recycled water. Imported water is considered reliable; however, the cost of the water is set by MWD and is considerably higher than development of local supplies. As such, the City desires to reduce dependence on imported water.

The water consumption factor for the project is 170 gallons per day per person with three-person per dwelling unit equaling 510 gallons per day per dwelling unit.

15F. Although the Commentor identifies what can be deemed as a duplication of information, the discussions are applicable and do not warrant change or deletion. The SB 221 and 610 discussion on Page 5.9-8 briefly summarizes the description of the Senate Bills and beginning on Page 5.9-25, a more detailed description is provided relative to the impact analysis.

15G. The information in the Development Agreement between the Colonies Crossroads Inc. and the City of Upland is consistent with the comments of LSA Associates. For clarification purposes, Mitigation Measure 5.9-6 shall be amended in the Final EIR based upon the following:

> *The Owner (Colonies Crossroads) is reserving approximately 75 acres of the project for open space, trails and other passive recreational uses for residents of the region. In addition, Owner shall pay park fees to City at the time of issuance of any building permit(s) for residential dwellings at the Project for Lots in Tract Nos. 14984, 15927 and 15928 in the amount of $2,052 for each dwelling unit in Phase I of the Project. In addition, at the time of issuance of any building permit(s) for commercial buildings at the Project, Owner shall pay to City a park fee equal to $0.75 (seventy-five cents) per square foot of commercial building area. In consideration of both the payment of these fees and the planning, development, improvements and on-going maintenance for trails and common areas land open for public use, the City will credit to Owner an amount equal to the Park Fees on all residential dwelling units excluding Tract Nos. 14984, 15927 and 15928 of the Project.*

15H. Page 5.9-21, Paragraph 2, of the Draft EIR has been revised in the Final EIR to include the word "infrastructure" after the word "water" in the first sentence.

> The demand for water <u>infrastructure</u> that is attributable to the Project site would increase with implementation of the proposed Project. Exhibit 5.9-2, *Water Facilities*, illustrates the backbone water system proposed in the Specific Plan.

15I. Table 5.9-6 of the Draft EIR shall be updated as necessary.

15J. Upon consultation with the Public Works Director, the information contained in the Draft EIR in its current form is appropriate.

15K. See Response to Comment No. 15G.

15L. Although comments provided by LSA Associates is consistent with the City's Agreement with the Colonies Crossroads regarding provision of a satellite police facility, Mitigation Measure 5.9-2b in its current form is appropriate. A Project condition of approval will clarify the issue of rent and tenant improvements.

15M. The Development Agreement clarifies the payment of water fees. Although Mitigation Measure 5.9-8b is correct in its current form, the Mitigation Measure shall be clarified in the Final EIR to be consistent with the terms of the Development Agreement as follows:

> Owner will pay a Water Fee to the City for water wells that the City will provide for supply of water under the following schedule:
>
> (1) At the time of issuance of building permit(s) for the Project, a water impact fee equal to $0.60 (sixty cents) per square foot of commercial building area will be paid, and
>
> (2) At the time of issuance of any building permit(s) for residential dwellings at the Project, excluding dwellings within Tracts Nos. 14984, 15927 and 15928, a water impact fee equal to $690.00 will be paid.

15N. Although Mitigation Measures Nos. 5.9-8b and 5.9-8c appear to have some redundancy in terms of off-site improvements, the City of Upland intends for Mitigation Measure No. 5.9-8c to address all off-site transmission and pumping improvements that may be required, which may differ from Mitigation Measure No. 5.9-8b, which focuses specifically on Zone III. Thus, Mitigation Measure No. 5.9-8c is applicable and has not been modified.

RECEIVED JUL 2 9 2002

COMMENT NO. 16

Donna McClenahan
1662 Garland Ct.
Upland, CA 91784
909-948-0049
dmcclenahan@adelphia.net

Community Development Department and Upland Planning Commissioners
460 N. Euclid Ave.
Upland, CA 91786

Re: Individual response to The Colonies EIR

Dear Planning Commissioners and other interested parties;

Let me begin by saying I am a new Upland resident having moved here late in August 2001. Since that time I have not receive any notices for community or public meetings until July 19th, which unfortunately was, *three* days after the public meeting held on July 16th. I'm sure many of my questions would have been answered had I been given the opportunity to attend. Since that was not the case I had to attend the formally structured Planning Commission meeting. The NOTICE OF PUBLIC HEARING I mentioned above also indicated its purpose would be "For Colonies at San Antonio Specific Plan and EIR." This was not the case since the committee conducted at least six other typical agenda items for miscellaneous permits, variances, and so forth, before addressing the stated reason [on the announcement] for the hearing in the first place -- NOTICE OF PUBLIC HEARING "For Colonies at San Antonio Specific Plan and EIR". I understand the commission has a good deal of work to accomplish; we all do. However, they seemed to slight several important issues overall and in some cases simply avoided answering specific questions or comments from the public speakers. We were all invited to read the EIR at the Public Library -- which is fine with me, but I'm told that my response must be submitted today! I do not know how long the EIR has been available, but it seems as if *the city officials put minimal effort forth* to communicate with *surrounding and other impacted residents* to even let them know the document existed, how important it is, and that they would be given an opportunity to have their views officially noted as part of the EIR. The first I learned of this deadline was at the meeting last week. Okay, enough said, my intent is to be helpful. I will list briefly the few areas of concern I have, although there may be others after I review the EIR this week. **16A**

1. Can we get an extension on the EIR deadline for public response since the city did not do an adequate job of notifying the surrounding public that the EIR was available and the deadline for response would be July 29th? **16B**
2. The 'open space' plan along the east portion of the plan should be secured to prevent graffiti, motorized vehicles [e.g., dirt bikes, etc.], groups that gather to "hang-out", and trash dumping in and along the Cucamonga canal. All of things, **16C**

with the possible exception of graffiti on the new project wall, have already taken place and *no* new Colonies residents have even moved in! Can security requirements be added as a component to the development associations, both commercial and residential? 16C

3. City review boards and Planning Commissioners should have final say regarding illuminated commercial development signage. Development agreements made by the city of Upland and the Colonies developers should seek to *minimize* the existing city standards [at the Colonies] rather than allow additional variances that would increase our existing light pollution, which will be caused by granting variances over and above the current standards in place. Even with the current standards [I feel] it may still be possible to see many of these new Colonies signs from some of our beautiful north/south streets, as well as the 10 freeway! 16D

I do want to thank all of the Upland city personnel who have already [so patiently] taken time to help me increase my understanding of this project. I look forward to working with you on future development events here and elsewhere in Upland.

Sincerely,

Donna McClenahan

Response to Comment No. 16

Donna McClenahan, Upland Resident
July 29, 2002

16A. Public notices for this project were mailed out to approximately 3,800 residents of the cities of Upland and Rancho Cucamonga in compliance with the California Environmental Quality Act (CEQA) requirements prior to the Planning Commission Hearing of July 24, 2002. The notice of public hearing was also published in the local newspaper. This public notice is in addition to the Notice of Preparation filed for the Draft EIR through the State Clearinghouse. The State Clearinghouse assigned a number (2001041048) for the EIR. A project mailing list has been established identifying the names and addresses of the residents receiving notices for this project.

The Planning Commission held a public workshop on July 16, 2002, which was also noticed. No decisions were made at the workshops but the Planning Commission obtained public testimony at the July 16, 2002 workshop.

CEQA Section 15105 identifies the public review period of a Draft EIR. The Draft EIR was sent to the State Clearinghouse on June 10, 2002 for a 45-day public comment period, which expires July 29, 2002. All comments received during this review period are being responded to as required by CEQA.

16B. Refer to Response No. 16A.

16C. The illegal trash dumping and access the comment refers to is implied to occur within the Cucamonga Creek Channel right-of-way, which is under the jurisdiction of the San Bernardino County Flood Control District. A maintenance mechanism for open space proposed within the Specific Plan area would be established as part of project development.

16D. The Upland City Council has approval authority over the proposed Specific Plan Amendment, and all development within the Specific Plan area requires City approval. Comment 16D expresses the opinion of the commentor regarding the proposed development itself, and does not raise any substantive issues regarding the adequacy of the Draft EIR. The opinions expressed in this comment will be considered by the City in its deliberations over the project.

COMMENT NO. 17

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse

Gray Davis
GOVERNOR

Tal Finney
INTERIM DIRECTOR

July 30, 2002

Sylvia Scharf
City of Upland
460 Euclid Avenue
Upland, CA 91786-4732

Subject: Colonies at San Antonio Specific Plan Amendment
SCH#: 1998051075

Dear Sylvia Scharf:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on July 29, 2002, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

17A

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts

Terry Roberts
Director, State Clearinghouse

Enclosures
cc: Resources Agency

Document Details Report
State Clearinghouse Data Base

SCH# 1998051075
Project Title Colonies at San Antonio Specific Plan Amendment
Lead Agency Upland, City of

Type EIR Draft EIR

Description The proposed project involves development of 447.8 acres located south of 20th Street, east of Campus Avenue, west of Cucamonga Creek Flood Control Channel, and north of 16th Street. The implementation of the project requires the approval of a Specific Plan Amendment (SPA-01), General Plan Amendment to the Transportation Element (GPA-00-02), amendments to Zoning Districts (ZC-00-01) and Zoning Regulations (ZA-180), Design Guidelines, a Master Tentative Tract Map, and tentative tract maps for residential areas.

Lead Agency Contact

Name Sylvia Scharf
Agency City of Upland
Phone 909 931-4100 **Fax**
email
Address 460 Euclid Avenue
City Upland **State** CA **Zip** 91786-4732

Project Location

County San Bernardino
City Upland
Region
Cross Streets Campus Avenue/16th Street
Parcel No. Multiple
Township 1N **Range** 7W **Section** 31 **Base**

Proximity to:

Highways SR 30/210
Airports
Railways
Waterways
Schools Alta Loma
Land Use Residential and Commercial with Specific Plan overlay.

Project Issues Agricultural Land; Air Quality; Archaeologic-Historic; Forest Land/Fire Hazard; Flood Plain/Flooding; Drainage/Absorption; Geologic/Seismic; Job Generation; Housing; Minerals; Noise; Public Services; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Growth Inducing; Landuse; Cumulative Effects

Reviewing Agencies Resources Agency; Department of Conservation; Department of Fish and Game, Region 6; Department of Parks and Recreation; Department of Water Resources; Office of Emergency Services; California Highway Patrol; Caltrans, District 8; Regional Water Quality Control Board, Region 8; Department of Toxic Substances Control; Native American Heritage Commission; State Lands Commission

Date Received 06/14/2002 **Start of Review** 06/14/2002 **End of Review** 07/29/2002

Response to Comment No. 17

State Clearinghouse Acknowledgement of Close of Review Period
July 30, 2002

17A. The State Clearinghouse has acknowledged that the 45-day review period has been concluded and State Agency comments have been forwarded to the City of Upland. Comments forwarded include Comment Letters Nos. 3 and 6.