Tom Dodson's Environmental Response for LAFCO 3183 and 3184 and the City of Chino Hill's Environmental Assessment and Mitigated Negative Declaration for the Fairfield Ranch Commons Project

Attachment 3

TOM DODSON & ASSOCIATES
2150 N. ARROWHEAD AVENUE
SAN BERNARDINO, CA 92405
TEL (909) 882-3612 • FAX (909) 882-7015
E-MAIL tda@tdaenv.com

May 5, 2015

RECEIVED
MAY 05 2015
LAFCO
San Bernardino County

Ms. Kathleen Rollings-McDonald
Executive Officer
Local Agency Formation Commission
215 North "D" Street, Suite 204
San Bernardino, CA 92415-0490

Dear Kathy:

LAFCOs 3183 and 3184 consist of a Sphere of Influence amendment for the Cities of Chino and Chino Hills, followed by a Reorganization with annexations for both cities. LAFCO 3183 will include a Sphere Expansion for the City of Chino Hills and a Sphere Reduction for the City of Chino. LAFCO 3184 includes a Detachment from the City of Chino and an Annexation to the City of Chino Hills. The area affected by these two actions is approximately 9,411 square feet (about 0.216 acre) located along the southwest side of Chino Creek, immediately south of Chino Hills Parkway. The basis for these proposed LAFCO actions is that the boundary between these two cities in this area was confusing and the City of Chino Hills has approved a development that requires this boundary adjustment to proceed.

The City of Chino Hills prepared an Initial Study which concluded that proposed development of the property with a mix of Business Park and Multi-family residential development would not cause any significant adverse impact, either directly or indirectly. A legal challenge was filed against the Initial Study, but this legal challenge has been resolved. The Sphere of Influence amendment and Reorganization (annexation and detachment) of the project area will facilitate the proposed development, which is not forecast to result in significant adverse environmental impacts if the proposed LAFCO actions are approved.

Based on the City's Initial Study/Negative Declaration, the Notice of Determination was filed 0n April 15, 2015, I am recommending that the Commission consider the adopted Negative Declaration as the appropriate CEQA environmental determination for LAFCOs 3183 and 3184. Thus, in accordance with the pertinent sections of CEQA and the State CEQA Guidelines, I believe it is appropriate for the Commission's CEQA environmental determination to cite the City's Negative Declaration as adequate documentation in accordance with the Commission's CEQA Responsible Agency status. Under this circumstance, I recommend that

the Commission take the following steps if it chooses to approve LAFCOs 3183 and 3184, acting as a CEQA Responsible Agency:

1. Indicate that the Commission staff and environmental consultant have independently reviewed the City of Chino Hills' Initial Study and Negative Declaration and the analysis in this document is adequate for the Sphere and Reorganization decisions.

2. The Commission needs to indicate that it has considered the Negative Declaration, and environmental effects, as outlined in the Initial Study, prior to reaching a decision on the proposed Sphere expansion and Reorganization and finds the information substantiating this environmental document adequate for its decisions. Even though the Sphere and Reorganization decisions were not anticipated in the Initial Study, the proposed use on the whole site, including the 9,411-acre area was fully evaluated. Thus, I conclude and recommend that the environmental findings regarding the physical changes to the environment are comprehensive and address the effects related to LAFCOs 3183 and 3184.

3. The Commission should indicate that it does not intend to adopt alternatives or mitigation measures for this project. No mitigation measures were required in the Initial Study/Negative Declaration for the LAFCO actions.

4. File a Notice of Determination for this action as a Responsible Agency because the Commission is relying on the Initial Study/Negative Declaration as a CEQA Responsible Agency.

If you have any questions regarding these recommendations, please feel free to give me a call.

Sincerely,

Tom Dodson

Tom Dodson

DATE FILED & POSTED
Posted On: 4.15.15
Removed On: 5.27.15
Receipt No: 36-2015238

City of Chino Hills

14000 City Center Drive
Chino Hills, CA 91709
(909) 364-2600
www.chinohills.org

NOTICE OF DETERMINATION

TO:

☒ Office of Planning and Research
For U.S. Mail: P.O. Box 3044 Sacramento, CA 95812-3044
Street Address: 1400 Tenth Street Sacramento, CA 95814

☒ Clerk of the Board of Supervisors
County of San Bernardino
385 North Arrowhead Avenue
San Bernardino, California 92415

FROM:

City of Chino Hills
14000 City Center Drive
Chino Hills, CA 91709
Contact: Jerrod Walters
Phone: 909-364-2753

CLERK OF THE BOARD OF SUPERVISORS
2015 APR 15 AM 8:08
COUNTY OF SAN BERNARDINO CALIFORNIA

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): **2014101023**

Project Title: **Fairfield Ranch Commons**

Project Applicant: Turner Real Estate Investments, 1500 Quail Street, Suite 150, Newport Beach, CA 92660

Project Location: Northeast corner of Fairfield Ranch Road and Monte Vista Avenue and east of SR-71 in the City of Chino Hills, County of San Bernardino.

Project Description: The 36.92-acre Fairfield Ranch Commons Project consists of two separate components: 1) a 17.37-acre, 326,641-square foot industrial business park; and 2) a 14.73-acre, 346-unit multifamily residential development. The Project consists of a General Plan Amendment to change the residential component from Business Park to Very High Density Residential; a Housing Element Amendment to incorporate the residential component into the Housing Element to satisfy the City's RHNA housing unit obligations; a Zone Change for the residential component to be rezoned from Business Park (BP) to Very High Density Residential (RM-3); a development agreement which provides vested rights to the developer and includes a monetary contribution to the City to be utilized for whatever public purpose the City deems appropriate; a Tentative Parcel Map to subdivide the project site into four parcels; a Site Plan Review; and Variances to reduce required landscape requirements, increase building and wall heights.

City Council: Art Bennett ▪ Ed M. Graham ▪ Ray Marquez ▪ Cynthia Moran ▪ Peter J. Rogers

This is to advise that the City of Chino Hills, Lead Agency, has approved the above described project on April 14, 2015 and has made the following determinations regarding the above described project:

1. The project ☐ will ☒ will not have a significant effect on the environment.

2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.

   ☒ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.

3. Mitigation measures ☒ were ☐ were not made a condition of the approval of the project.

4. A mitigation reporting or monitoring plan ☒ was ☐ was not adopted for this project.

5. A statement of Overriding Considerations ☐ was ☒ was not adopted for this project.

6. Findings ☒ were ☐ were not made pursuant to the provisions of CEQA.

This is to certify that the Negative Declaration with comments and responses and record of project approval is available to the General Public at: City of Chino Hills, Community Development Department, 14000 City Center Drive, Chino Hills, CA 91709.

Signature: _____ Title: City of Chino Hills Senior Planner

Date: April 14, 2015 Date Received for filing at OPR: _____

Authority cited: Section 21083, Public Resources Code.
Reference: Sections 21000-21174, Public Resources Code.

DRAFT INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

FOR

FAIRFIELD RANCH COMMONS

CHINO HILLS, CALIFORINA

Prepared for:

City of Chino Hills
Community Development Department
14000 City Center Drive
Chino Hills, CA 91709
Telephone: (909) 364-2753

Prepared by:

UltraSystems Environmental Inc.
16431 Scientific Way
Irvine, CA 92618-4355
Telephone: 949.788.4900
FAX: 949.788.4901

October 2014

PROJECT INFORMATION SHEET

1. Project Title	Fairfield Ranch Commons
2. Lead Agency and Address	City of Chino Hills 14000 City Center Drive Chino Hills, CA 91709
3. Contact and Phone Number	Jerrod Walters, Senior Planner Community Development Department (909) 364-2753
4. Project Location	Northeast corner of Monte Vista Avenue and Fairfield Ranch Road
5. Assessor's Parcel Number	1021-591-08
6. Project Applicant	Turner Real Estate Investments 1500 Quail Street Suite 150 Newport Beach, CA 92660
7. Project Site General Plan Designation	Business Park
8. Project Site Zoning Designation	Business Park
9. Surrounding Land Uses and Setting	As shown in **Figure A**, Project Location**,** and **Figure B,** Regional Overview, the project site is located in the City of Chino Hills within a transitional setting containing a mix of land use types. Within the City of Chino, the Carbon Canyon Water Recycling Facility (CCWRF) and other industrial uses are located to the north and east opposite the Chino Creek Channel. Within the City of Chino Hills, vacant land designated for Business Park (BP) and zoned as Light Industrial (LI) is found to the south, and the BAPS Shri Swaminarayan Mandir temple is located to the southwest. A residential use, the Monte Vista Mobile Home Park, is on the west.
10. Description of Project	The project applicant is requesting approval of Site Plan Review 14SPR02 for development of the Fairfield Ranch Commons, which consists of 346 very high density residential apartment

units on 14.73 acres and a 326,641-square foot industrial park (3 buildings) on 17.37 acres. Tentative Parcel Map 19539 would subdivide one parcel into 4 parcels (1 parcel for residential development and 3 parcels for the industrial business park). General Plan Amendment 14GPA01 to change the land use designation for the 14.73-acre residential development from Business Park to Very High Density Residential. The General Plan Amendment also includes a Housing Element Amendment to transfer 346 Very High Density Residential Units from the Tres Hermanos Site A to the project site. Zone Change 14ZC01 would change the zoning designation from BP (Business Park) to RM-3 (Very High Density Residential) for the 14.73 acre-residential development; however, the Business Park designation would be retained on the south 17.37-acre portion of the site. The project also includes a Development Agreement. Concurrent with the project, the City is undertaking Local Agency Formation Commission (LAFCO) proceedings to annex 9,360 square feet of land located in the jurisdiction of the City of Chino. This land is adjacent to the right-of-way of the Chino Creek Flood Control Channel positioned between the existing City of Chino Hills' limit line and west of the Chino Creek Channel.

11. Other Public Agencies whose Approval is Required

- Chino Valley Independent Fire District
- San Bernardino Local Agency Formation Commission
- San Bernardino County Flood Control District
- Inland Empire Utility Agency Regional Technical Committee
- Santa Ana Regional Water Quality Control Board
- South Coast Air Quality Management District

Figure A
PROJECT LOCATION

Document Path: J:\Projects\5937_Fairfield_Ranch_Commons\MXDs\General\5937_Fairfield_Ranch_Commons_Project_Location_Map_2014_07_10.mxd

July 10, 2014

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community, National Geographic, Esri, DeLorme, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp., Esri, HERE, DeLorme, TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS user community; San Bernardino County, 2014; UltraSystems Environmental, Inc., 2014

Scale 1:12,000

N

0 1,000 2,000 Feet

0 250 500 Meters

Legend

- Project Location
- Project Boundary
- City Boundary

Fairfield Ranch Commons

Project Location

UltraSystems environmental management planning

Figure B
REGIONAL OVERVIEW

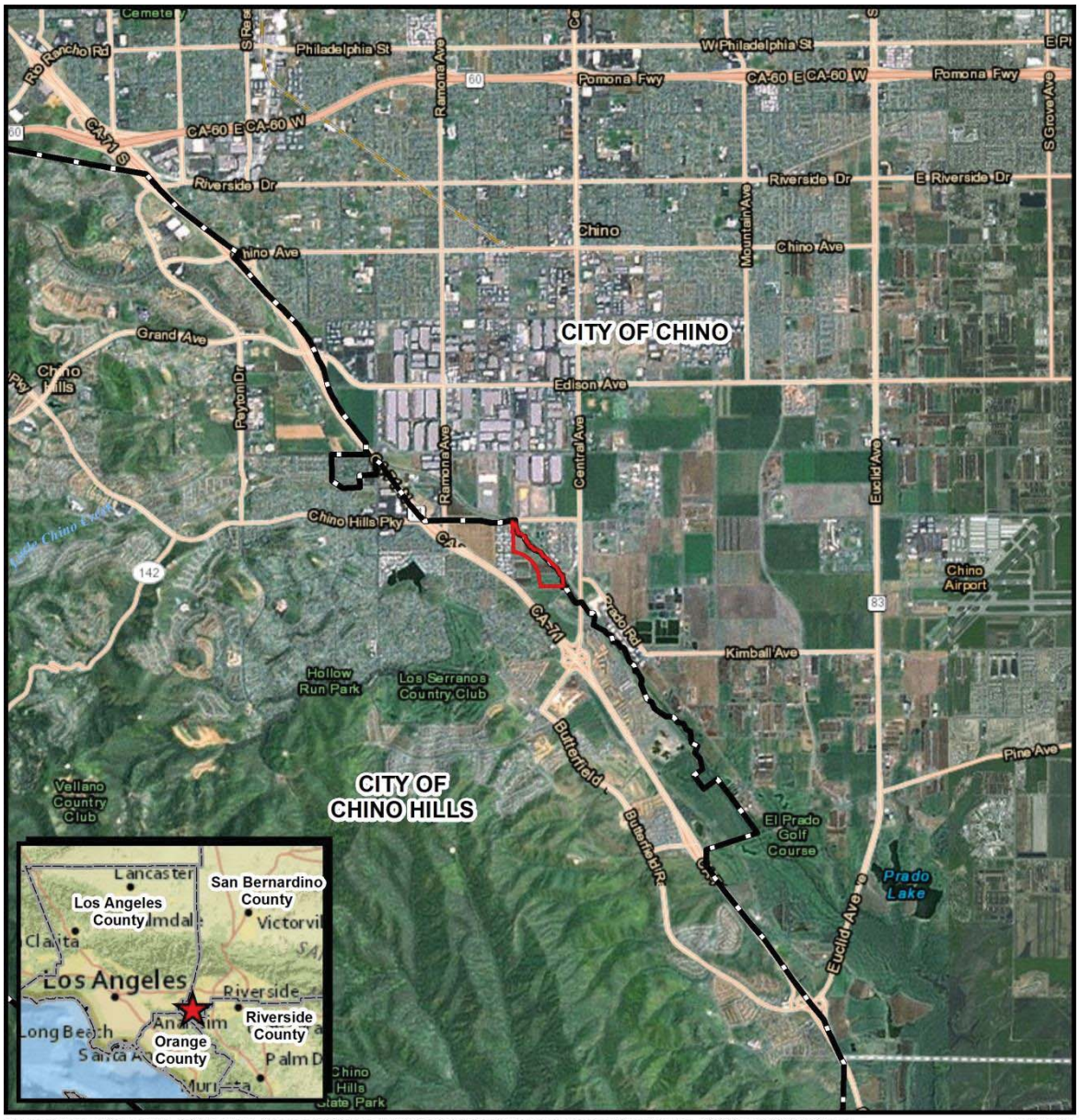


TABLE OF CONTENTS

TABLES

FIGURES

APPENDICES

ACRONYMS AND ABBREVIATIONS

∅	phase
§	Section
AB	Assembly Bill
AB 939	California Integrated Solid Waste Management Act
ADA	Americans with Disabilities Act
AF	acre-feet
AFY	acre-feet per year
APE	Area of Potential Effect
APN	Assessor's parcel number
BGEPA	Bald and Golden Eagle Protection Act
BMPs	best management practices
BP	Business Park (City of Chino Hills zoning district)
BSA	Biological Study Area
CA MUTCD	California Manual on Uniform Traffic Control Devices
CACLUP	Chino Airport Comprehensive Land Use Plan
CAL-FIRE	California Department of Forestry and Fire Protection
Cal-OSHA	California Occupational Safety and Health Administration
CASQA	California Stormwater Quality Association
CBC	California Building Code
CCWRF	Carbon Canyon Water Recycling Facility
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFS	cubic feet per second
CHMC	Chino Hills Municipal Code
City	City of Chino Hills
CIWMP	Countywide Integrated Waste Management Plan
CMP	Congestion Management Plan
CNDDB	California Natural Diversity Database
Corps	United States Army Corps of Engineers
County	County of San Bernardino
CRHR	California Register of Historical Resources
CWA	Clean Water Act
d/u	dwelling units
DAMP	Drainage Area Management Plan
DSOD	Department of Water Resources Division of Safety of Dams
DTSC	Department of Toxic Substances Control
du/acre	dwelling units per acre
EDR	Environmental Data Resource
EIR	Environmental Impact Report
EOP	Emergency Operation Plan
ESA	Environmental Site Assessment

E-waste	Household Hazardous, Electronic
FAR	floor area ratio
FEMA	Federal Emergency Management Area
FHSZ	Fire Hazard Severity Zone
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
G1	General Industrial Land Use District (City of Chino)
GIS	Geographic Information System
gpd	gallons per day
GPS	Global Positioning System
HCP	Habitat Conservation Plan
HRA	health risk assessment
IEUA	Inland Empire Utilities Agency
IS	Initial Study
LAFCO	Local Agency Formation Commission
LED	light-emitting diode
LI	Light Industrial (City of Chino Hills zoning district)
LOS	level of service
LRA	Local Responsibility Areas
LUST	leaking underground storage tank
M2	General Industrial (City of Chino zoning district)
MBTA	Migratory Bird Treaty Act
MEP	maximum extent practicable
MLD	most likely descendant
MND	Mitigated Negative Declaration
MS-4 Permit	NPDES Municipal Separate Storm Sewer System Discharge Permit
msl	above mean sea level
NAHC	Native American Heritage Commission
NB	northbound
NCCP	Natural Community Conservation Plan
ND	Negative Declaration
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
OEHHA	Office of Environmental Health Hazard Assessment
OSHA	Occupational Safety and Health Administration
PCE trips	passenger car trip equivalents
PEIR	Programmatic Environmental Impact Report
PRC	Public Resources Code
RCRA	Resource Conservation and Recovery Act
RM-2	High Density Residential
RM-3	Very High Density Residential
RP-2	Regional Plant No.2

RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SANBAG	San Bernardino Associated Governments
SARWQCB	Santa Ana Regional Water Quality Control Board
SB	southbound
SBAIC	San Bernardino Archaeological Information Center
SBTAM	San Bernardino Traffic Analysis Model
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SFHAs	Special Flood Hazard Areas
SR-60	State Route 60
SR-71	State Route 71
SRA	State Responsibility Areas
Staff Report	Staff Report on Burrowing Owl Mitigation
SWIS	Solid Waste Information System
SWMD	County of San Bernardino Department of Public Works, Solid Waste Management Division
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TPM	Tentative Parcel Map
USD	unified school district
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
USTs	underground storage tanks
UWMP	Urban Water Management Plan
UWMPA	Urban Water Management Planning Act
V/C	volume-to-capacity
WEAP	Worker Environmental Awareness Program
WQC	water quality certification
WQMP	Water Quality Management Plan

EXECUTIVE SUMMARY

This Initial Study and Mitigated Negative Declaration (IS/MND) is prepared in accordance with the requirements of the California Environmental Quality Act (CEQA) to evaluate potential environmental impacts associated with the construction and operation of the proposed Fairfield Ranch Commons project in the City of Chino Hills, California. The City of Chino Hills is the Lead Agency under CEQA because the City has the principal responsibility and discretionary authority for implementing and approving the project.

Overview of Proposed Project

The project applicant is requesting approval through Site Plan Review 14SPR02 for development of the Fairfield Ranch Commons ("proposed project"). The proposed project site is a 36.92-acre vacant lot located at the northeast corner of Monte Vista Avenue and Fairfield Ranch Road. The proposed project has two major components. The residential component consists of 346 very high density residential apartment units on 14.73 acres and the business park component consists of 326,641-square foot industrial park on 17.37 acres.

Through the subdivision process (Tentative Parcel Map 19539), the project site would be subdivided into four (4) parcels. Parcels 1, 2 and 3 (17.37 acres) includes the business park component of the project, and Parcel 4 (14.73 acres) includes the residential component of the project. The remaining 4.82 acres (Lot A and B) are within the existing Chino Creek Channel.

The following table summarizes the two major components of the proposed project.

PROJECT COMPONENT OVERVIEW

Component	Description	Parcel and Acreage	Zoning Designation	General Plan Land Use
Multi-Family Residential (Apartment Community)	▪ 18 residential buildings (346 apartment units); ▪ Clubhouse (4,077 square feet) and; ▪ Maintenance Building (563.4 square feet)	TPM 19539, Parcel 4 14.73 acres	Existing: Business Park (BP) Proposed: Very High Density Residential (RM-3)	Existing: Business Park Proposed: Very High Density Residential
Business Park	▪ 3 buildings (326,641 square feet)	TPM 19539 – Parcels 1, 2, and 3 17.37 acres	Existing: Business Park (BP) Proposed: Business Park	Existing: Business Park Proposed: Business Park

The entire project site is currently designated and zoned as Business Park (BP). The project proposes to amend the General Plan Land Use designation of approximately 14.73 acres of the 36.92-acre project site from Business Park to Very High Density Residential to allow for the

development of 346 residential units. The General Plan Amendment 14GPA01 would include a Housing Element Amendment to transfer 346 Very High Density Residential Units from Tres Hermanos Site A to the project site. The transfer of 346 Very High Density Residential Units from Tres Hermanos Site A to the project site is in compliance with Measure U as the transfer of units does not increase the total number of residential units allowed on the properties involved in the transfer. A Zone Change 14ZC01 would change the zoning for the residential component from Business Park (BP) to Very High Density Residential (RM-3), and Business Park designation on the south portion of the site would be retained for the business park component.

The City of Chino Hills has undertaken Local Agency Formation Commission proceedings to annex 9,360 square feet of assessor's parcel number (APN) 1021-551-03, which is located in the jurisdiction of the City of Chino and owned by William and Albertus Van Klaveren. The 9,360 square feet of land is adjacent to the right-of-way of the Chino Creek Flood Control Channel positioned between the existing City of Chino Hills's limit line and west of the Chino Creek Channel.

In addition to the annexation of land, the City would enter into a development agreement with the project applicant to provide public benefits from the project beyond those that the City could otherwise require through the normal land use entitlement process.

Initial Study

The Initial Study (IS) was completed according to CEQA requirements, and evaluated the following:

- Aesthetics
- Agricultural & Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems

Based on the IS, potential adverse significant environmental effects to air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, noise, transportation and traffic were identified.

Mitigated Negative Declaration

Mitigation measures have been incorporated into the project to effectively minimize the potentially significant environmental impacts identified in the IS. Implementation of these mitigation measures would avoid or reduce impacts to less than significant levels, and no further environmental review is necessary. Mitigation measures required to reduce potential impacts are listed below.

<u>Air Quality</u>

AQ-1: Watering of Exposed Areas
AQ-2: EPA-Approved Construction Equipment
AQ-3: Use of Project Landscape Equipment
AQ-4: No Fireplaces or Hearths

AQ-5: 100% Reclaimed Water for Irrigation
AQ-6: Odor Disclosure Relating to Business Park
AQ-7: Odor Disclosure Relating to Wastewater Treatment Plant

Biological Resources
BR-1: Pre-Construction Breeding Bird Survey
BR-2: Pre-Construction Burrowing Owl Surveys
BR-3: Project Limits and Designated Areas
BR-4: Worker Environmental Awareness Program (WEAP)
BR-5: Biological Monitor
BR-6: General Vegetation and Wildlife Avoidance and Protection
BR-7: Construction Best Management Practices
BR-8: Wildlife Corridors and Native Open Space Mitigation

Cultural Resources
CR-1: Cultural Monitoring
CR-2: Discovery of Human Remains

Geology and Soils
GS-1: Site Preparation and Grading
GS-2: Certified Soils Engineer

Greenhouse Gas Emissions
GG-1: Use of Project Landscape Equipment (same as AQ-3)
GG-2: No Fireplaces or Hearths (same as AQ-4)
GG-3: 100% Reclaimed Water for Irrigation (same as AQ-5)

Noise
NO-1: Construction Hours
NO-2: Operating Construction Equipment
NO-3: Local Resident Complaints
NO-4: Temporary Shields and Noise Barriers
NO-5: Short-term Noise Exposure Measuring
NO-6: Residential Windows

Transportation and Traffic
TR-1: Monte Vista Avenue (S) at Chino Hills Parkway
TR-2: Central Avenue at El Prado Road
TR-3: Central Avenue at Fairfield Ranch Road
TR-4: Pipeline Avenue at Chino Hills Parkway
TR-5: Monte Vista Avenue (S) at Chino Hills Parkway (same as TR-1)
TR-6: Central Avenue at Chino Hills Parkway
TR-7: Central Avenue at El Prado Road (same as TR-2)
TR-8: Central Avenue at Fairfield Ranch Road
TR-9: SR-71 Northbound Ramps at Central Avenue
TR-10: SR-71 Southbound Ramps at Soquel Canyon Parkway

TR-11: Pipeline Avenue at Chino Hills Parkway
TR-12: Monte Vista Avenue (S) at Chino Hills Parkway (same as TR-1)
TR-13: Central Avenue at Chino Hills Parkway (same as TR-6)
TR-14: Central Avenue at El Prado Road
TR-15: Central Avenue at Fairfield Ranch Road (same TR-8)
TR-16: SR-71 Northbound Ramps at Central Avenue (same as TR-9)
TR-17: Central Avenue at Eucalyptus Avenue

A detailed listing of mitigation measures are provided in a CEQA-required Mitigation Monitoring and Reporting Program (MMRP) that will be formally adopted by the City of Chino Hills City Council prior to project implementation. The MMRP can be found in Chapter 6.0 of this document.

1.0 INTRODUCTION

1.1 Project Overview

The Fairfield Ranch Commons project includes construction of 346 very high density residential units and a 326,641-square foot business park on a 36.92-acres site in the City of Chino Hills (City), California. The residential use would consist of 20 wood frame buildings on 14.73 acres of the project site. The 17.37-acre business park would allow light industrial, retail, office, or other commercial development. The remaining 4.82 acres would consist of Lot A and Lot B, which are for the existing Chino Creek Channel.

1.2 Purpose and Legal Authority

The City of Chino Hills is the Lead Agency for this project pursuant to the California Environmental Quality Act (CEQA)[1] and implementing regulations[2]. The Lead Agency has the principal responsibility for implementing and approving a project that may have a significant effect on the environment.

The purpose of an Initial Study (IS) under § 15063(c) of the CEQA Statute and Guidelines (CEQA Guidelines) is to:

- Evaluate the significance of environmental impacts associated with the project.
- Provide the Lead Agency with information necessary to decide if an Environmental Impact Report (EIR), Negative Declaration (ND), or Mitigated Negative Declaration (MND) should be prepared.
- Enable an applicant or Lead Agency to modify a project to mitigate adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a ND or MND.
- Assist in the preparation of an EIR, if required, by focusing the EIR on adverse effects determined to be significant, identifying the adverse effects determined not to be significant, explaining the reasons for determining that potentially significant adverse effects would not be significant, and identifying whether a program EIR, or other process, can be used to analyze adverse environmental effects of the project.
- Facilitate an environmental assessment early during project design.
- Provide documentation in the ND or MND that a project would not have a significant effect on the environment.
- Eliminate unnecessary EIRs.
- Determine if a previously prepared EIR could be used for the project.

In cases where no potentially significant impacts are identified, the Lead Agency may issue a ND, and no mitigation measures would be needed. Where potentially significant impacts are identified,

[1] CEQA Guidelines § 21067.
[2] Public Resources Code § 21000 - 21177 and California Code of Regulations Title 14, Division 6, Chapter 3.

the Lead Agency may determine that mitigation measures would adequately reduce these impacts to less than significant levels. The applicant or Lead Agency would then prepare a MND for the proposed project. If the Lead Agency determines that individual or cumulative effects of the proposed project would cause a significant adverse environmental effect that cannot be mitigated to less than significant levels, then the Lead Agency would require an EIR to further analyze these impacts.

1.2.1 Responsible & Trustee Agencies

Other public agencies are provided the opportunity to review and comment on the IS/MND. Each of these agencies is described briefly below.

- A Responsible Agency (CEQA Guidelines § 15381) is a public agency, other than the Lead Agency, that has discretionary approval power over the project, such as permit issuance or plan approval authority.

- A Trustee Agency[3] (CEQA Guidelines § 15386) is a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California.

- Agencies with Jurisdiction by Law (CEQA Guidelines § 15366) are local agencies that border the jurisdiction of the project site, or public agencies, other than Trustee Agencies, that exercise authority over resources that may be affected by the project.

Trustee and Agencies with Jurisdiction by law do not have legal authority to approve or implement the project.

1.3 Requirements

Section 15063(d) of the CEQA Guidelines identifies the following specific disclosure requirements for an IS.

- A description and the location of the project.

- A description of the environmental setting.

- An assessment of environmental effects by use of a checklist, matrix, or other method.

- A discussion of measures to mitigate significant adverse environmental effects, if any.

- An examination of existing zoning, plans and other land use controls that apply to the project.

- The names of persons that participated in the preparation of the document.

---

[3] The four Trustee Agencies in California listed in CEQA Guidelines § 15386 are California Department of Fish and Wildlife, State Lands Commission, State Department of Parks and Recreation, and University of California.

1.4 Impact Terminology

The following terminology is used to describe the level of significance of potential impacts:

- A finding of ***no impact*** is appropriate if the analysis concludes that the project would not affect the environment in any way.

- An impact is considered ***less than significant*** if the analysis concludes that the project would cause no substantial adverse change to the environment and requires no mitigation.

- An impact is considered ***less than significant with mitigation incorporated*** if the analysis concludes that the project would cause no substantial adverse change to the environment with the inclusion of environmental commitments, or other enforceable measures, that would be adopted by the applicant.

- An impact is considered ***potentially significant*** if the analysis concludes that the project could have a substantial adverse effect on the environment.

An EIR is required if an impact is identified as ***potentially significant***.

1.5 Incorporation by Reference

The following documents are incorporated into this IS/MND by reference.

- City of Chino Hills General Plan (1994 and 2014 Proposed General Plan Update). The City of Chino Hills General Plan is a policy document designed to give long range guidance for decision-making affecting the future character of the City planning area. It represents the official statement of the community's physical development as well as its economic, social, and environmental goals. The General Plan was utilized throughout this Initial Study as the fundamental planning document governing development on the project site.

- Program Environmental Impact Report, City of Chino Hills General Plan. A Draft Program EIR was prepared for the City of Chino Hills General Plan Update. The Program EIR evaluates the potential individual and cumulative environmental effects associated with buildout of the General Plan including both direct (primary) and indirect (secondary) impacts that might occur throughout buildout. This environmental document references both the Draft 2014 General Plan Update and its Draft Program EIR, as well as the City's adopted General Plan.

- City of Chino Hills Zoning Code. The City of Chino Hills Municipal Code establishes the basic regulations under which land is developed and utilized. This includes allowable uses, building setback requirements, and other development standards. Pursuant to state law, the zoning ordinance must be consistent with the General Plan. The basic intent of the code is to promote and protect the public health, safety, convenience, and welfare of present and future citizens of the City.

1.6 Organization of Initial Study/Mitigated Negative Declaration

This IS/MND is organized to satisfy CEQA requirements, and includes findings that no significant environmental impacts would occur when proposed mitigation measures are adopted. The IS/MND includes the following sections:

- Chapter 1*, Introduction*, which identifies the purpose and scope of the IS/MND.
- Chapter 2, *Project Description*, which provides an overview of the project objectives, a description of the proposed development, project phasing during construction, and discretionary actions for the approval of the project.
- Chapter 3, *Environmental Checklist*, which presents checklist responses for each resource topic to identify and assess impacts associated with the proposed project, and proposes mitigation measures, where needed, to render potential environmental impacts less than significant, where feasible.
- Chapter 4, *References*, which includes a list of documents cited in the IS/MND.
- Chapter 5, *List of Preparers*, which identifies technical specialties of persons that participated in the preparation of the IS/MND.
- Chapter 6, *Mitigation Monitoring and Reporting Program*, which includes a detailed list of project-related mitigation measures that will be formally adopted by the City of Chino Hills City Council prior to project implementation.

Technical studies and other documents, which include supporting information or analyses used to prepare the IS/MND, are included in the appendices.

1.7 Certification

Prior to project approval, Responsible Agencies, Trustee Agencies, Agencies with Jurisdiction by Law, and the public are provided 30 days to review and comment on the IS/MND. Approval of the proposed project by the Lead Agency is contingent on certification of the IS/MND after considering agency and public comments. By certifying the IS/MND, the Lead Agency is proclaiming that the IS/MND was reviewed and considered by the City, represents the independent judgment of the Lead Agency, and that the IS/MND complies with CEQA.

2.0 PROJECT DESCRIPTION

2.1 Project Summary

The applicant is requesting approval through Site Plan Review 14SPR02 for development of the Fairfield Ranch Commons, which consists of 346 very high density residential apartment units on 14.73 acres and a 326,641-square foot industrial park (3 buildings) on 17.37 acres. As shown in **Figure 2.0-1** and **Figure 2.0-2**, the project site is designated Business Park and zoned BP (Business Park). The project proposes to amend the General Plan designation and change the zoning for the proposed 14.73-acre residential development to RM-3 (Very High Density Residential) and retain the Business Park designation on the south portion of the site (see **Figure 2.0-3**).

Concurrent with the project, the City of Chino Hills is undertaking Local Agency Formation Commission (LAFCO) proceedings to annex a 9,360-square foot portion of APN 1021-551-03 owned by William and Albertus Van Klaveren that is located within the jurisdiction of the City of Chino. The 9,360-square foot piece of land is adjacent to the right-of-way of the Chino Creek Flood Control Channel positioned between the existing City of Chino Hills's limit line and west of the Chino Creek Channel (see **Figure 2.0-4)**. The major project components are shown in **Table 2.0-1, Project Overview.**

Table 2.0-1
PROJECT OVERVIEW

Component	Description
Project Site	36.92 acres
Residential	14.73 acres **(Parcel 4)**
	3.80 acres of building • 18 residential buildings • Clubhouse • Maintenance building 2.38 acres of private and common usable open space 5.09 acres of landscaping
City of Chino	9,360 square feet annexed from the City of Chino and acquired by City of Chino Hills
Business Park	17.37 acres **(Parcel 1, 2, and 3)**
	326,641 square feet of building floor space • Building 1 (Parcel 1) – 120,516 square feet • Building 2 (Parcel 2) – 106,005 square feet • Building 3 (Parcel 3) – 100,120 square feet 99,670 square feet of open space and landscaping
Chino Creek	
City of Chino Hills	4.82 acres of creek currently in the City of Chino Hills (Lots A and B of TPM 19539)

Figure 2.0-5, **Conceptual Site Plan**, depicts the layout of roadways and proposed buildings. Each use is described below.

2.1.1 Apartment Community

The residential project component is proposed on one parcel (Parcel 4 of TPM 19539), which represents the northern 14.73 acres of the project site. The apartment community would consist of 20 wood frame buildings oriented around a centrally located clubhouse/leasing office. As shown in **Table 2.0-2, Apartment Community Summary**, unit types would include one, two, and three bedrooms; some would have attached garages. A recreation area located at the clubhouse would serve as a community center. Community amenities would include an indoor gym, pool and spa, outdoor sports court, landscaped courtyard with fountain, outdoor kitchen with barbeque and outdoor dining area with fireplace.

Table 2.0-2
APARTMENT COMMUNITY SUMMARY

Use	Quantity	Footprint/Area (Square Feet)
Residential Dwelling Units		
One Bedroom:	156	
Two Bedroom:	172	
Three Bedroom:	18	
Total:	346	165,313
Leasing/Recreation	-	
Parking		
Resident Spaces:	686	
Guest Spaces	190	
Total:	876	
Hardscaping	-	51,300
Landscaping	-	*222,020

Source: Site Plan dated August 20, 2014, Conceptual Landscape Plan dated August 20, 2014

* Includes recreational space

The apartment buildings are designed in a contemporary architectural style incorporating balconies and projections along the building exterior to create visual relief. As shown in **Figure 2.0-6**, **Apartment Community Building Elevations** and **Figure 2.0-7**, **Apartment Community Building Elevation Detail**, siding material consists of concrete roof tile; metal railing; vinyl windows; stucco; decorative tile, grille, and chimney; and foam corbel. Maximum building height would be 42 feet and mechanical equipment will be ground mounted and shielded from view through landscaping and mechanical equipment screens.

2.1.2 Business Park

Parcels 1, 2, and 3 totaling a combined 17.37 acres are planned for business park use, including warehouse and office spaces. See **Table 2.0-3, Business Park Summary**, for a breakdown of uses by type. The project proposes to develop three concrete tilt up structures ranging from 100,120 to 120,516 square feet each in size. As shown in **Figure 2.0-8**, **Business Park Building Elevations** and **Figure 2.0-9**, **Business Park Building Elevation detail**, siding material would include

concrete and metal. According to the project applicant, no specific tenants[1] have been identified at this time to occupy the three warehouse/industrial buildings. The warehouse/industrial buildings are intended to be occupied by import/export distribution or light manufacturing users because the Business Park zoning designation allows nonresidential uses, generally encompassing light industrial, retail, office, and other commercial development.[2]

Table 2.0-3
BUSINESS PARK SUMMARY

Use	Parcel 1/ Building 1	Parcel 2/ Building 2	Parcel 3/ Building 3	Total Area (Square Feet)
In Square Feet	300,128	251,341	205,168	756,637
In Acres	6.89	5.77	4.71	17.37 acres
Building Area				
Warehouse:	108,516	97,005	90,120	295,641
Mezzanine:	-	-	5,000	5,000
Office:	12,000	9,000	5,000	26,000
Total Building Footprint:	120,516	106,005	100,120	326,641
*Parking Stalls:	149	154**	132***	435
Total Parking				80,630
Streets				147,130
Landscaping (includes 3 retention basins)	39,250	34,550	25,870	99,670

Source: Site Plan dated August 20, 2014, Preliminary Landscape Plan dated August 20, 2014.

*Based on 9 feet x 19 feet dimensions

** Building 2 includes eleven semi-truck parking stalls

*** Building 3 includes one compact parking stall

2.1.3 Access

The primary access for the residential parcel would be through two gated entrances, one on Monte Vista Avenue (Driveway No.1) and one on Fairfield Ranch Road (Driveway No.2). Both vehicle entrances would provide full vehicle movement with left in, right in, left out and right out turning movements. Striping of Monte Vista Avenue at Driveway No. 1 would occur to provide a separate southbound left-turn lane with a minimum storage of 100-feet. All necessary pavement markings and signs associated per City of Chino Hills Standard Design Guidelines and California Manual on Uniform Traffic Control Devices would be installed. The project also includes a leasing office guest parking lot in front of the clubhouse that is accessible from Fairfield Ranch Road.

1 For purposes of the analysis, industrial uses were assumed as they generate the greatest impact potential.

2 City of Chino Hills Development Code Section 16.14.020 Permitted uses, accessory uses, temporary uses, and conditional uses.

The business park would be accessed through four points along Fairfield Ranch Road. All four vehicle entrances would provide full vehicle movement with left in, right in, left out and right out turning movements. All driveways would be designed and landscaped to provide clear sight lines of oncoming traffic and pedestrians consistent with the City Development Code Section 16.06.080.

Project development includes improvements for Monte Vista Avenue and Fairfield Ranch Road along the project frontage to ultimate half-section width. Monte Vista Avenue would be improved per the City of Chino Hills "Collector" street standards with a 44-foot paved width within a 66-foot right-of-way, to include sidewalk and/or landscaping, per the City of Chino Hills standards/requirements. For Fairfield Ranch Road, improvements would follow the City of Chino Hills "Secondary Highway" street standards with a 64-foot paved width within an 88-foot right-of-way, to include sidewalk and/or landscaping, per the City of Chino Hills standards/requirements.

2.1.4 Parking

The apartment community would provide 876 surface parking spaces for apartment residents, guests and employees. Parking types would include attached garage, open stall, tandem, and carports. The business park would provide 435 surface parking spaces for employees and visitors. Parcel 2/Building 2 is proposing eleven (11) semi-truck parking stalls and Parcel 3/Building 3 is proposing one (1) compact parking stall. **Table 2.0-4** provides a summary of the proposed parking types for the apartment and business park components.

Table 2.0-4
PARKING TYPES

Apartment	**Total: 876 spaces**
Residential Parking	686
Garage	215 (includes 5 spaces for handicap)
Open Stall	213 (includes 5 spaces for handicap)
Carports	133 (includes 3 spaces for handicap)
Tandem	125 (includes 3 spaces for handicap)
Guest Parking	190
Open Stall	173
Leasing Open Stall	6
Postal Pick up	2
Handicap Open Stall	9
Business Park	**Total: 435 stalls***
Building 1	149
Building 2	154**
Building 3	132***

Source: Conceptual Site Plan dated August 20, 2014, Overall Site Plan dated April 29, 2014.

*Based on 9 feet x 19 feet dimensions

** Building 2 includes eleven semi-truck parking stalls

*** Building 3 includes one compact parking stall

2.1.5 Landscaping/Perimeter Treatments

The site plan incorporates residential setbacks and landscaped areas for residential uses consistent with Section 16.10.030 of the Development Code. See **Figure 2.0-10**, **Preliminary Landscape Plan**, for a depiction of project landscaping. As shown, the residential parcel would incorporate 20-foot building setbacks along Monte Vista Avenue and Fairfield Ranch Road that includes landscaping. A 10-foot building setback that is landscaped with a dense row of evergreens is planned along the eastern perimeter of the residential parcel along Chino Creek Channel, while a 12-foot-tall concrete tilt up wall, landscape setback and surface parking would buffer the apartment buildings from proposed industrial uses to the south.

The residential streetscapes would include a wall element consisting of 5-foot tubular steel with 24-inch-square stucco pilasters spaced at 50 feet on center or a solid 6-foot stucco wall with cap. Monumentation walls with community signage would be placed at the primary entrances to the residential complex.

Setbacks and landscape coverage for the business park parcels would be constructed consistent with Section 16.14.040 of the Development Code. A 25-foot building setback that includes landscaping is proposed along Fairfield Ranch Road while a 10-foot building setback that includes landscaping would extend along the southern perimeter and a 40-foot building setback that includes landscaping would extend along the eastern perimeter of the business park. A 12-foot concrete tilt up wall would form a visual buffer along the northern boundary of the business park. All landscaping and irrigation would comply with Section 16.07.010 Landscape and Water Conservation Guidelines, of the Development Code.

2.1.6 Utilities

Figure 2.0-11, **Utility Plan**, depicts the conceptual utility plan to be constructed in support of the proposed development. A description of each component is provided below.

Water

Domestic water would be supplied to the site by a network of proposed water lines ranging in diameter from six to eight inches that would connect to the existing 16-inch water line located in the Fairfield Ranch and Monte Vista road rights-of-way. Hydraulic and fire flow analysis would be completed during final design of the proposed apartment and business park structures to ensure adequate water flow at sufficient pressure and duration to meet fire code requirements. The project will be conditioned to have recycled/reclaimed water installation for all landscape irrigation for the entire project site.

Sanitary Sewer

A network of sewer laterals ranging in diameter from six to eight inches would be constructed to collect and convey effluent for treatment. The project proposes a connection with an existing 18-inch sewer main that bisects the project site. This line is owned and operated by the Inland Empire

Utilities Agency (IEUA) and connects to the Carbon Canyon Water Recycling Facility. The sewer connections for the residential portion of the project would be gravity flow while a mix of gravity flow and lift station with force main are required to convey effluent generated by the business park north to the proposed point of connection at the existing sewer easement.

Drainage

Stormwater runoff would be collected by downspouts, area drains, or catch basins where it is carried away by a network of proposed storm drain laterals ranging in size from 30 to 48 inches. The system would drain runoff to the southeast, where it would be discharged into one of four retention basins. The basins contain soft bottoms and are approximately 4 feet deep. A gravity retaining wall comprising compacted earth at a slope ranging from 2:1 to 4:1 would hold the runoff. A Water Quality Management Plan (WQMP) would be prepared as part of final engineering design to identify all the treatment and source control measures to be implemented in order to manage the quality of runoff after construction is complete and the project is occupied. The WQMP would meet relevant design specifications contained in the San Bernardino County Model WQMP and Technical Guidance Document.

Easements

The project site has several existing easements granted to public utilities (see **Figure 2.0-3**). They include an easement granted to Southern California Gas Company and Southern Counties Gas Company of California for pipelines and access. The Chino Basin Municipal Water District has an easement that runs east-west underneath proposed Parcel 4 from Fairfield Ranch Road to the Chino Creek for sewer main purposes. Along Monte Vista Avenue at the northernmost corner of the project site, Southern California Edison Company owns an ingress and egress easement. As part of the proposed project plan, these existing easements will be protected in place and not encroached upon by permanent structures or surcharge loading.

2.1.7 Exterior Lighting

Per Chapter 16.48 of the Chino Hills Municipal Code (CHMC) for Performance Standards, all exterior lighting for both (multi-family residential and light commercial) components of this project would be required to conform to CHMC Section 16.48.040 for Lights which requires that lights be shielded or not focused in illuminating adjacent properties or cause glare(s) to motorists. Additionally, the business park component of this project would be required to comply with CHMC Chapter 16.09 for Non-Residential Design Guidelines and CHMC Section 16.09.070 which establishes Lighting Guidelines. All light fixtures and illumination for the residential component of the project would be subject to Minimum Residential Design Standards in the CHMC Section 16.10.040 and Residential Design Guidelines in Section 16.10.050.

Exterior lighting proposed for the residential component of this project includes pole-mounted area light fixtures (on 20 foot poles), wall sconce fixtures, pathway bollard lighting fixtures, carport surface mounts, and LED light sources (see **Figure 2.0-12**, **Light Fixtures**). The business park component of the project proposes the use of three-types of pole mounted lighting structures (not to exceed 27'-6" tall) that would be shielded/hooded, two-types of wall-mounted sconces (at 30 feet high), and all light fixtures would utilize LED lamps.

2.1.8 Perimeter Fencing and Exterior Walls

Perimeter fencing and walls would include six feet tall splitface block wall and tubular steel fencing along the eastern portion of the project's parcel boundary for both residential and business park components. The southern boundary would continue with six feet tall tubular steel fencing. The western boundary of both components would consist of a mixture of six feet tall tubular steel fencing with 24-inch tall square decorative pilasters, and stucco walls. All residential entryways would have stucco walls, 48 inch tall decorative entry pilasters, and stucco entry monument walls. Business park buildings would comprise 12 feet tall concrete screen wall with trellis fixed atop along western access ways. The residential and business park components would be separated by a 12 feet tall concrete screen wall.

Exterior fencing and walls for the residential component would entail four feet tall tubular steel fencing (specifically for both project components), six feet tall tubular steel fencing, and stucco walls. See **Figures 2.0-13**, **Preliminary Fence and Wall Plan** and **2.0-14**, **Preliminary Fence and Wall Plan Elements** for detailed specifications of proposed dimensions and materials.

2.2 Discretionary Actions

Approvals and entitlement requests associated with this development include:

- *Annexation of Land* - The Local Agency Formation Commission (LAFCO) proceedings would annex a portion of APN 1021-551-03 (approximately 9,360 sq. ft.) of land owned by William and Albertus Van Klaveren located in the adjacent City of Chino. The area to be annexed is located adjacent to the west side of the Chino Creek Flood Control Channel right-of-way positioned between the existing City of Chino Hills' limit line and the Chino Creek Channel. This annexation action would provide a uniform edge with City of Chino and Chino Hills that follows a natural boundary in the form of Chino Creek channel (see **Figure 2.0-4**).

- *Development Agreement* - The applicant would enter into a development agreement with the City of Chino Hills that, among other things, requires certain public benefits from the project beyond those that the City could otherwise require through the normal land use entitlement process.

- *General Plan Amendment 14GPA01* to change the General Plan Land Use of approximately 14.73 acres of the 36.92-acre project site from Business Park to Very High Density Residential to allow for the 346 units (See **Figure 2.0-3**). The General Plan Amendment will also include a Housing Element Amendment to transfer 346 Very High Density Residential Units from Tres Hermanos Site A to the project site. Once redesignated, the project site will allow for up to 35 units per acre; and pursuant to Government Code Section 65583, the project site will require a minimum gross density of 20 dwelling units per acre and will allow multi-family by right without a conditional use permit, planned unit development or other discretionary action.

- A *Zone Change 14ZC01* to amend the designation on 14.73 acres of the site from Business Park (BP) to Very High Density Residential (RM-3) zone (see **Figure 2.0-3**).

- *Site Plan Review 14SPR02* to check the development of the residential component of 18 residential buildings (346 apartment units), a Clubhouse (4,077 square feet), and a

Maintenance Building (563.4 square feet) and development of a 326,641 square feet (3 buildings) business park.

- *Tentative Parcel Map 19539* to subdivide the 36.92 acre project site into four (4) parcels; Parcels 1, 2 and 3 (17.37 acres) includes the business park component of the project, Parcel 4 (14.73 acres) includes the residential component of the project and Lettered Lots A and B (4.82 acres) are for the existing Chino Creek Channel.

2.3 Phasing and Construction

The project would be constructed in a single phase with construction scheduled to begin in the second quarter of 2015. Construction of the project would take approximately 12 months with final occupancy scheduled for second quarter of 2016.

Site Preparation and Framing

Grading operations would occur over two months. They would include rough grading to establish building pads and utility trenches, and precise grading for drainage contours, landscaped areas and amenities. Grading would result in the movement of 84,800 cubic yards of earth with 42,100 cubic yards of cut and 42,700 cubic yards of fill. Approximately 12,000 cubic yards of soil would be imported for use on site. The soil would be imported via approved haul route. Soil importation would generate approximately 750 heavy truck trips assuming a capacity of 16 cubic yards per truck.

Once the site has been graded, infrastructure such as water, sewer and drainage lines would be installed. Then foundations would be poured and framing of structures would begin. It is anticipated that vertical construction would occur over six months. The final stage of construction would involve interior furnishings and detail work as well as completion of common areas and landscaping. Occupancy is scheduled to occur the second quarter of 2016.

Construction Traffic, Staging Area, and Equipment

Construction vehicles and equipment would be stationed in a designated area on-site. The proposed project requires no off-site improvements, construction of new public infrastructure (e.g. roadways) or trenching for new infrastructure which may cause traffic lane closures and traffic congestion delays to motorists. Access to surrounding roadways would be available during project construction.

Construction Materials and Waste

The applicant would submit for City's approval a properly completed construction waste reduction and recycling plan as part of the building permit process. The plan would include implementation measures, separate calculations, and reports for construction and demolition activities intended to divert recyclable and reusable material from landfills consistent with CHMC Chapter 13.40, Materials and Waste Management Plan for Construction and Demolition Projects, and California law[3].

[3] Under the California Waste Management Act (California Public Resources Code Section 40000 et seq.)

2.4 Responsible Agencies

The City of Chino Hills will act as the lead agency under the requirements of the California Environmental Quality Act (CEQA). The anticipated permits and approvals required from the City and other agencies are listed in **Table 2.0-5.**

Table 2.0-5
PERMITS/APPROVALS ANTICIPATED

Permit/Approval	Approving Agency
Housing Element Amendment, General Plan Amendment to Land Use Map, Zone Change to Zoning Map, Site Plan Review, Tentative Parcel Map and Development Agreement	City of Chino Hills–Community Development Department
Building Permit	City of Chino Hills– Community Development Department
General Construction Activities Stormwater Permit	Santa Ana Regional Water Quality Control Board (SARWQCB)
Los Serranos Lake Channel Chino Creek Channel	San Bernardino County Flood Control District
Fire District Permit for Residential and Commercial Construction	Chino Valley Fire District
Approval to modify existing traffic signals and implement right-of-way improvements	City of Chino Hills – Engineering Department and Public Works City of Chino –Public Works Caltrans – District 8
Local Agency Formation Commission (LAFCO) permits: • Application and Preliminary Environmental Description. • Supplemental Application for Sphere of Influence Change • Supplemental Application for Annexation Detachment and Reorganization	San Bernardino Local Agency Formation Commission (LAFCO)
Letter of authorization/consent for proposed improvements to provide regional sewer connection which may encroach into IUEA easement (provide easement for construction of structures on Parcel 4).	Inland Empire Utility Agency (IEUA) Regional Technical Committee

Figure 2.0-1
GENERAL PLAN LAND USE

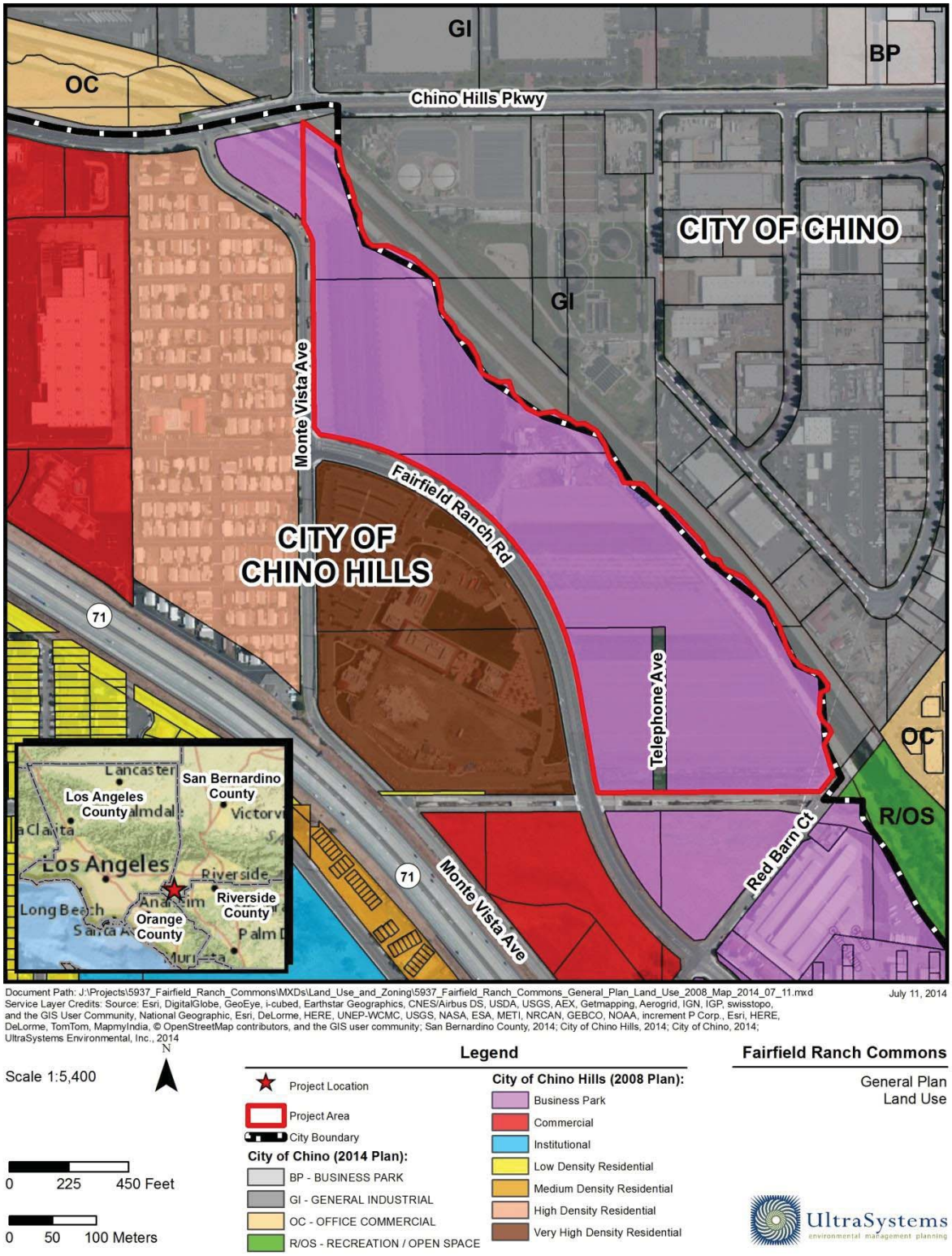


Figure 2.0-2
ZONING

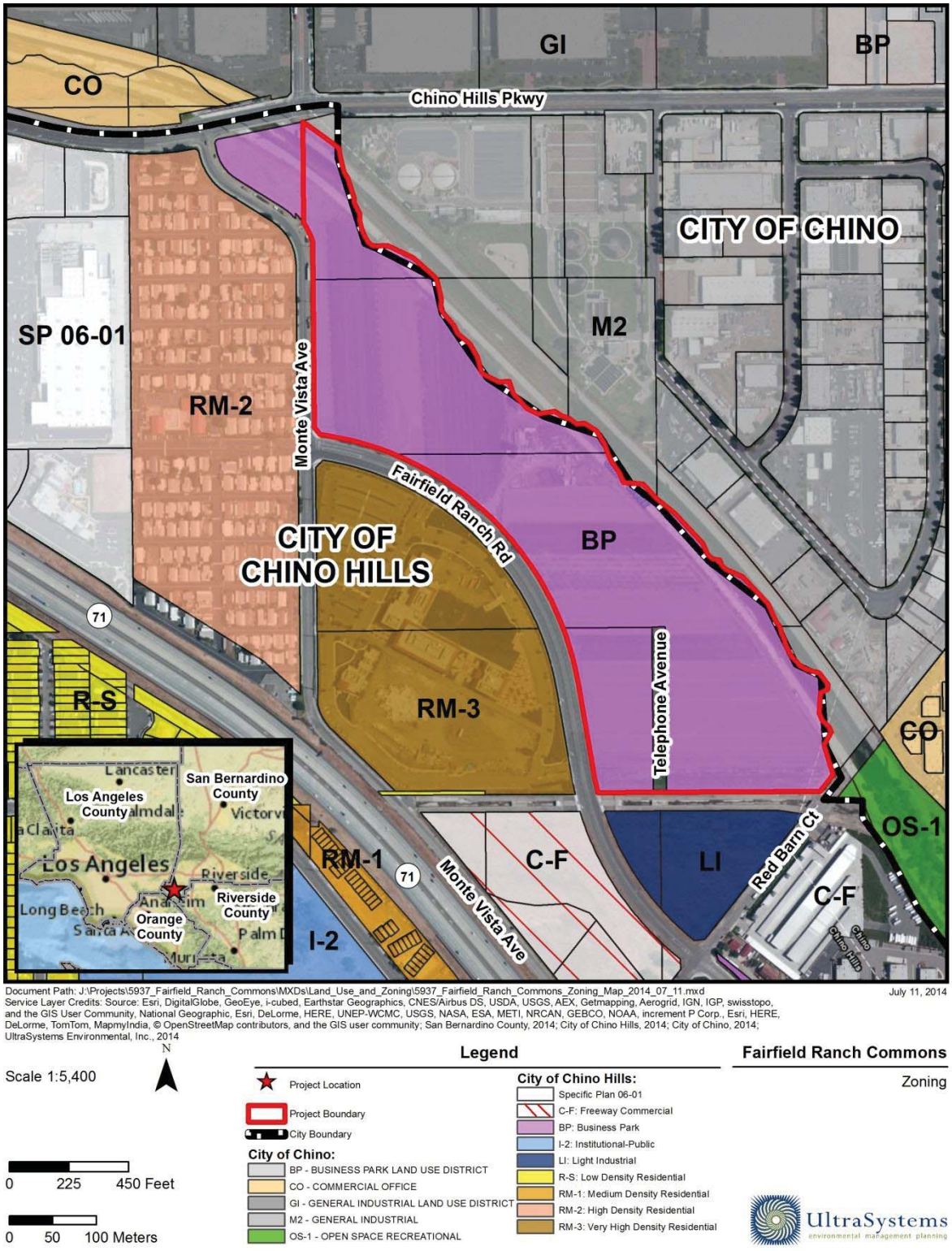
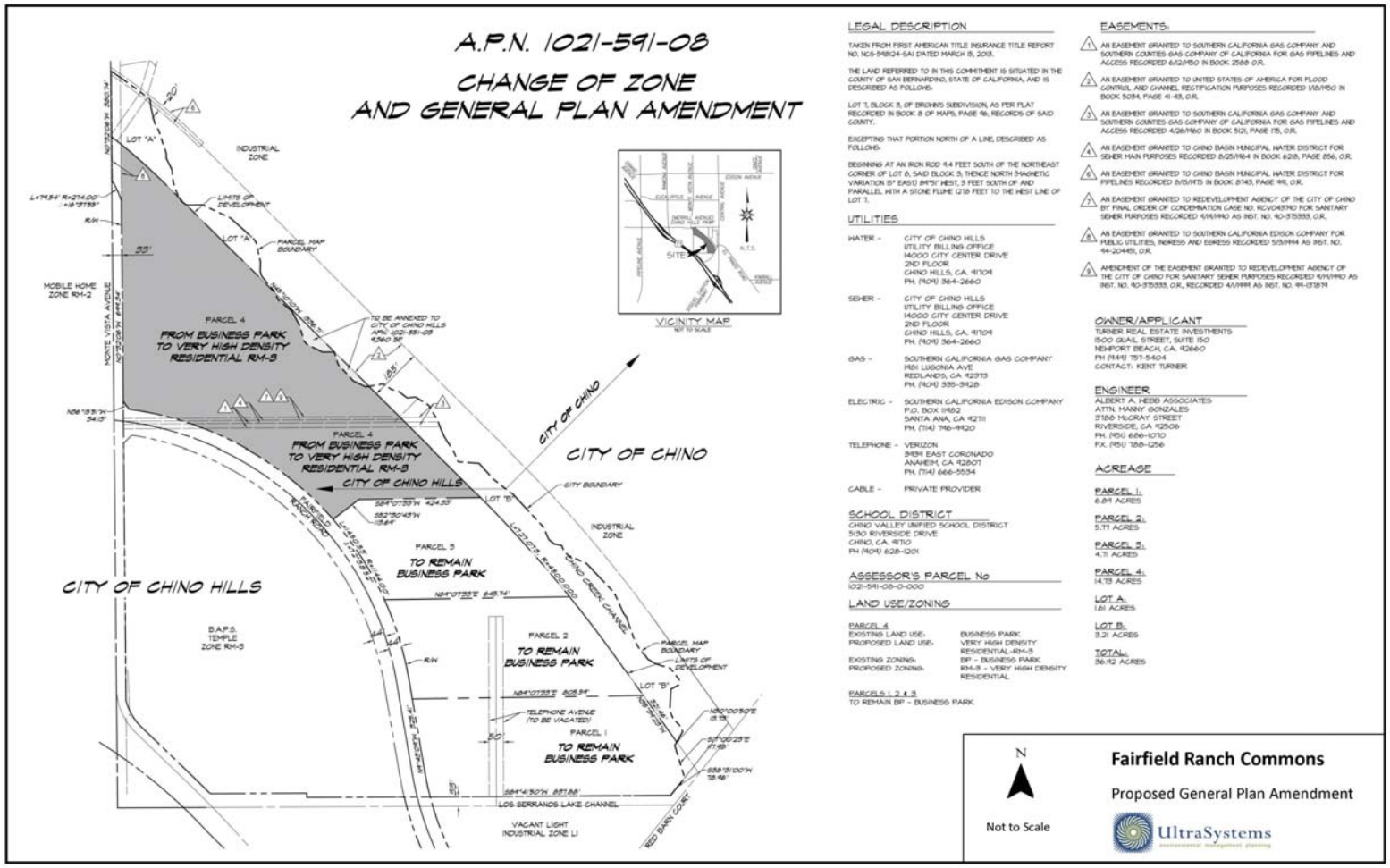


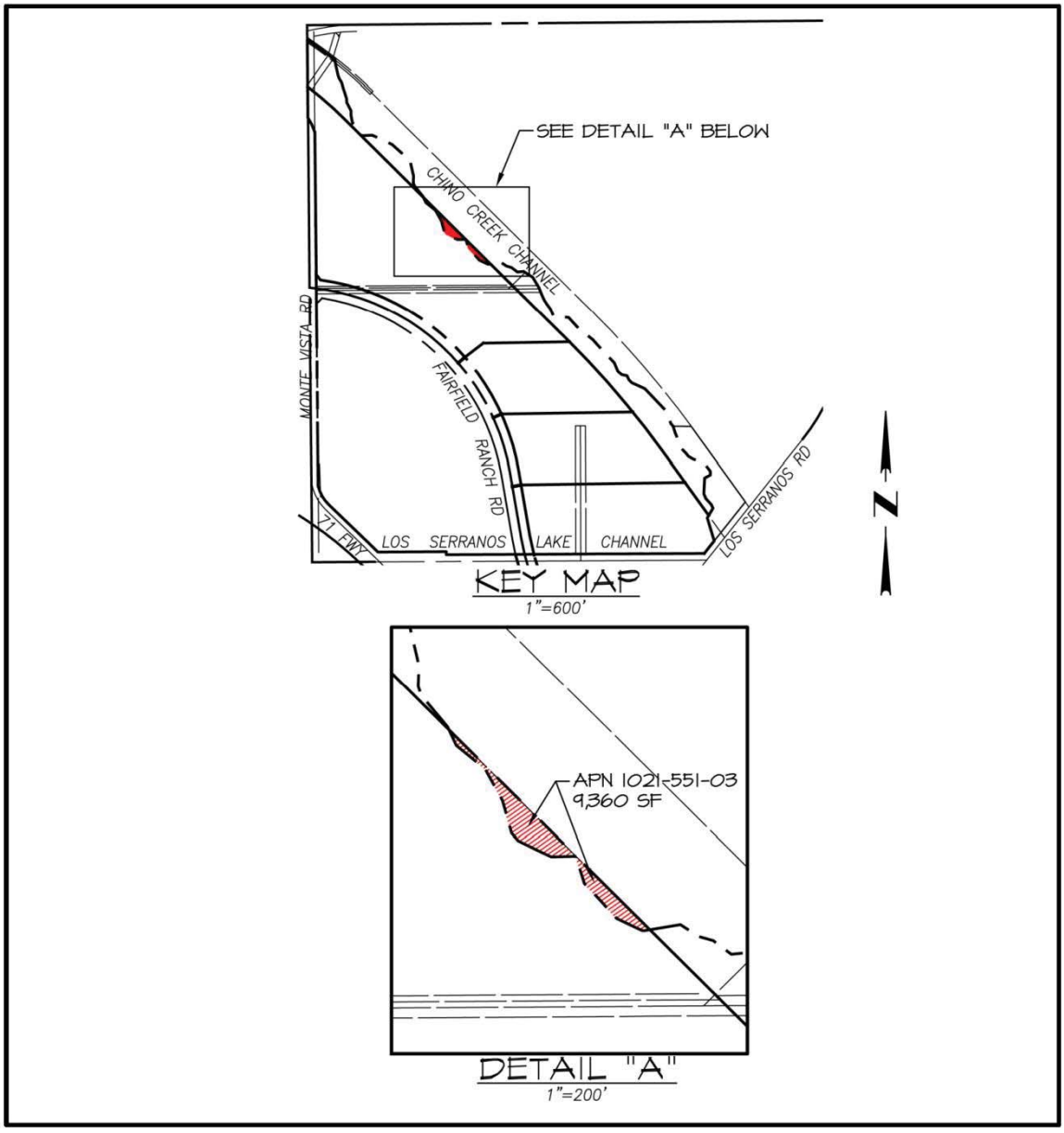
Figure 2.0-3
PROPOSED GENERAL PLAN AMENDMENT AND CHANGE OF ZONE



Sources: Architects Orange, 2014; Turner Real Investments, 2014; HPS Architecture, 2014; UltraSystems Environmental, Inc., 2014

September 9, 2014

Figure 2.0-4
ANNEXATION PROPERTY EXHIBIT



Sources: Albert A. WEBB Associates Engineering Consultants, 2014; Turner Real Investments, 2014; UltraSystems Environmental, Inc., 2014 July 11, 2014

Fairfield Ranch Commons

Annexation Property Exhibit

N

Not to Scale

UltraSystems environmental management planning

Figure 2.0-5
CONCEPTUAL SITE PLAN

Sources: Cityscapes Landscape Architecture & Planning, 2014; Architects Orange, 2014; Turner Real Investments, 2014; UltraSystems Environmental, Inc., 2014

September 9, 2014

Fairfield Ranch Commons

Conceptual Site Plan

N

Not to Scale

UltraSystems
environmental management planning

Figure 2.0-6
APARTMENT COMMUNITY BUILDING ELEVATIONS

Sources: Architects Orange, 2014; Turner Real Investments, 2014; UltraSystems Environmental, Inc., 2014

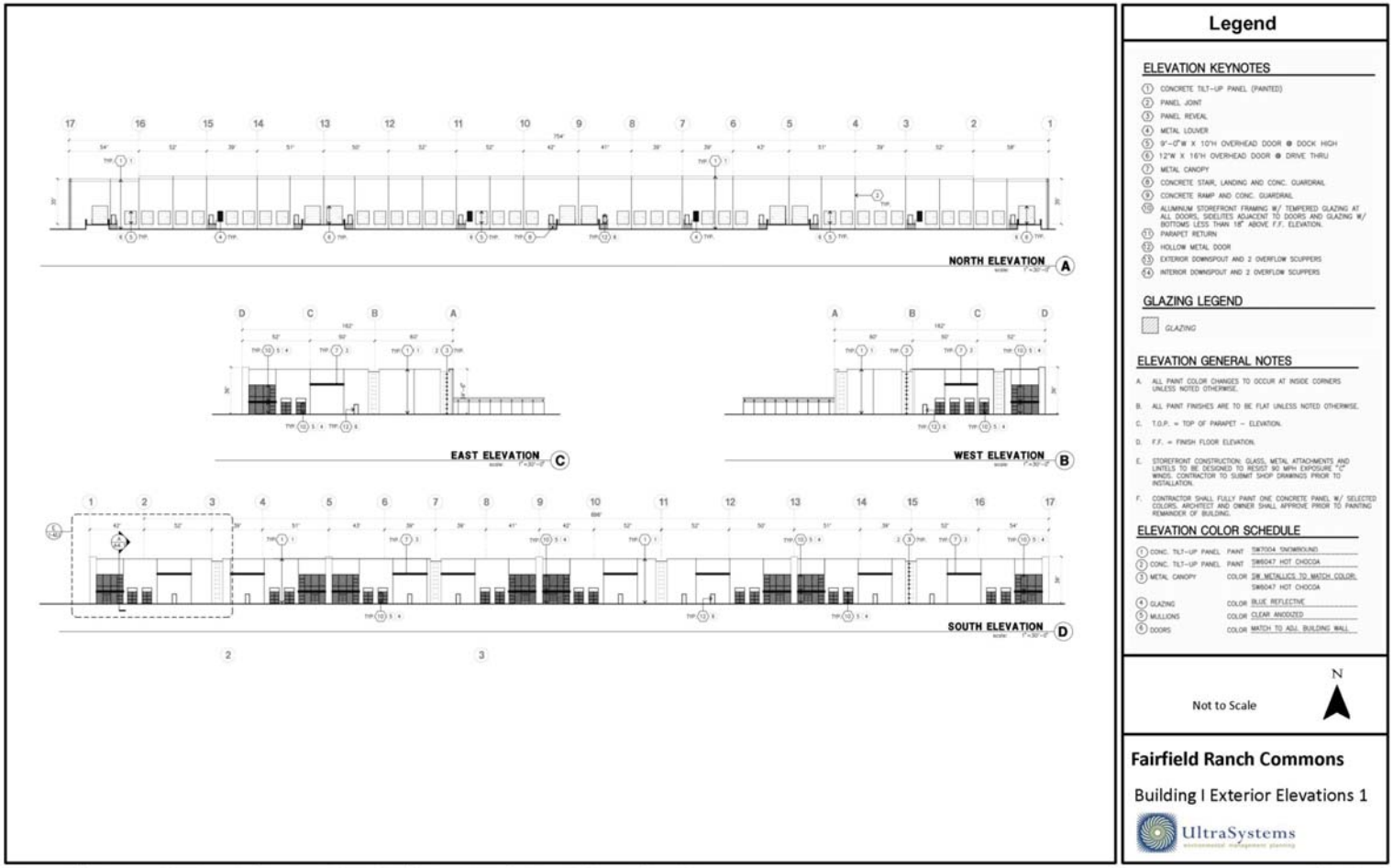
July 11, 2014

Figure 2.0-7
APARTMENT COMMUNITY BUILDING ELEVATION DETAILS

Sources: Architects Orange, 2014; Turner Real Investments, 2014; UltraSystems Environmental, Inc., 2014

July 11, 2014

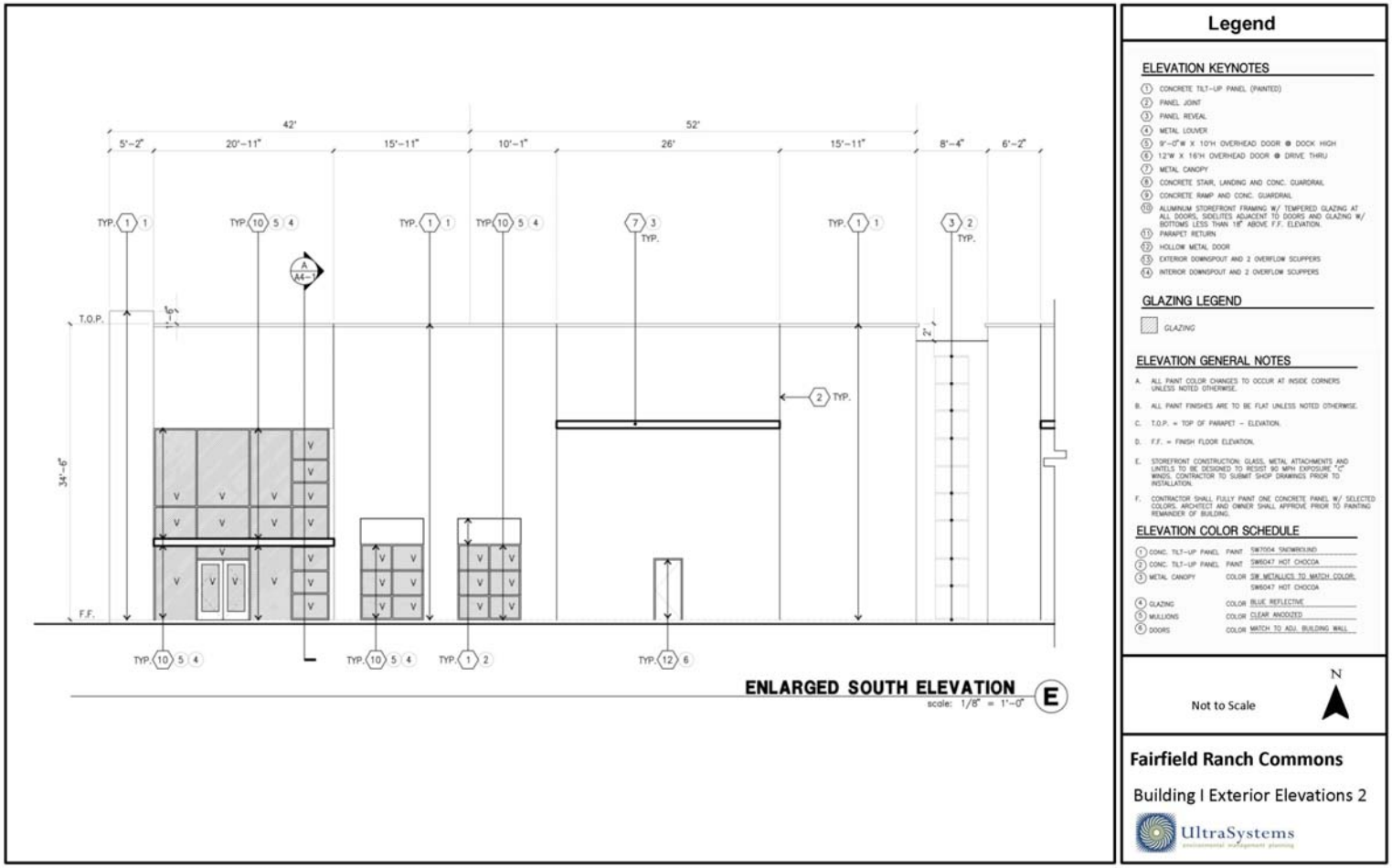
Figure 2.0-8
BUSINESS PARK BUILDING ELEVATIONS



Sources: Architects Orange, 2014; Turner Real Investments, 2014; HPS Architecture, 2014; UltraSystems Environmental, Inc., 2014

July 11, 2014

Figure 2.0-9
BUSINESS PARK BUILDING ELEVATION DETAIL



Sources: Architects Orange, 2014; Turner Real Investments, 2014; HPS Architecture, 2014; UltraSystems Environmental, Inc., 2014

July 11, 2014

Figure 2.0-10
PRELIMINARY LANDSCAPE PLAN

Sources: Cityscapes Landscape Architecture & Planning, 2014; Architects Orange, 2014; Turner Real Investments, 2014; UltraSystems Environmental, Inc., 2014

September 9, 2014

Fairfield Ranch Commons

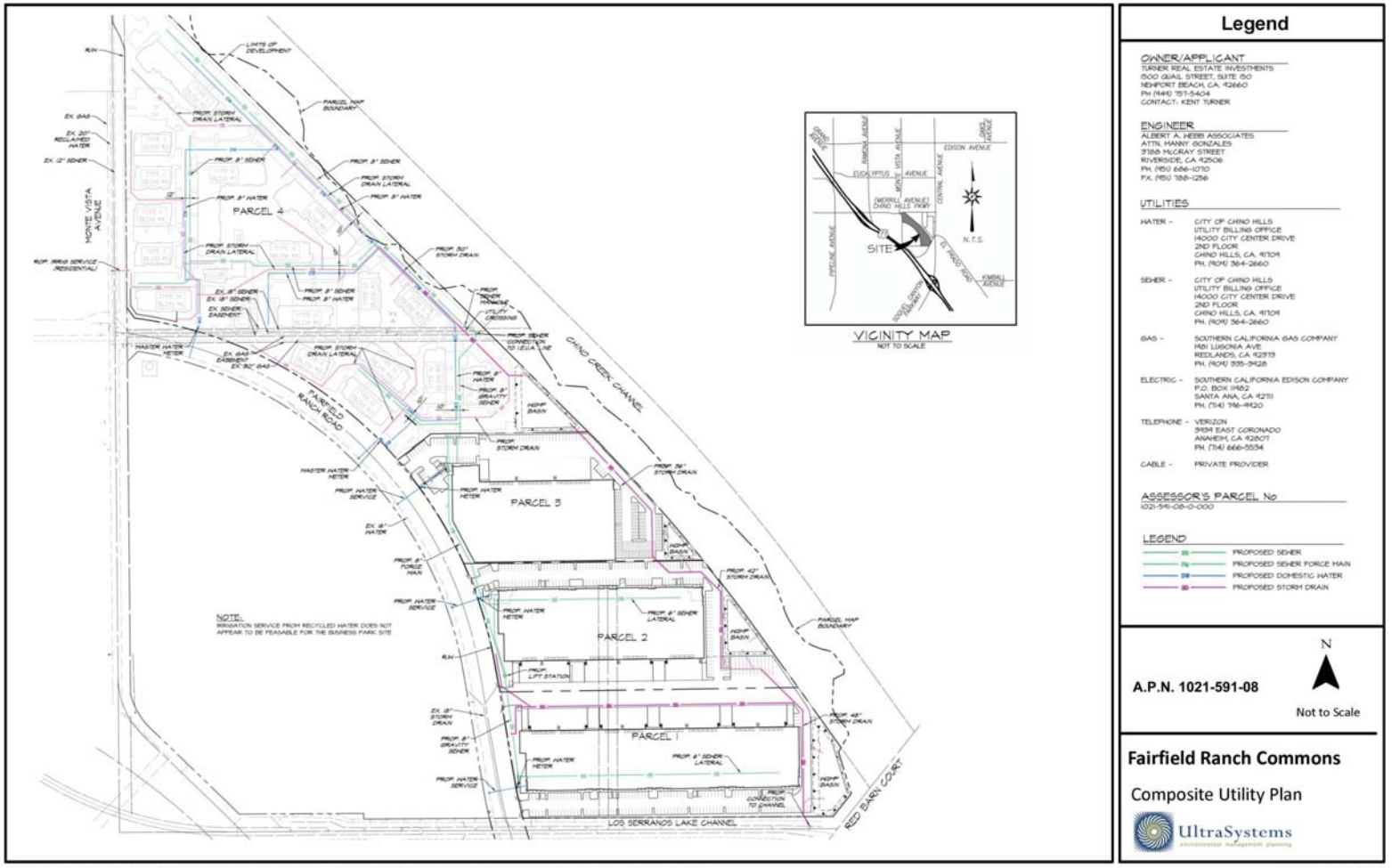
Preliminary Landscape Plan

N

Not to Scale

UltraSystems environmental management planning

Figure 2.0-11
UTILITY PLAN



Sources: Architects Orange, 2014; Turner Real Investments, 2014; HPS Architecture, 2014; UltraSystems Environmental, Inc., 2014

September 9, 2014

Figure 2.0-12
LIGHT FIXTURES

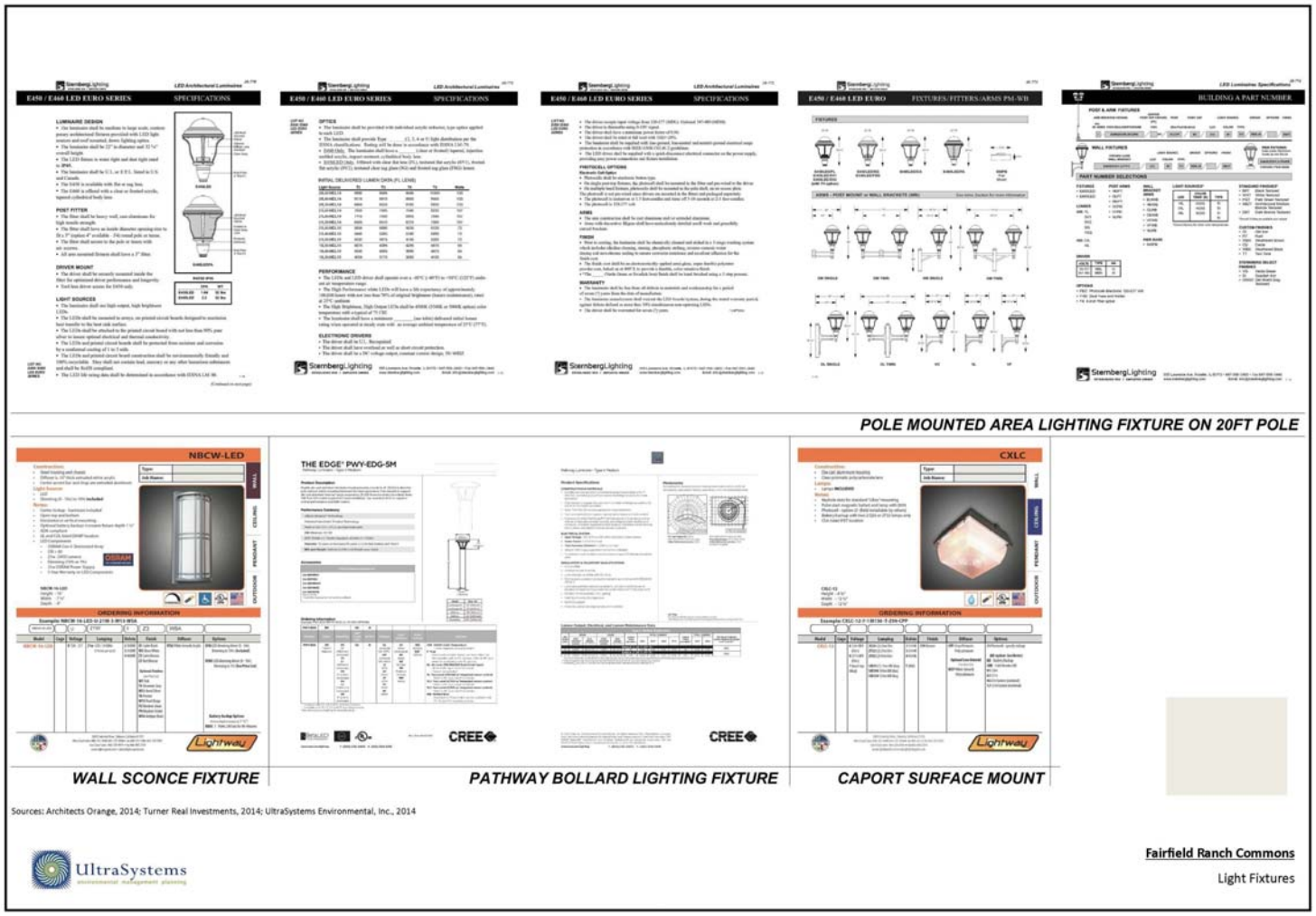
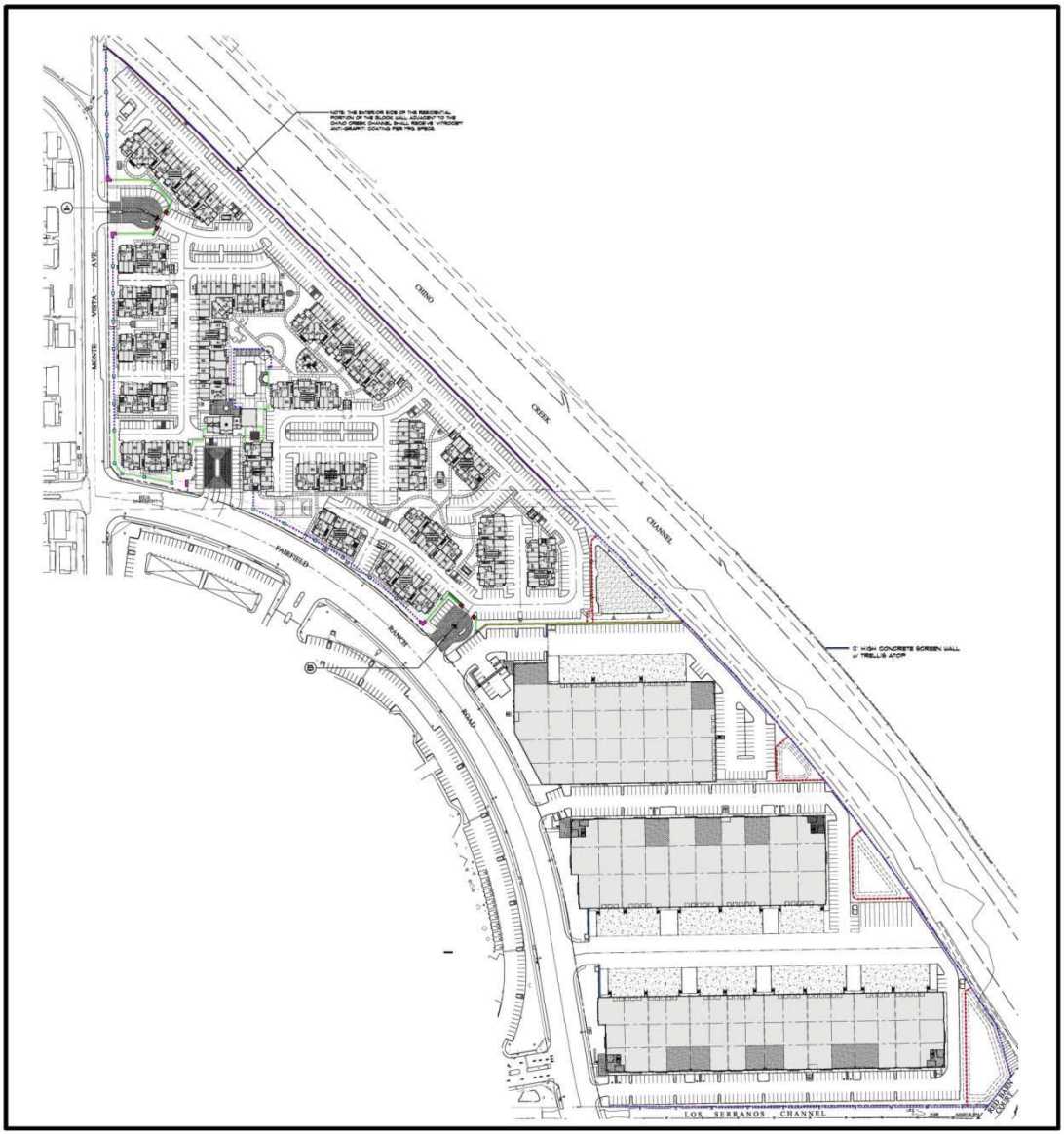
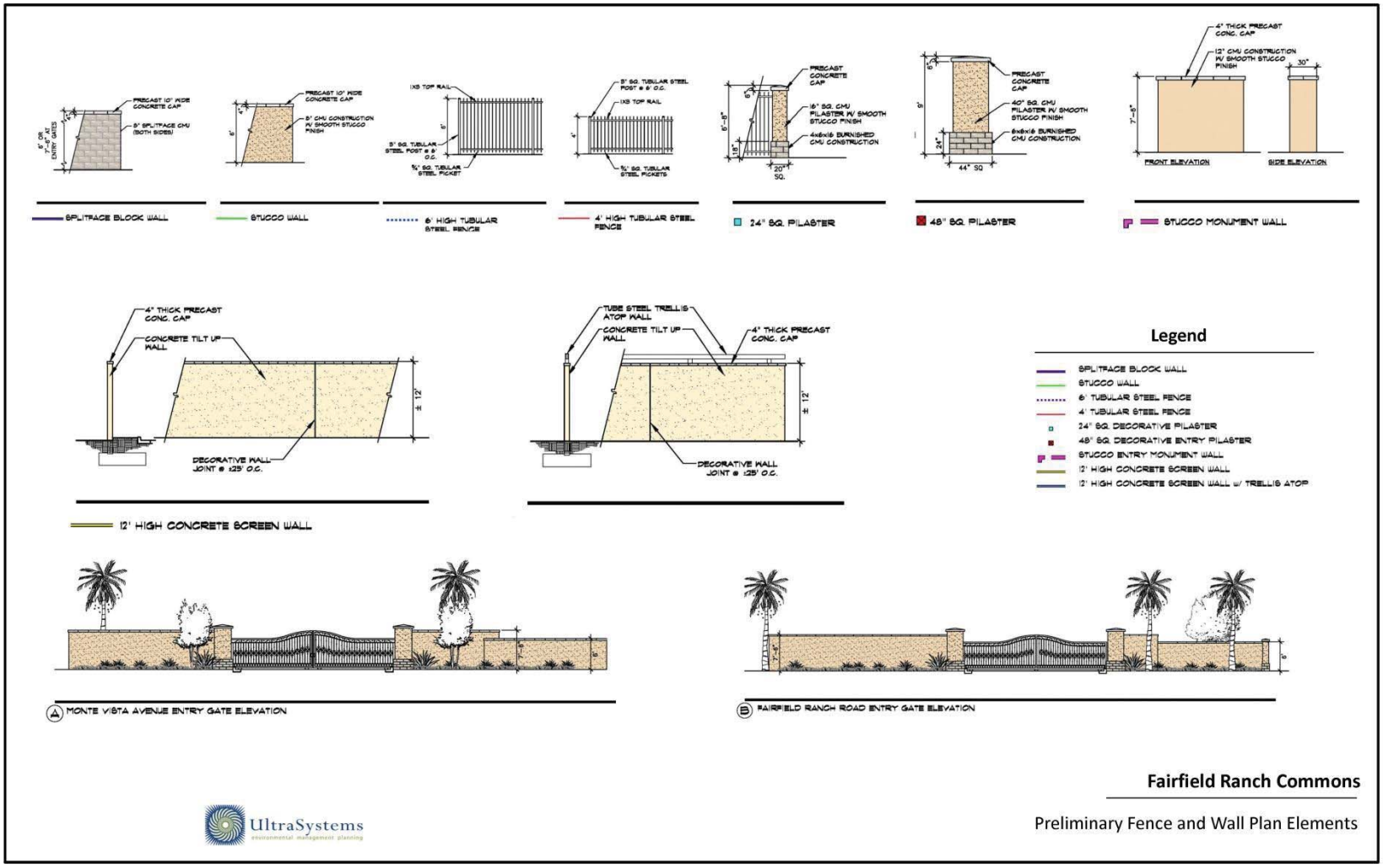


Figure 2.0-13
PRELIMINARY FENCE AND WALL PLAN



Sources: Albert A. WEBB Associates Engineering Consultants, 2014; Turner Real Investments, 2014; UltraSystems Environmental, Inc., 2014 September 9, 2014

Figure 2.0-14
PRELIMINARY FENCE AND WALL PLAN ELEMENTS



Sources: Architects Orange, 2014; Turner Real Investments, 2014; UltraSystems Environmental, Inc., 2014

September 9, 2014

3.0 ENVIRONMENTAL CHECKLIST

Environmental Factors Potentially Affected

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

☐ Aesthetics	☒ Greenhouse Gas Emissions	☐ Population and Housing
☐ Agricultural Resources	☐ Hazards and Hazardous Materials	☐ Public Services
☒ Air Quality	☐ Hydrology and Water Quality	☐ Recreation
☒ Biological Resources	☐ Land Use and Planning	☒ Transportation and Traffic
☒ Cultural Resources	☐ Mineral Resources	☐ Utilities and Service Systems
☒ Geology and Soils	☒ Noise	☒ Mandatory Findings of Significance

Determination (To Be Completed by the Lead Agency)

On the basis of this initial evaluation:

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

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

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

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

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	Date
Printed Name	For

10-7-14

City of Chino Hills

Evaluation of Environmental Impacts

(1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

(2) All answers must take into account the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

(3) Once the lead agency has determined that a particular physical impact may occur then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

(4) "Negative Declaration: Less than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to less than significant level.

(5) Earlier analyses may be use where, pursuant to the tiering, program EIR, or other CEQA process, an affect has been adequately analyzed in an earlier EIR or negative declaration. (See Section 15063(c)(3)(D) of the CEQA Guidelines. In this case, a brief discussion should identify the following:

   (a) Earlier Analyses Used. Identify and state where the earlier analysis available for review.

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

   (c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

(6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated. A source list should be

attached and other sources used or individuals contacted should be cited in the discussion.

(7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

(8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

(9) The explanation of each issue should identify:

(a) The significance criteria or threshold, if any, used to evaluate each question; and

(b) The mitigation measure identified, if any, to reduce the impact to less than significant.

3.1 AESTHETICS				
Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Have a substantial adverse effect on a scenic vista?				**X**
b) Substantially damage scenic resources, including, but not limited to, trees, outcroppings, and historic buildings within a state scenic highway?				**X**
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			**X**	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			**X**	

ENVIRONMENTAL SETTING

A site visit was conducted by UltraSystems Environmental, Inc. on July 25, 2014. Photographs were taken to document existing conditions of the project site and its surroundings. The site is surrounded by industrial uses to the north and east, high density residential uses to the west, and commercial as well as business park uses to the south. The site is situated within an urban setting and has been used for agricultural purposes in the past.

Currently, only small strips of Chinese ornamental lotus have been planted with irrigation lines laid out in a parallel pattern across the landscape. Most of the project site is undeveloped land while approximately 2.21 acres of the site is used as a storage area. The storage area, located at the center of the site, consists of a wooden barn, storage shed, canopy, poultry enclosures, vehicles, miscellaneous supplies, and mounds of debris.

REGULATORY SETTING

The project is subject to applicable state and local programs and policies including the California Scenic Highway Program, City of Chino Hills General Plan (1994), and City of Chino Hills Municipal Code (CHMC).

DISCUSSION OF IMPACTS

a) Would the project have a substantial adverse effect on a scenic vista?

No Impact

The City's Scenic Resources Overlay District[1] applies to areas within 200 feet (on both sides) of an official or candidate designated scenic highways by a city or state. The scenic highway corridor

[1] Chino Hills Municipal Code, Chapter 16.30, Scenic Resources Overlay District.

includes prominent ridgelines, view windows, and viewsheds. Important visual resources[2] for Chino Hills are: (1) exceptionally prominent ridgelines, (2) prominent ridgelines, (3) prominent knolls, (4) and associated primary viewpoints. Chino Hills Parkway is the only scenic corridor[3] within 200 feet of the site, is located to the north, and is considered a city-designated scenic highway. This would place the site within the Scenic Resources Overlay District.

The project site is vacant land, relatively flat, and does not contain any scenic resources according to the City of Chino Hills General Plan (1994) and Proposed General Plan Update (2014). Views of the site and its surroundings are depicted below. **Figure 3.1-1**, Photograph Key Map, depicts the location and cardinal direction from which the photograph was taken. **Figure 3.1-2**, Views from Project Site, illustrates the visual setting documented by photograph. An evaluation of potential impacts from various locations around the property is discussed below.

Location A: Near Chino Hills Parkway and Monte Vista Avenue

- Facing west – This viewpoint depicts a major transportation corridor into Chino Hills where views of exceptionally prominent ridgelines and prominent ridgelines are visible. The project site is directly south of the intersection of Chino Hills Parkway and Monte Vista Avenue and would not affect this viewpoint.

- Facing south – Views from this vantage point may be blocked by the project's development; however, visual resources were barely visible to the south due to intervening development. Exceptionally prominent ridgelines would not be obstructed and there are no existing residential uses to the north or east of the site. Project development would not obstruct views of ridgelines as observed to the south.

Location B: Near Fairfield Ranch Road and Monte Vista Avenue

- Facing west – No visual resources were visible from this vantage point. Furthermore, no residential views would be obstructed by the project's development since there are no residences to the east of the site.

- Facing south – Views of exceptionally prominent and prominent ridgelines were visible from this perspective along Monte Vista Avenue which would not obstruct views of residences since industrial uses are located to the north and east of the site.

[2] Chino Hills Municipal Code, Section 16.08.030(A.-D.), Important Visual Resources Defined and Chapter 16.08, see Figure 15-1, City of Chino Hills Ridgeline sand Knolls Map.

[3] Chino Hills Municipal Code, Section 16.08.030(A.5.), Important Visual Resources Defined.

Figure 3.1-1
PHOTOGRAPH KEY MAP

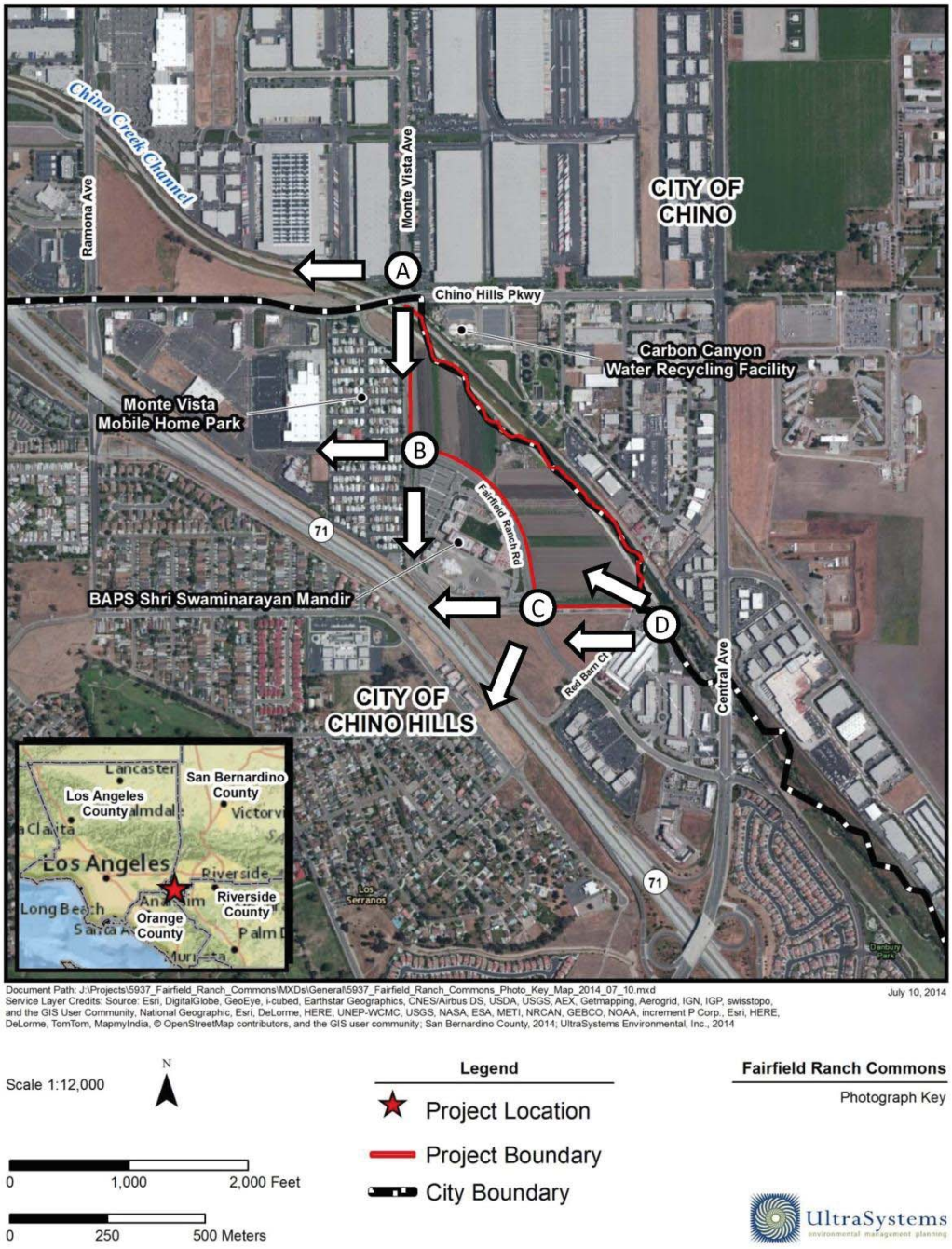


Figure 3.1-2
VIEWS FROM PROJECT SITE

Location A - Facing West
Near Chino Hills Parkway and Monte Vista Avenue

Location A - Facing South
Near Chino Hills Parkway and Monte Vista Avenue

Figure 3.1-2 (Continued)
VIEWS FROM PROJECT SITE

Location B - Facing West
Near Fairfield Ranch Road and Monte Vista Avenue

Location B - Facing South
Near Fairfield Ranch Road and Monte Vista Avenue

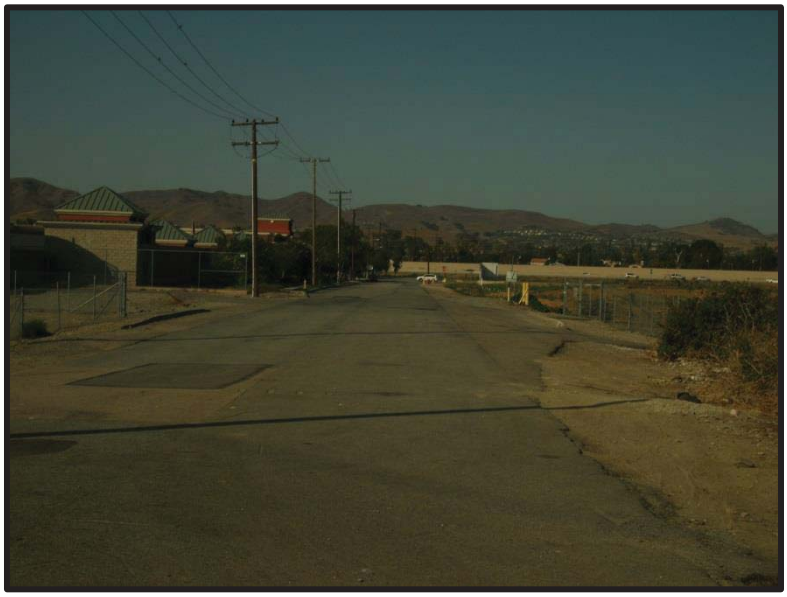
Figure 3.1-2 (Continued)
VIEWS FROM PROJECT SITE

Location C - Facing West
Near Fairfield Ranch Road and Los Serranos Lake Channel

Location C - Facing Southwest
Near Fairfield Ranch Road and Los Serranos Lake Channel

Figure 3.1-2 (Continued)
VIEWS FROM PROJECT SITE

Location D - Facing Northwest
Near Fairfield Ranch Road and Red Barn Court



Location D - Facing West
Near Fairfield Ranch Road and Red Barn Court

Location C: Near Fairfield Ranch Road and Los Serranos Lake Channel

- Facing west – No visual resources were visible from this vantage point. Furthermore, no residential views would be obstructed by the project's development since there are no residences to the east of the site.

- Facing southwest - Views of exceptionally prominent and prominent ridgelines were visible from this perspective across from State Route 71 and along Monte Vista Avenue which would not obstruct views of residences since industrial uses are located east of the site. Furthermore, the project would not obstruct views for vehicles that traverse northbound on State Route 71 (SR-71) or those vehicles entering Chino Hills at its most southern terminus from SR-71.

Location D: Near Fairfield Ranch Road and Red Barn Court

- Facing northwest – Views of the San Gabriel Valley Mountains are visible but are not considered visual resources by the City.

- Facing west – Views of exceptionally prominent and prominent ridgelines from the Chino Hills State Park are available from this vantage point. Hence, the project would not obstruct scenic corridor views from State Route 71, Chino Hills Parkway, or from nearby residences.

No exceptionally prominent, prominent ridgelines or prominent knolls would be obscured by the project. Thus, the project would not obstruct views of visual resources for associated primary viewpoints such as recreational areas, residences or scenic corridors. Therefore, no impact would occur.

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact

According to California's Scenic Highway Program[4], there are no officially designated state scenic highways located in Chino Hills. Hence, the project would not substantially damage scenic resources such as trees, rock outcroppings, and historic buildings within a state scenic highway. Therefore, no impacts would occur.

c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Less than Significant Impact

The project site consists of undeveloped land located within Chino Hills and is bordered by City of Chino to the north and east. The site is located in a transitional setting containing a mix of land use types. According to the City of Chino Zoning Map, the General Industrial (GI) Land Use District within Chino's Eucalyptus Business Park Specific Plan is found to the north of the project site. The Carbon Canyon Water Recycling Facility (CCWRF) and other industrial uses are zoned as General Industrial (M2) and are located to the east and are opposite of the Chino Creek Channel within the City of Chino.

[4] http://www.dot.ca.gov/hq/LandArch/scenic_highways/scenic_hwy.htm Accessed on June 17, 2014.

Within Chino Hills, vacant land zoned as Business Park (BP) and Light Industrial (LI) are found to the south. To the southwest of the project site is the BAPS Swaminaryan Mandir temple which is zoned as Very High Density Residential (RM-3). To the west of the project site is Monte Vista Mobile Home Park which is zoned as High Density Residential (RM-2).

The project site's existing land use and zoning designation is Business Park. The site is currently disturbed land that has been under continuous cultivation with row crops since the 1930's. Ancillary agricultural sheds and several mature trees present in the central portion of the property adjacent to the Chino Creek Channel. The project proposes development of 346 very high density residential apartment units on 14.73 acres and a 326,641-square foot business park (3 buildings) on 17.37 acres. The project proposes to amend the General Plan (GP) land use designation for the very high density residential apartment portion of the project (14.73 acres) from Business Park to Very High Density Residential and a Zone Change designation from Business Park (BP) to Very High Density Residential (RM-3) which would allow for the development of 346 multi-family residential units. The remaining 17.37 acres would retain the Business Park land use and zoning designations.

The project would be designed in compliance with all applicable development standards and design guidelines (e.g., setbacks, building height, lot coverage, and density standards) established under the CHMC for residential (Chapter 16.10.030, Development Standards for Residential Districts) and business park uses (Chapter 16.14.040, Development Standards for Business Parks and Light Industrial Districts) as well as landscaping requirements (Chapter 16.07, Landscape and Water Conservation Guidelines). The project would adhere to the City's residential (CHMC Chapter 16.10) and non-residential design guidelines (CHMC Chapter 16.09).

In summation, the project would change the existing visual character or quality of the site from disturbed vacant land to residential and business park uses; however; it would adhere to all applicable development standards, design guidelines, landscaping requirements. Compliance with development standards and design guidelines would ensure the project is cohesive with surrounding features within the vicinity. Following the approval of the project's request for a GP Amendment and Zone Change, the land use and zoning designations for these parcels would conform to established development standards and permitted uses. It would comply with the City's General Plan and be cohesive with existing surrounding uses. Therefore, a less than significant impact would occur and no necessary mitigation measures would be necessary.

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than Significant Impact

This development project would introduce new sources of light into the area; however; the City has established code requirements, development standards, and guidelines for exterior lighting of new residential and non-residential development projects. This project proposes to construct both multi-family residential ("residential") and business park structures.

Per Chapter 16.48 of the CHMC for Performance Standards, all exterior lighting for both (multi-family residential and light commercial) components of this project would be required to conform to CHMC Section 16.48.040 for Lights which requires that lights be shielded or not focused in illuminating adjacent properties or cause glare(s) to motorists. Additionally, the business park component of this project would be required to comply with CHMC Chapter 16.09 for Non-Residential Design Guidelines and CHMC Section 16.09.070 which establishes Lighting Guidelines.

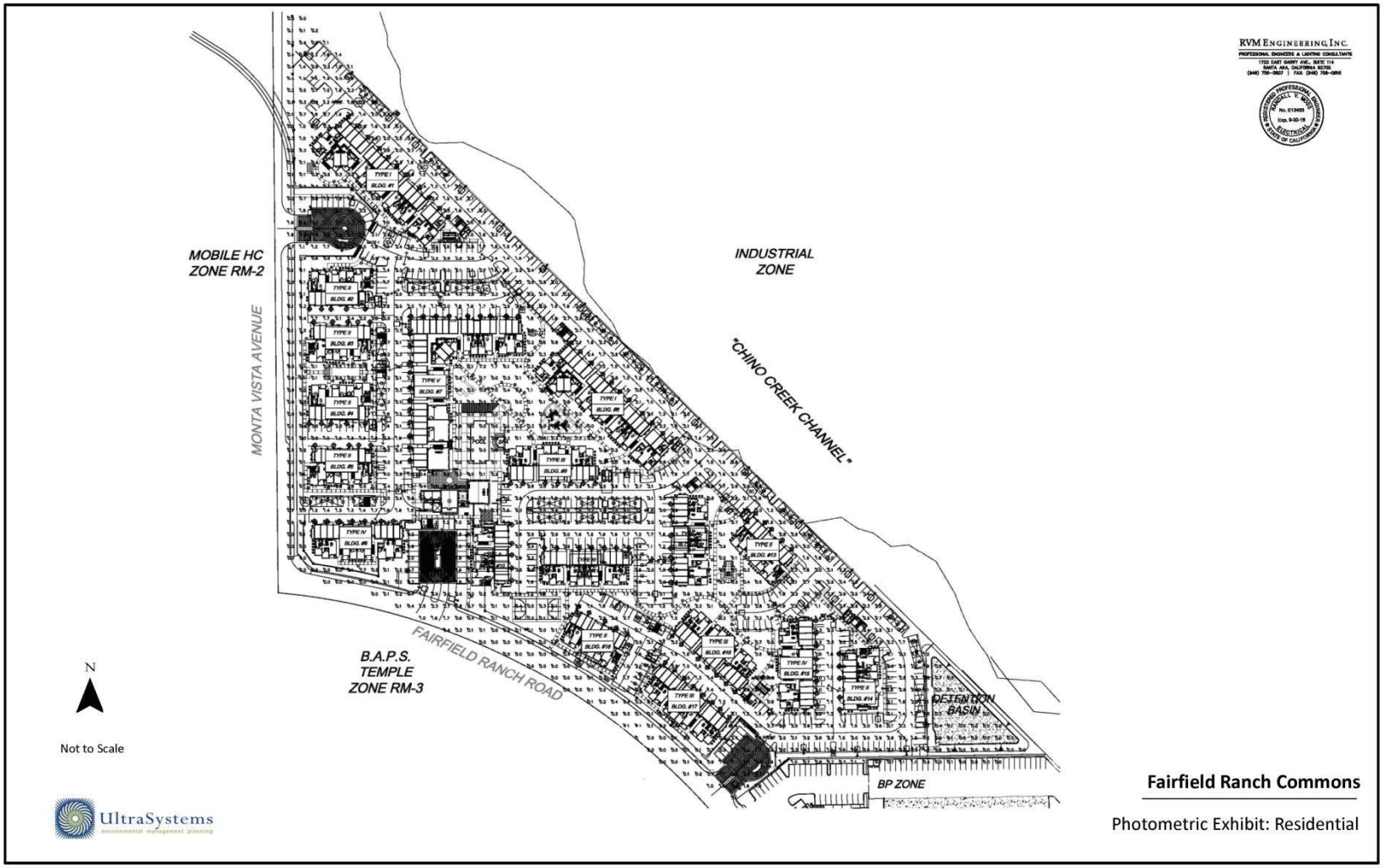
The Photometric Exhibit (see **Figure 2.0-12**, Light Fixtures and **Figure 3.1-3**, Residential Exterior Lighting) for the residential component of this project would include pole mounted area lighting fixtures (on 20 foot poles), wall-mounted sconce fixtures, pathway bollard lighting fixtures, and carport surface mounts. The business park component (see **Figure 2.0-12**, Light Fixtures and **Figure 3.1-4,** Business Park Exterior Lighting) of the project proposes the use of three-types of pole mounted lighting structures (not to exceed 27'-6" tall) that would be shielded/hooded and two-types of wall-mounted sconces (at 30 feet high), and all light fixtures would utilize LED lamps. The exhibits (see **Figures 3.1-3** and **3.1-4**), for residential and business park uses, suggest that the project would not produce lighting beyond the site's property. The photometric exhibit indicates that exterior lighting is to be directed downward and would not cause nighttime glare or affect neighboring properties, residents, or motorists.

The nearest residential land use is Monte Vista Mobile Homes which is adjacent to the west of this project's residential component. As shown in the project's photometric plan, the project's illumination would not extend outside the project boundary and the residential use would not be impacted. With regard to glare, the project would be constructed with stucco and concrete. There are no proposed large pane glass windows or metals that would create reflective glare that would adversely affect daytime or nighttime views.

Furthermore, with exception to this project's residential component, there are no existing residential uses adjacent to or abutting the proposed business park component. A 12 feet tall concrete screen wall (see **Figure 2.0-13**, Preliminary Fence and Wall Plan and **Figure 2.0-14**, Preliminary Fence and Wall Plan Elements), landscaping setback requirements, and on-site surface parking would serve as a physical buffer that separates the business park from residential uses.

In summary, adherence to all applicable municipal code requirements, development standards, design guidelines, and proposed photometric plans would reduce light or glare impacts to less than significant levels.

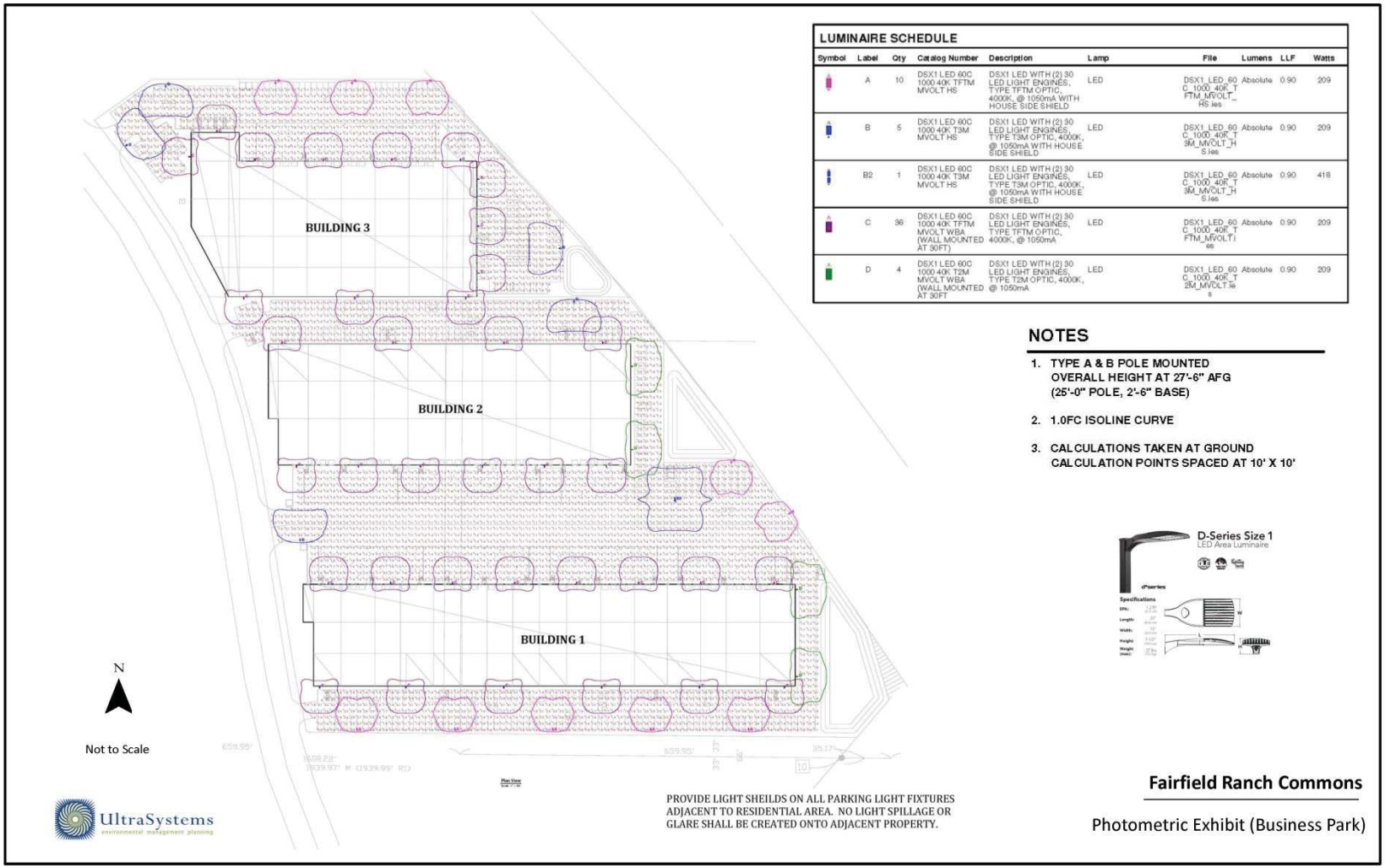
Figure 3.1-3
PHOTOMETRIC EXHIBIT – RESIDENTIAL EXTERIOR LIGHTING



Sources: Architects Orange, 2014; Turner Real Investments, 2014; UltraSystems Environmental, Inc., 2014

September 9, 2014

Figure 3.1-4
PHOTOMETRIC EXHIBIT – BUSINESS PARK EXTERIOR LIGHTING



Sources: Architects Orange, 2014; Turner Real Investments, 2014; UltraSystems Environmental, Inc., 2014

September 9, 2014

3.2 AGRICULTURE AND FORESTRY RESOURCES				
Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
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?			**X**	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				**X**
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Codes section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				**X**
d) Result in the loss of forest land or conversion of forest land to non-forest use?				**X**
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			**X**	

ENVIRONMENTAL SETTING

The project site is located in a transitional setting of the city; this area is characterized by a mix of land uses types including residential, industrial, and commercial. The project site is fallow agricultural land not under cultivation for crop production. A small portion of the site is covered by ornamental planting. Approximately 2.21 acres of the project site is currently being used as a storage area, occupied by a wooden barn, storage container, a canopy, poultry enclosures, miscellaneous supply and debris.

According to the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP) San Bernardino County Williamson Act Fiscal 2012/2013 map, the project site is identified as "Non-Enrolled Land" or land not enrolled in a Williamson Act contract. The project site is identified within the Prime Farmland category based on the FMMP San Bernardino County

2010[1] Important Farmland map. According to the General Plan Update Initial Study, no properties in the City remain in an agricultural preserve (Chino Hills, 2013).

REGULATORY SETTING

This project would be subject to applicable state and local programs, regulations, laws, and policies including, but not limited to, the following: California Important Farmland Inventory System and Farmland Mapping and Monitoring Program (FMMP), California Public Resources Code, and City of Chino Hills General Plan.

The California Department of Conservation administers the FMMP California's statewide agricultural land inventory. The FMMP is updated every two years and utilizes an automated map and database system to record changes in the use of agricultural lands. The FMMP is an information service only and does not constitute state regulation of local land use decisions.

Public Resources Code (PRC) Section 4526 defines Timberland as land, other than federal land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products including Christmas trees.

PRC Section 12220(g) defines forest land as land that can support, under natural conditions, 10 percent native tree cover of any species, including hardwoods, and that allows for the preservation or management of forest-related resources such as timber, aesthetic value, fish and wildlife, biodiversity, water quality, recreational facilities, and other public benefits.

DISCUSSION OF IMPACTS

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?

Less than Significant Impact

Agricultural land uses within City of Chino Hills are controlled by the General Plan and City zoning ordinances. These documents identify the type of land uses permitted and call out the development parameters within each land use category. The proposed project would convert land designated as Prime Farmland to non-agricultural related use. However, the City of Chino Hills currently zones the project site for developed uses and has officially designated the project site for non-agricultural use since adoption of the 1994 General Plan.[2] In the proposed 2014 General Plan Update, this non-agricultural use designation remains the same.

Based on the FMMP Important Farmland Data on San Bernardino County 2008-2010 Land Use Conversion Table[3], a total of 290 acres of prime farmland within the City of Chinos Hills are designated as Land Committed to Nonagricultural Use. This designation is defined as existing farmland, grazing land, and vacant areas which have a permanent commitment for development. The "committed" land must be so designated in an adopted local general plan and must meet either

1 The 2012 Important Farmland map is in progress. The 2010 Important Farmland map is available at: http://www.conservation.ca.gov/dlrp/fmmp/Pages/SanBernardino.aspx

2 City of Chino Hills 1994 General Plan covers the planning period from 1993 to 2013.

3 http://www.conservation.ca.gov/dlrp/fmmp/Pages/SanBernardino.aspx Accessed August 6, 2014.

one of two requirements[4]: 1) receive final discretionary approval from the local government; 2) be subject to final fiscal commitments to finance the capital improvements specifically required for future development of the land in question (DOC, 1997).

The proposed project would change the existing land use designation for the northern 14.73 acres of the 36.92-acre site through a General Plan Amendment from Business Park to Very High Density Residential. The remaining southern portion would retain the existing Business Park designation. The zoning for the 14.73 acre of land would also be changed from Business Park (BP) to Very High Density Residential (RM-3). The project site has been designated for nonagricultural use since adoption of the 1994 General Plan and is similarly planned for development as part of the proposed 2014 General Plan Update. Given the above, and through the General Plan Amendment and Zone Change, conversion of the project site would be less than significant.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact

Based on the FMMP San Bernardino County Williamson Act Fiscal 2012/2013 map, the project site is identified as land not enrolled in a Williamson Act contract and mapped by FMMP as Prime Farmland. As previously discussed in Section 3.2 a) the project site is currently zoned for Business Park (i.e., nonagricultural use). Although the project site was previously included in an agricultural preserve, the site was cancelled in 2004 pursuant to Section 51282 of the California Government Code and Section 16.66 of the City Development Code. According to the General Plan Update Initial Study, no properties in the City remain in an agricultural preserve (Chino Hills, 2013). As a result, no conflict is anticipated with existing zoning for agricultural use or with the Williamson Act contract. Therefore, no impact would occur.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Codes section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact

The project site is not located within an existing zone for forest land or timberland. The project site consists primarily of undeveloped, open fallow land and less than a quarter of the site remains under cultivation. The existing zoning for the project site is for developed urban uses and does not support the definitions provided by PRC Section 42526 and PRC Section 12220(g). The surrounding land is characterized by a mixed of urban uses such as industrial, residential, and commercial. There is no timberland and no designated forest lands within Chino Hills. Therefore, no impacts related to the conversion of timberlands or forest land would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact

The project site consists of fallow agricultural land not under cultivation for crop production and is heavily surrounded by urban development. There is no forest land on or in the vicinity of the

[4] For details, refer to California Department of Conservation Land Evaluation and Site Assessment (LESA) Manual page 26-27.

project site. Therefore, the proposed project would not result in the loss of forest land or convert forest land to non-forest use. No project impact would occur.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Less than Significant Impact

As discussed in the above sections (a) and (c), the project site consists of a vacant lot that is located in an urban built-up environment characterized by a mixed of land uses including industrial, commercial, and residential. No forest land defined under PRC Section 12220 (g) is located within the vicinity of the project site. Implementation of the proposed project would not result in changes to the environment due to location, or nature that would result in converting forest land to non-forest use.

Although the project site falls under the Prime Farmland category defined by FMMP, no agricultural activity currently occurs at the site. The site is fallow land with a storage area for miscellaneous supply and debris and a small strip of ornamental planting. Much of the site contains exposed soil and is invaded by weed growth. As discussed under the response for Section 3.2 a) above, the land use designation for 14.73 acres of the 36.92-acre project site would be changed via a General Plan Amendment from Business Park to Very High Density Residential and re-zoned via a Zone Change from Business Park (BP) to Very High Density Residential (RM-3). Therefore, project impacts related to conversion of farmland to non-agricultural use would be less than significant.

3.3 AIR QUALITY				
Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Conflict with or obstruct implementation of the applicable air quality plan?			**X**	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		**X**		
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			**X**	
d) Expose sensitive receptors to substantial pollutant concentrations?			**X**	
e) Create objectionable odors affecting a substantial number of people?		**X**		

The following is summarized in part from the Air Quality Report prepared by UltraSystems (UltraSystems, 2014a). The Air Quality Report is included as **Appendix A**.

ENVIRONMENTAL SETTING

Pollutants of Concern – Criteria Pollutants

Criteria pollutants are air pollutants for which acceptable levels of exposure can be determined and an ambient air quality standard has been established by the U.S. Environmental Protection Agency (USEPA) and/or the California Air Resources Board (CARB). The criteria air pollutants of concern are nitrogen dioxide (NO_2), carbon monoxide, particulate matter, sulfur dioxide, lead, and ozone, and their precursors. Since the proposed project would not generate appreciable sulfur dioxide (SO_2) or lead (Pb) emissions,1 it is not necessary for the analysis to include those two pollutants. **Table 3.3-1** shows the area designation status of the SCAB for each criteria pollutant for both the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS).

[1] Sulfur dioxide emissions would be below 0.02 pound per day, and only during construction.

Table 3.3-1
FEDERAL AND STATE ATTAINMENT STATUS

Pollutants	Federal Classification	State Classification
Ozone (O_3)	Non-Attainment (Extreme)	Non-Attainment
Particulate Matter (PM_{10})	Attainment	Non-Attainment
Fine Particulate Matter ($PM_{2.5}$)	Non-Attainment	Non-Attainment
Carbon Monoxide (CO)	Maintenance	Attainment
Nitrogen Dioxide (NO_2)	Maintenance	Non-Attainment[a]
Sulfur Dioxide (SO_2)	Attainment	Attainment

Sources:

U.S. Environmental Protection Agency, "California 8-Hour Ozone Nonattainment Areas in Blue Borders." Green Book. [www.epa.gov/air/oaqps/greenbook/ca8.html]. Updated December 14, 2012.

U.S. Environmental Protection Agency, "Counties Designated Nonattainment for PM-10." Green Book. [http://www.epa.gov/air/oaqps/greenbook/map/mappm10.pdf]. Accessed January 15, 2013.

California Air Resources Board, "Area Designations Maps/State and National." [www.arb.ca.gov/desig/adm/adm.htm]. Accessed January 15, 2013.

The California Air Resources Board is proposing to reclassify the SCAB to attainment for the state NO_2 ambient air quality standard. http://www.arb.ca.gov/desig/desig13/2013_workshop_presentation_text.pdf.

Air Quality Management Plan (AQMP)

The SCAQMD is required to produce plans to show how air quality will be improved in the region. The CAAA requires that these plans be updated triennially to incorporate the most recent available technical information.[2] A multi-level partnership of governmental agencies at the federal, state, regional, and local levels implements the programs contained in these plans. Agencies involved include the EPA, CARB, local governments, Southern California Association of Governments (SCAG), and SCAQMD. The SCAQMD and the SCAG are responsible for formulating and implementing the AQMP for the SCAB. The SCAQMD updates its AQMP every three years. The 2012 AQMP, which is the latest, was adopted by the SCAQMD Board on December 6, 2012 and submitted to the CARB and the USEPA for concurrent review on December 20, 2012 (Wallerstein, 2012). After the submittal, the SCAQMD adopted Amendment IND-01to the 2012 AQMP; this control measure applies to emissions from sources associated with the Port of Los Angeles and the Port of Long Beach.

The 2012 AQMP identifies control measures needed to demonstrate attainment with the federal 24-hour standard for $PM_{2.5}$ by 2014 in the South Coast Air Basin. In addition, the 2012 AQMP provides updates on progress towards meeting the 8-hour ozone standard for 2023, an attainment demonstration for the revoked 1-hour ozone standard, a vehicle miles traveled (VMT) offset demonstration for ozone standards, and a report on the health effects of $PM_{2.5}$.

On January 25, 2013 the CARB approved the South Coast 2012 AQMP as an amendment to the State Implementation Plan (SIP) (CARB, 2013).[3] On February 13, 2013, the CARB submitted the approved plan to the USEPA (Goldstene, 2013).[4]

2 CCAA of 1988.
3 http://www.aqmd.gov/aqmp/2012aqmp/Final/CARB-Resolution.pdf.
4 http://www.arb.ca.gov/planning/sip/planarea/2012%20AQMP%20Submittal%20Letter%20to%20U.S.%.

The project will be subject to local significance thresholds (LSTs) for the South Coast Air Quality Management District's (SCAQMD's) source receptor area (SRA) 33, Southwest San Bernardino Valley. The Rancho Monte Vista Mobile Home Park is a residential neighborhood that is close to the site. The distance from the closest residence to the edge of development is approximately 60 feet.

Sensitive Receptors

Some people, such as individuals with respiratory illnesses or impaired lung function because of other illnesses, persons over 65 years of age, and children under 14, are particularly sensitive to certain pollutants. Facilities and structures where these sensitive people live or spend considerable amounts of time are known as sensitive receptors. Land uses identified to be sensitive receptors by SCAQMD (2003) in its *CEQA Air Quality Handbook* include residences, schools, playgrounds, child care centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Sensitive receptors may be at risk of being affected by air emissions released from the construction and operation of the proposed project.

The proposed project would be located in Chino Hills, California, near Rancho Monte Vista Mobile Home Park and a public K-6 school, Chaparral Elementary School. Exposure to potential emissions due to construction would vary substantially from day to day, depending on the amount of work being conducted, the weather conditions, the location of receptors, and the length of time that receptors would be exposed to air emissions. The construction phase emissions estimated in this analysis are based on conservative assumptions and worst-case conditions, with maximum levels of construction activity occurring simultaneously within a short period of time. The nearest sensitive receptors to the proposed project site, with the highest potential to be impacted by the proposed project are displayed in **Figure 3.3-1** (Sensitive Receptors) and listed in **Table 3.3-2** (Sensitive Receptors near Project Site).

Table 3.3-2
SENSITIVE RECEPTORS NEAR PROJECT SITE

Sensitive Receptor Name	Address	Coordinates	Distance from Proposed Project (Feet)
Rancho Monte Vista Mobile Home Park	15050 Monte Vista Ave Chino Hills, CA 91709	Latitude: 33°58'48.37"N Longitude: 117°41'52.23"W	60
Chaparral Elementary School	4849 Bird Farm Rd Chino Hills, CA 91709	Latitude: 33°58'29.26"N Longitude: 117°41'55.75"W	1,500

Source: UltraSystems and Google Earth. 2014.

20EPA.pdf.

DISCUSSION OF IMPACTS

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact

The SCAQMD has established an air quality management plan (AQMP) that proposes policies and measures to achieve federal and state standards for healthful air quality in the SCAB. The most recently approved AQMP was adopted by the SCAQMD Board of Directors on December 7, 2012.

The AQMP incorporates land use assumptions from local general plans and regional growth projections developed by the Southern California Council of Governments (SCAG) to estimate stationary and mobile air emissions associated with projected population and planned land uses. If the proposed land use is consistent with the local general plan, then the impact of the project is presumed to have been accounted for in the AQMP. This is because the land use and transportation control sections of the AQMP are based on the SCAG regional growth forecasts, which incorporated projections from local general plans. As is discussed in **Section 3.10**, the proposed project meets the main objectives of the land use plans and ordinances governing the project site and appropriately balances the requirements of the zoning code with and associated development limitations of the project site.

Another measurement tool in determining consistency with the AQMP is to determine whether a project would generate population and employment growth and, if so, whether that growth would exceed the growth rates forecasted in the AQMP and how the project would accommodate the expected increase in population or employment. The City of Chino Hills has determined that the project would not generate population growth because the project's increase in the availability of housing is being offset by reductions in housing in planning for future developments elsewhere in the City. Furthermore, the jobs created by the industrial portion of the project are less likely to draw large numbers of people from outside the region than they are to redistribute employees already living in Chino Hills and its surroundings. Therefore the project would not conflict with or obstruct the implementation of the applicable air quality management plan and would be less than significant.

b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less than Significant with Mitigation Incorporated

As required by the CAA and CCAA, NAAQS have been established for six major air pollutants, known as criteria pollutants: nitrogen dioxide (NO_2), carbon monoxide (CO), ozone (O_3), particulate matter (PM_{10} and $PM_{2.5}$), sulfur dioxide (SO_2), and lead (Pb). The State of California has also established ambient air quality standards, known as the California Ambient Air Quality Standards (CAAQS). These standards are generally more stringent than the corresponding federal standards and include additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles.

Both state and federal standards are summarized in **Table 3.3-3**, Ambient Air Quality Standards for Criteria Pollutants. The primary standards have been established to protect the public health. The secondary standards are intended to protect the nation's welfare and account for air pollutant effects on soil, water, visibility, materials, vegetation and other aspects of the general welfare.

Table 3.3-3
AMBIENT AIR QUALITY STANDARDS FOR CRITERIA AIR POLLUTANTS

Pollutant	Averaging Time	California Standards[a]		Federal Standards[b]		
		Concentration[c]	Method[d]	Primary[c,e]	Secondary[c,f]	Method[g]
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.07 ppm (137 µg/m³)		0.075 ppm (147 µg/m³)		
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		—		
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	No Separate State Standard		35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	15 µg/m³		
Carbon Monoxide (CO)	8 Hour	9 ppm (10 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m³)	None	Non-Dispersive Infrared Photometry (NDIR)
	1 Hour	20 ppm (23 mg/m³)		35 ppm (40 mg/m³)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		—	—	—
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m³)	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.18 ppm (339 µg/m³)		0.1 ppm (188 µg/m³)	None	
Sulfur Dioxide (SO_2)	24 Hour	0.04 ppm (105 µg/m³)	Ultraviolet Fluorescence	—	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m³)	
	1 Hour[h]	0.25 ppm (655 µg/m³)		0.075 ppm (196 µg/m³)	—	
Lead[i]	30 Day Average	1.5 µg/m³	Atomic Absorption	—	—	—
	Calendar Quarter	—		1.5 µg/m³	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Average[j]	—		0.15 µg/m³		
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per kilometer–visibility of 10 miles or more (0.07 – 30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70%. Method: Beta Attenuation and Transmittance through Filter Tape.		**No Federal Standards**		
Sulfates	24 Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[i]	24 Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

Notes:

a. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter--PM_{10}, $PM_{2.5}$, and visibility reduction particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

b. National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

c. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

d. Any equivalent procedure which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.

e. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

f. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

g. Reference method as described by the USEPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by USEPA.

h. On June 2, 2010, the USEPA established a new 1-hour SO_2 standard, effective August 23, 2010, which is based on the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations. The USEPA also revoked both the existing 24-hour SO_2 standard of 0.14 ppm and the annual primary SO_2 standard of 0.030 ppm, effective August 23, 2010.

i. The CARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

j. National lead standard, rolling 3-month average: final rule signed October 15, 2008.

Source: California Air Resources Board, "Ambient Air Quality Standards." Internet URL: http://www.arb.ca.gov/research/aaqs/aaqs2.pdf. (June 7, 2012)

Significance Thresholds

The SCAQMD has developed criteria for determining whether emissions from a project are regionally significant. They are useful for estimating whether a project is likely to result in a violation of the NAAQS and/or whether the project is in conformity with plans to achieve attainment. The SCAQMD no longer has "indirect source" rules, e.g. rules that place restrictions on housing or commercial development, or require reductions in trip generation and/or vehicle miles traveled to developed commercial or industrial sites.[5] Instead, the District has published guidance on conducting air quality analyses under CEQA (SCAQMD, 1993). SCAQMD's significance thresholds are summarized in **Table 3.3-4** for criteria pollutant emissions during construction activities and project operation. A project is considered to have a regional air quality impact if emissions from its construction and/or operational activities exceed the corresponding SCAQMD significance thresholds.

Table 3.3-4
SCAQMD EMISSIONS THRESHOLDS FOR SIGNIFICANT REGIONAL IMPACTS

Pollutant	Mass Daily Thresholds (Pounds/Day)	
	Construction	Operation
Nitrogen Oxides (NO_X)	100	55
Volatile Organic Compounds (VOC)	75	55
Respirable Particulate Matter (PM_{10})	150	150
Fine Particulate Matter ($PM_{2.5}$)	55	55
Sulfur Oxides (SO_X)	150	150
Carbon Monoxide (CO)	550	550
Lead	3	3

Source: "SCAQMD Air Quality Significance Thresholds." 2011. Diamond Bar, CA: South Coast Air Quality Management District, www.aqmd.gov/ceqa/handbook/signthres.pdf. March 2011. Accessed April 24, 2013.

Air Quality Methodology

Estimated criteria pollutants from the project's on-site and off-site project activities were calculated using the California Emissions Estimator Model (CalEEMod), Version 2013.2.2. CalEEMod is a planning tool for estimating emissions related to land use projects. The model incorporates EMFAC2011 emission factors to estimate on-road vehicle emissions; and emission factors and assumptions from the CARB's OFFROAD2011 model to estimate off-road construction equipment emissions (EIC, 2013). Model-predicted project emissions are compared with applicable thresholds to assess regional air quality impacts. Operational emissions are estimated using CalEEMod and take into account area emissions, such as space heating, from land uses and from the vehicle trips associated with the land uses.

Regional Short-Term Air Quality Effects

Project construction activities will generate short-term air quality impacts. Construction emissions can be distinguished as either on-site or off-site. On-site air pollutant emissions consist principally of exhaust emissions from off-road heavy-duty construction equipment, as well as fugitive particulate matter from earthwork and material handling operations. Off-site emissions result from workers commuting to and from the job site, as well as from trucks hauling materials to the site and construction debris for disposal.

[5] Two indirect source rules (1501 - Work Trip Reduction Plans and 1501.1 - Alternatives to Work Trip Reduction Plans) were repealed in 1995.

For the purpose of this analysis, it was assumed that construction would begin on June 1, 2015 and end on May 31, 2016. The residential and industrial portions of the project would be constructed simultaneously. Estimates of the types and numbers of pieces of equipment anticipated in each phase of construction and development were based on preliminary equipment lists provided by the City of Chino Hills (Walters, 2014), equipment used on typical construction projects, and CalEEMod defaults. Equipment exhaust emissions were determined using CalEEMod default values for horsepower and load factors, which are from the CARB's OFFROAD2011 model. **Table 3.3-5** (Maximum Daily Construction Emissions) summarizes the results of the modeling. Without mitigation, the maximum daily NO_x emissions would be 216 pounds. Use of the emission reduction measures discussed below reduces NO_x emissions to 89 pounds per day. Daily emissions for all the criteria pollutants are less than their respective SCAQMD significance thresholds.

Mitigation Measures

The following mitigation measures apply only to the construction phase and would help to reduce construction air quality impacts to less than significant.

AQ-1: Watering of Exposed Areas

Water exposed areas at least twice per day.

AQ-2: EPA-Approved Construction Equipment

All equipment of the following types that are used in project construction will have engines that meet the U.S. Environmental Protection Agency's "Tier 4" emission standards for new off-road, in-use equipment:

- Cranes
- Generator Sets
- Graders
- Pavers
- Paving Equipment
- Rollers
- Rubber Tired Dozers
- Scrapers
- Tractors/Loaders/Backhoes

Table 3.3-5
PROPOSED PROJECT: MAXIMUM DAILY CONSTRUCTION EMISSIONS (WITH MITIGATION)

Construction Activity	Maximum Emissions (lbs/day)				
	ROG	NO_x	CO	PM_{10}	$PM_{2.5}$
Maximum Cumulative Emissions (Mitigated)	28	89	116	11	5.2
SCAQMD Significance Thresholds	*75*	*100*	*550*	*150*	*55*
Significant - Mitigated	**No**	**No**	**No**	**No**	**No**

Source: Calculated by UltraSystems with CalEEMod (Version 2013.2.2).

Regional Long-Term Air Quality Effects

The primary source of operational emissions would be vehicle exhaust emissions generated from project-induced vehicle trips, known as "mobile source emissions." Other emissions, identified as "energy source emissions," would be generated from energy consumption for water, electricity, and wastewater and solid waste generation.

Operational emissions from the proposed project (2016) were estimated using the operational module of CalEEMod. The vehicle trip generation rates of the proposed project were obtained from the traffic study (Linscott, Law & Greenspan, Engineers, 2014). In addition, default values generated by CalEEMod, including the expected vehicle fleet mix, and vehicle traveling speed and distance assumptions, were used in each model run. The model-predicted area source, energy source, and mobile source emissions for the proposed project are presented in **Table 3.3-6**.

Table 3.3-6
DAILY PROJECT OPERATIONAL EMISSIONS

Emissions Source	Pollutant (lbs/day)				
	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$
Unmitigated					
Area Source Emissions	18	0.34	29	0.16	0.16
Energy Source Emissions	0.44	4.0	2.9	0.31	0.31
Mobile Source Emissions	16	55	185	31	8.6
Total Operational Emissions	**34**	**59**	**217**	**31**	**9.1**
SCAQMD Significance Thresholds	*55*	*55*	*550*	*150*	*55*
Significant (Yes or No)	**No**	**Yes**	**No**	**No**	**No**
Mitigated[6]					
Area Source Emissions	18	0.30	25	0.14	0.14
Energy Source Emissions	0.44	4.0	2.9	0.31	0.31
Mobile Source Emissions	15	50	171	28	7.8
Total Operational Emissions	**33**	**54**	**200**	**28**	**8.2**
SCAQMD Significance Thresholds	*55*	*55*	*550*	*150*	*55*
Significant (Yes or No)	**No**	**No**	**No**	**No**	**No**
Source: Calculated by UltraSystems with CalEEMod (Version 2013.2.2).					

Without mitigation, daily NO_x emissions would be 59 pounds per day. As indicated in **Table 3.3-6**, the long-term operational emissions will be less than significant with incorporation of the following project design features and mitigation measures.

Project Design Features

In the following list, the letter-number combinations in brackets refer to air pollutant reduction measures defined by CAPCOA (2010).

PDF-1: Increase housing density [LUT-1].

[6] "Mitigation" here refers to implementation of project design features presented in the text.

PDF-2: Increase diversity of land use [LUT-3].

PDF-3: Increase Transit Accessibility [LUT-5].

PDF-4: Install and maintain high-efficiency lighting in both the residential and industrial portions of the project.

PDF-5: Install and maintain low-flow bathroom faucets, kitchen faucets, toilets, and showers in all residential units [WUW-1].

Mitigation Measures

Even with consideration of project design features such as increasing housing density and placement of high density residential near to existing transit routes, project operational emissions would exceed thresholds. Consequently, the following mitigation measures are required. The letter-number combinations in brackets refer to air pollutant reduction measures defined by CAPCOA (2010).

AQ-3: Use of Project Landscape Equipment

For project landscaping, use electric lawnmowers, leaf blowers and chainsaws at least 50% of the time [A-1].

AQ-4: No Fireplaces or Hearths

Apartment units will not have fireplaces or hearths.

AQ-5: 100% Reclaimed Water for Irrigation

Use 100% reclaimed water for all irrigation [WSW-1].

c) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less than Significant Impact

As described above in Section 3.3 (b), the project would not exceed any of the SCAQMD daily criteria pollutant thresholds with mitigation incorporated. In general, cumulative *regional* impacts of construction and operation of all projects in the SCAB at any given time are accounted for in the AQMP. The only cumulative impacts with the potential for significance would be localized impacts during construction. The analysis in Section 3.3(d) shows that localized impacts from the project would be less than significant. The question is whether these impacts, in combination with those of other projects would be locally significant. Three projects are under development within 0.5 mile of the project site (Saiyed, 2014). They are listed in **Table 3.3-7**.

Table 3.3-7
CUMULATIVE PROJECTS

Project	Direction	Distance (miles)	Location	Type
Country Club Villas	SW	0.2	Pomona Rincon Road between Wallace Avenue and Los Serranos Road.	46 dwelling units condominium
The Commons	West	0.35	South of Chino Hills Parkway, east of Ramona Avenue, and north of SR-71.	150,488 square feet retail
Indus Light Industrial Development	South	0.1	North of Fairfield Ranch Road at Los Serranos Road	100,330 square feet of warehouse/industrial floor area

Given that Country Club Villas and the project site are on the opposite side of SR-71, it is reasonable to assume that the two projects will not impact each other. The Commons and the Indus Light Industrial Development are too far away (1,200 and 1,800 feet, respectively) from the mobile home park for their local impacts to raise the cumulative impacts to a significant level—even assuming that the project, The Commons, and Indus Light Industrial Development were all simultaneously in the construction phase that would result in the highest emissions. Therefore cumulative impacts would be less than significant.

d) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact

Localized Short-Term Air Quality Effects

Construction of the proposed project would generate short-term and intermittent emissions. **Table 3.3-8** shows the results of the localized significance analysis for the proposed project.

Table 3.3-8
RESULTS OF LOCALIZED SIGNIFICANCE ANALYSIS - CONSTRUCTION

Without Mitigation						
Nearest Sensitive Receptor	**Distance**		**Maximum On-Site Emissions (lbs/day)**			
	Feet	**Meters**	**NO_x**	**CO**	**PM_{10}**	**$PM_{2.5}$**
Rancho Monte Vista Mobile Home Park	75	22.6	193	117	8.9	8.2
SCAQMD LST for 5 acres @ 25 meters[a]			*270*	*2,193*	*16*	*9*
Significant (Yes or No)			**No**	**No**	**No**	**No**
With Mitigation Incorporated						
Rancho Monte Vista Mobile Home Park			74	78	3.2	3.0
SCAQMD LST for 5 acres @ 25 meters[a]			*270*	*2,193*	*16*	*9*
Significant (Yes or No)			**No**	**No**	**No**	**No**

Sources:
Emissions calculated by UltraSystems with CalEEMod (Version 2013.2.2).
Chico, T. and Koizumi, J. *Final Localized Significance Threshold Methodology.* South Coast Air Quality Management District, Diamond Bar, California. June 2003.

[a] SCAQMD guidance for receptors less than 25 meters from a construction site boundary is to use the table lookup values for 25 meters; see Chico and Koizumi (2003), p. 3-3. Thresholds are for source-receptor area 33 (Southwest San Bernardino Valley).

The analysis was based on SCAQMD's Localized Significance Thresholds (LSTs) for a five-acre disturbance area approximately 25 meters (82 feet) away from the nearest sensitive receptor. In general, for a given distance away from a sensitive receptor, the greater the construction area is, the greater the significance threshold is. The LST for a five-acre disturbance area was evaluated as a conservative measure rather than interpolating the more lenient standard for larger project areas. Also, for a given construction site area, the farther away the receptor is, the greater the significance threshold is. All pollutants are below their LSTs at the Rancho Monte Vista Mobile Home Park. Mitigation measures incorporated for the purpose of meeting regional thresholds further lower pollutant concentrations to well below LSTs.

Although sensitive receptors would be exposed to diesel exhaust from construction equipment, which has been associated with lung cancer (CA EPA, 1998), the duration of exposure would not be sufficient to result in a significant cancer risk. Carcinogenic health risk assessments are based upon an assumption of 70 years continuous exposure, while the exposure in the present case would be intermittent over approximately one year. Therefore, no cancer health risk assessment was necessary. Acute non-cancer risk assessments are based upon one-hour maximum exposures, but acute reference exposure levels (RELs) for diesel exhaust and diesel particulate matter have not been established by the Office of Environmental Health Hazard Assessment (CA EPA, 2008).

Localized Long-Term Air Quality Effects

As discussed in Section 3.3(b), the daily project operational emissions will not exceed the SCAQMD regional thresholds (see **Table 3.3-5**), and would not expose adjacent sensitive receptors to substantial pollutant concentrations.

Increased local vehicle traffic may contribute to off-site air quality impacts. The traffic increases in nearby intersections may contribute to traffic congestion, which may create "pockets" of CO called hotspots. These pockets have the potential to exceed the state 1-hour standard of 20 ppm and/or the 8-hour standard of 9.0 ppm, thus affecting sensitive receptors that are close to these roadways or intersections. CO hotspots typically are found at busy intersections, but can also occur along congested major arterials and freeways. They occur mostly in the early morning hours when winds are stagnant and ambient CO concentrations are elevated. In accordance with the California Department of Transportation (Caltrans) CO Protocol (Caltrans, 1997), CO hotspots are evaluated when a project degrades the level of service (LOS) at a nearby signalized intersection to "E" or worse. Typically, hotspots analyses are not performed for unsignalized intersections, which have lower traffic volumes than those with signals. This is particularly the case when a hotspots analysis shows no impacts for the most congested, signalized intersections.

The traffic study performed for this project concluded that the traffic generated by project activities would not lower the LOS to "E" or worse. A CO hotspots analysis was therefore not required or performed.

e) Would the project create objectionable odors affecting a substantial number of people?

Less than Significant with Mitigation Incorporated

Construction activities for the proposed project would generate airborne odors associated with the operation of construction vehicles (i.e., diesel exhaust), asphalt paving operations, and the application of paints and coatings. These emissions would occur during daytime hours only, and would be isolated to the immediate vicinity of the construction site and activity. Therefore, they would not affect a substantial number of people. When project construction is completed, odors from the proposed residential uses of the proposed project would not significantly differ from odors emanating from other residential areas within the vicinity.

The light industrial portion of the project could have odor-producing diesel truck traffic and manufacturing processes. Most manufacturing processes would require operating permits from the SCAQMD. As part of the District's new source review, the potential for odor issues would be identified and permits would contain conditions to minimize those odors. In addition, the facilities in the industrial portion would be subject to SCAQMD Rule 402 (Nuisance); Rule 402 applies to odors from any source[7] including diesel truck traffic. If residents of the residential portion of the project complained, the District would send an inspector; if the inspector issued a notice of violation, then the industrial facility would have to abate the odor. With incorporation of mitigation measure **AQ-6**, odor impacts from the industrial portion of the project would be less than significant.

It is also necessary to evaluate the impacts on future project residents from the Carbon Canyon Water Recycling Facility, which is operated by the Inland Empire Utilities Agency. The wastewater treatment plant is within 500 feet of the locations of future apartment buildings. A preliminary review of SCAQMD records for the facility found no nuisance complaints. Also, analysis of wind rose data for Chino Airport, which is about 2.3 miles from the site, shows that the predominant flow is from the west-southwest, which would be from the project towards the wastewater treatment plant. Flows from the plant toward the project site appear to be rare. With incorporation of mitigation measure **AQ-7**, odor impacts from the Carbon Canyon Water Recycling Facility would be less than significant.

Mitigation Measures

The following mitigation measures would help to reduce odor impacts to less than significant.

AQ-6: Odor Disclosure Relating to Business Park

The owner and/or manager of the apartment units will provide full disclosure to prospective tenants that the project is adjacent to light industrial land uses and that tenants may perceive unpleasant odors on certain days. The disclosure will be both oral and written. The form and content of the disclosure will be submitted to the City for approval prior to Certificate of Occupancy. The disclosure will contain the current phone number and web address for the SCAQMD odor complaint system. The disclosure, at the owner and/or manager's option, may contain data on historical wind patterns and descriptions of manufacturing processes occurring at the light industrial properties.

[7] SCAQMD Rule 402 applies to "any source whatsoever;" however, it includes an exemption for husbandry.

AQ-7: Odor Disclosure Relating to Wastewater Treatment Plant

The owner and/or manager of the apartment units will provide full disclosure to prospective tenants that the project is within 500 feet of a wastewater treatment plant and that tenants may perceive unpleasant odors on certain days. The disclosure will be both oral and written. The form and content of the disclosure will be submitted to the City for approval prior to Certificate of Occupancy. The disclosure will contain the current phone number and web address for the SCAQMD odor complaint system. The disclosure, at the owner and/or manager's option, may contain data on historical wind patterns.

3.4 BIOLOGICAL RESOURCES				
Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Have 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 Wildlife Service?		**X**		
b) Have 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 US Fish and Wildlife Service?		**X**		
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 pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		**X**		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native nursery sites?		**X**		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				**X**
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				**X**

The following is summarized in part from the Biological Resources Assessment for the Fairfield Ranch Commons Project, prepared for the proposed Fairfield Ranch Commons Project (project) by UltraSystems Environmental Inc. (UltraSystems, 2014b). The biological resources report is included as **Appendix B**.

ENVIRONMENTAL SETTING

UltraSystems' biologists conducted a literature review, a habitat assessment, a plant survey, a wildlife survey, a jurisdictional assessment, and a wildlife movement evaluation within the project site and a 500-foot zone referred to as the biological study area (BSA) to (1) assess the potential presence of special-status plant and wildlife species; (2) identify plant communities, jurisdictional waters, critical habitat, and potential wildlife corridors; and (3) identify potential impacts to these biological resources within 500 feet of the proposed project. The literature review and field survey methods are described in the *Biological Resources Assessment for the Fairfield Ranch Commons Project* (**Appendix B**). Focused protocol surveys for plants or wildlife were not conducted for this initial study.

Most of the project site is vacant and can be characterized as disturbed due to previous agricultural cultivation. Approximately two acres is used as agricultural related storage, which is occupied by a wooden barn, storage container, a canopy, poultry enclosures, miscellaneous supplies and debris. Although no crops are currently planted (other than a small strip of a Chinese ornamental lotus), irrigation lines are still laid out in a parallel pattern across the landscape.

Three plant communities and two non-vegetated features were mapped within the BSA. They include: 1) fallow agricultural land [see **Photo 1**], 2) black willow thicket [see **Photo 2**], 3) barren/disturbed area [see **Photo 3** and **4**], 4) non-vegetated canal [see **Photo 5**], and 5) urban/developed [see **Photo 6**]. No listed or sensitive plants were observed on the project site during the general biological survey.

Two sensitive wildlife species, the Cooper's hawk (*Accipiter cooperii*) and the California horned lark (*Eremophila alpestris actia*), were observed within the BSA. Both birds are designated as "taxa to watch" in the *California Bird Species of Special Concern* report (Shuford and Gardali, 2008). Besides these birds, no other sensitive wildlife species were observed during the field survey.

However, the literature review concluded that habitat conditions within the BSA create a moderate to high potential for six sensitive wildlife species to occur.

<u>High Potential to Occur</u>

- Loggerhead shrike (*Lanius ludovicianus*): high potential to occur within the BSA for foraging only.

<u>Moderate Potential to Occur</u>

- White-tailed kite (*Elanus leucurus*): moderate potential to occur within the BSA for foraging only.

- Burrowing owl (*Athene cunicularia*): moderate potential to occur within project site boundary.

- Merlin (*Falco columbarius*): moderate potential to use the BSA for foraging only. Merlin does not nest in California.

- Yellow warbler (*Setophaga petechia brewsteri*) and yellow-breasted chat (*Icteria virens*): No potential to occur within the project site and moderate potential to occur outside of the project site boundary within the BSA in the black willow thicket.

The project site is located approximately seven miles north of the Prado Dam. Prado Dam is an earth-fill dam across the Santa Ana River. Upstream of the Prado Dam is the Prado Flood Control Basin which contains the single largest stand of forested, riparian habitat remaining in Southern California. Chino Creek, located east of the project site, flows approximately 3.5 miles until it reaches the Prado Flood Control Basin. The basin is rich in plant and animal life, including rare, threatened and endangered species.[1] This productive and rare ecosystem supports more than 311 species of vascular plants, seven species of amphibians, 13 species of reptiles, 47 breeding bird species, 11 raptor species and 23 mammal species. The basin hosts the largest population of the least Bell's vireo (*Vireo bellii pusillus*) in existence. This bird is both a state and federal endangered species.

[1] Orange County Water District website on Prado Dam. Accessed August 2014. http://www.ocwd.com/Environment/PradoBasin.aspx

Figure 3.4-1
PHOTOGRAPHS OF EXISTING SITE CONDITIONS FOR BIOLOGICAL RESOURCES

Photo 1: Fallow agricultural land.

Photo 2: Black willow thicket community downstream of Chino Creek, 150 feet southeast of project site.

Photo 3: Barren/disturbed land.

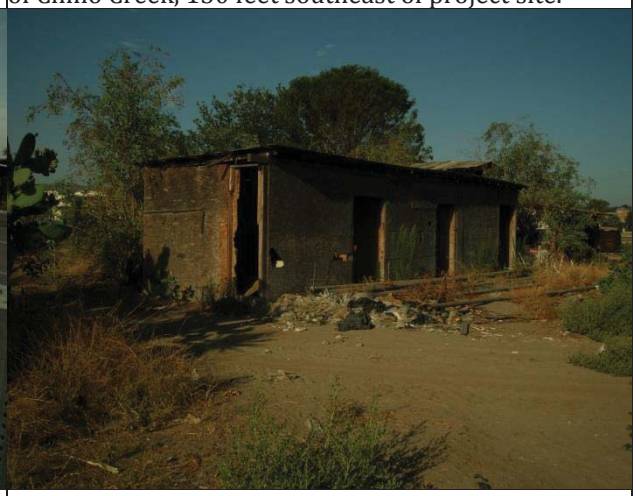


Photo 4: Centrally located on the project site is one of many ancillary agricultural related sheds.

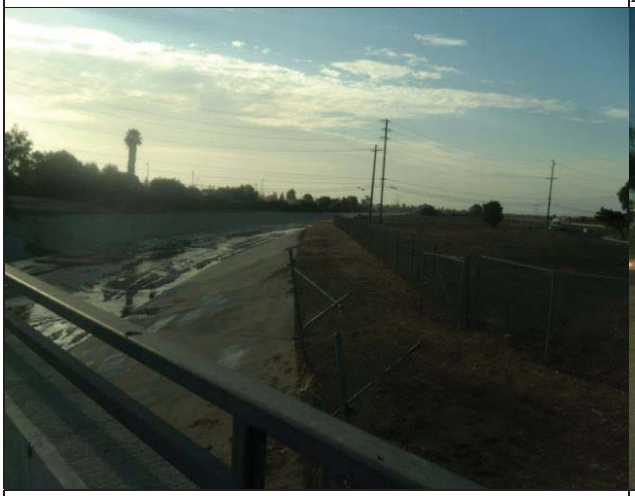


Photo 5: Concrete lined- flood control channel (Chino Creek).

Photo 6: Urban/developed land immediately west of the project site.

REGULATORY SETTING

This project would be subject to applicable federal, state and local environmental laws, regulations, ordinances, policies, programs, and management plans. These provide a potential regulatory constraint to construction and are the regulatory drivers that require biological surveys, permits, avoidance, and protection measures, and mitigation measures. These include, but are not limited to, the following: federal Endangered Species Act (ESA); Migratory Bird Treaty Act (MBTA); Bald and Golden Eagle Protection Act (BGEPA); Clean Water Act (CWA), California Environmental Quality Act (CEQA); California Endangered Species Act (CESA); Fish and Game Codes (§§3511, 4700, 5050, 5515, 3503, 3503.5, 3505, 3513, and 1600-1616; Native Plant Protection Act (NPPA); and the Porter-Colonge Water Quality Control Act. Each is described in detail within the *Biological Resources Assessment for the Fairfield Ranch Commons Project* (**Appendix B**).

DISCUSSION OF IMPACTS

a) Could the project have a substantial adverse impact, 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[2] or U.S. Fish and Wildlife Service?

Less than Significant with Mitigation Incorporated

Impacts to Vegetation

Excavation and remedial grading necessary to construct the project would directly and indirectly impact on-site vegetation. Direct impacts on plants have immediate consequences, such as the changes that occur when land is cleared for development. Direct permanent impacts include all areas within the limits of construction in the project footprint.

Construction of the project also has the potential to indirectly impact plants. Indirect impacts on plants result in secondary consequences and are likely to be temporary. Examples of indirect, temporary impacts include the effects of airborne fugitive dust created by construction activities. Construction-related erosion, runoff, siltation, sedimentation, soil compaction, and alteration of drainage patterns could affect plants by altering site conditions so that the location in which they are growing becomes unfavorable.

No listed or sensitive plants were observed within the BSA during the general biological survey. In addition, the literature review and field survey concluded that the BSA clearly lacks suitable plant communities, soils, and/or other factors to support any of the listed or sensitive plant species in the plant inventory. Therefore, no direct impacts or indirect impacts on listed endangered, threatened, candidate, state rare, or sensitive plant species are anticipated as a result of construction of the project, and mitigation is not required.

Impacts to Wildlife

Excavation and remedial grading needed to develop the property has potential to directly impact wildlife occupying the BSA through mortality, injury, or harassment of individuals as a result of permanent development and from the removal and direct loss of breeding, foraging, and/or

[2] On January 1, 2013, the California Department of Fish and Game (CDFG) officially changed its name to the California Department of Fish and Wildlife (CDFW).

sheltering habitats. Project development would also reduce the amount of habitat available for common and special-status wildlife species utilizing onsite habitats.

Project construction and operation may also cause indirect impacts**.** Indirect impacts could occur within areas located adjacent to the limits of construction in the project footprint. Examples of indirect impacts include:

- Increased noise levels, dust, vibrations, lighting and/or human intrusion in and near habitats could disrupt natural foraging, roosting, denning, and/or breeding behavior of wildlife species. Wildlife species stressed by these factors may disperse from habitat in the project site and project vicinity. In addition, increased noise levels could interfere with territorial and mating vocalizations, thereby interfering with wildlife reproduction.

- Project construction could increase fugitive dust, pollution, runoff, siltation, sedimentation, and erosion. This could result in degradation and alteration of habitats, soils, and water quality of on-site streams. Consequently, the ability of onsite and adjacent plant communities and aquatic habitats to support wildlife populations may decrease.

- An increase and continuation of human activities within and adjacent to the project site could lead to mortality, injury, or harassment of common and special-status wildlife species by providing food in the form of trash and litter or water which attracts predators such as the common raven (*Corvus corax*), Virginia opossum (*Didelphis virginiana*), and coyote (*Canis latrans*).

Ground disturbing and habitat altering activities could involve significant disturbance to common and special-status ground-dwelling animals or nesting birds. Direct impacts to less mobile fossorial (burrowing) animals that are underground during most of the day or year (e.g., small mammals or lizards) or have a life stage in the soil or on plants (e.g., amphibians, nesting birds, insects) could occur from encounters with vehicles or heavy equipment as many of these animals do not run away from construction vehicles/equipment and are likely to be killed. These species could be expected to experience direct mortality, injury, harassment, and displacement from increased human activity and vehicle/equipment travel if they are present onsite within the project footprint at the time of construction. Individual losses are more likely, especially during clearing and grubbing activities.

Listed Wildlife

No listed wildlife was observed within the BSA during the general biological survey; however two listed bird species, least Bell's vireo (*Vireo bellii pusillus*) and southwestern willow flycatcher (*Empidonax traillii extimus*), have a moderate to high potential to occur within the black willow thicket located in Chino Creek outside of the project footprint. The black willow thicket will not be directly impacted; therefore, no direct impacts to least Bell's vireos or southwestern willow flycatchers are anticipated as a result of construction of the project, and mitigation is not required. However, the least Bell's vireo and southwestern willow flycatcher could potentially be indirectly impacted by the project, if the birds occur within the black willow thicket located outside of the project boundary in Chino Creek during construction activities. Construction noise, dust, vibrations, or lighting could potentially disrupt the natural foraging, roosting, denning, and/or breeding behavior of these birds. With implementation of mitigation measures **BR-1, BR-3** through **BR-6**, indirect impacts on listed wildlife species, if any, would be reduced to less than significant levels.

Sensitive Wildlife

Two sensitive wildlife species, the Cooper's hawk (*Accipiter cooperii*) and the California horned lark (*Eremophila alpestris actia*), were observed within the BSA during the general biological survey. Both birds are designated as "taxa to watch" in the *California Bird Species of Special Concern* report (Shuford and Gardali, 2008). This designation carries no formal legal status under the ESA, CESA, or the CEQA. These species are highly mobile; therefore, it is not anticipated that project construction could result in any direct impacts on them. In addition, potential impacts on watch list species are not typically considered significant by the California Department of Fish and Wildlife (CDFW). Besides these birds, no other sensitive wildlife species were observed within the BSA during the field survey.

The project site does have moderate potential for burrowing owl to occur. However a focused burrowing owl survey was not conducted and the presence of burrowing owls within the project site is not confirmed. Grading has the potential to significantly impact this species if present on-site. With implementation of mitigation measures **BR-1** through **BR-6**, direct and indirect impacts on sensitive wildlife, if any, would be reduced to less than significant levels.

Breeding Birds

The BSA supports trees, shrub vegetation, and other physical features that could potentially provide foraging, nesting, and cover habitats to support a diverse assortment of bird species (year-round residents, seasonal residents, and migrants). A majority of the birds observed during the field survey and those birds that would potentially breed within the project site are protected by the MBTA and Fish and Game Codes §3503, §3503.5, and §3513. The MBTA and Fish and Game codes make it unlawful to take native breeding birds, and their nests, eggs, and young.

Site grading has the potential to directly and indirectly take individual breeding birds, their nests, young, or eggs. Indirect impacts on breeding birds could occur from increased noise, vibration, and dust during construction, which could adversely affect the breeding behavior of some birds, and lead to the loss (take) of eggs and chicks, or nest abandonment. Impacts on breeding birds or active nests would be considered significant unless reduced to less than significant levels by adopting measures to mitigate or avoid these impacts. Project development is not expected to cause a significant impact to bird species that only forage at the site or occur as transient visitors. With implementation of mitigation measures **BR-1** through **BR-6**, direct and indirect impacts on breeding birds, if any, would be reduced to less than significant levels.

Mitigation Measures

The following mitigation measures would help to reduce and/or avoid potential direct or indirect impacts on special-status wildlife species to less than significant levels.

BR-1: Pre-Construction Breeding Bird Survey

To be in compliance with the MBTA and the California Fish and Game Code, and to avoid impacts or take of migratory non-game breeding birds, their nests, young, and eggs, the following measures will be implemented. These measures will help to reduce direct and indirect impacts caused by construction on migratory non-game breeding birds to less than significant levels.

- Project activities that will remove or disturb potential nest sites will be scheduled outside the breeding bird season to avoid potential direct impacts on migratory non-

game breeding birds protected by the MBTA and Fish and Game Code. The raptor and breeding bird nesting season is typically from January 31 through September 15, but can vary slightly from year to year, usually depending on weather conditions. Removing all physical features that could potentially serve as nest sites will also help to prevent birds from nesting within the project site during the breeding season and during construction activities.

- If project activities cannot be avoided during January 31 through September 15, a qualified biologist will conduct a pre-construction breeding bird survey for breeding birds and active nests or potential nesting sites within the limits of project disturbance. The survey(s) will be conducted at least seven days prior to the onset of scheduled activities, such as mobilization and staging. It will end no more than three days prior to vegetation, substrate, and structure removal and/or disturbance.

- If no breeding birds or active nests are observed during the pre-construction survey(s) or they are observed and will not be impacted, project activities may begin and no further mitigation will be required.

- If a breeding bird territory or an active bird nest is located during the pre-construction survey(s) and will potentially be impacted, the site will be mapped with a Global Positioning System (GPS) unit and on engineering drawings and a no-activity buffer zone will be marked (fencing, stakes, flagging, orange snow fencing, etc.) a minimum of 100 feet in all directions or 500 feet in all directions for listed bird species and all raptors. The biologist will determine the appropriate buffer size based on the type of activities planned near the nest and the type of bird that created the nest. Some bird species are more tolerant than others of noise and activities occurring near their nest. This no-activity buffer zone will not be disturbed until a qualified biologist has determined that the nest is inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young will no longer be impacted by project activities. Periodic monitoring by a biologist will be performed to determine when nesting is complete. Once the nesting cycle has finished, project activities may begin within the buffer zone.

- If listed bird species, such as the least Bell's vireo, are observed within the project site during the pre-construction surveys, the biologist will immediately map the area and notify the appropriate resource agency to determine suitable protection measures and/or mitigation measures and to determine if additional surveys or focused protocol surveys are necessary. Project activities may begin within the area only when concurrence is received from the appropriate resource agency.

- Birds or their active nests will not be disturbed, captured, handled or moved. Active nests cannot be removed or disturbed; however nests can be removed or disturbed if determined inactive by a qualified biologist.

BR-2: Pre-Construction Burrowing Owl Surveys

To be in compliance with the MBTA and Fish and Game Codes, and to avoid impacts or take of burrowing owls, their nests, young, and eggs, a qualified biologist will conduct a pre-construction burrowing owl survey (Take Avoidance Surveys, page 29) within the project site in accordance with the *Staff Report on Burrowing Owl Mitigation* (*Staff Report*) (CDFG,

2012) no less than 14 days prior to initiating ground disturbance activities. Following the completion of the pre-construction burrowing owl survey, the biologist will prepare a letter report in accordance with the Survey Report Guidelines described in the *Staff Report* (page 30) summarizing the results of the survey. The report will be submitted to CDFW prior to initiating any ground disturbance activities.

If no burrowing owls or active burrow(s) (signs of which may include: molted feathers, cast pellets, prey remains, eggshell fragments, or excrement at or near a burrow entrance or perch site) are observed during the pre-construction survey and concurrence is received from CDFW, project activities may begin and no further mitigation will be required.

If burrowing owls or active burrow(s) are observed during the pre-construction survey, the biologist will contact CDFW and conduct an impact assessment in accordance with the *Staff Report* to assist in the development of avoidance, minimization, and mitigation measures, prior to commencing project activities. If burrowing owls are present then the ultimate disposition is a negotiation with CDFW to determine the locations for active relocation.

BR-3: Project Limits and Designated Areas

To avoid impacts on nearby sensitive biological resources, the applicant will implement the following measures prior to project construction and commencement of any ground-disturbing activities or vegetation removal.

- Specifications for the project boundary, limits of grading, project related parking, storage areas, laydown sites, and equipment storage areas will be mapped and clearly marked in the field with temporary fencing, signs, stakes, flags, rope, cord, or other appropriate markers. All markers will be maintained until the completion of activities in that area.

- To minimize the amount of disturbance, the construction/laydown areas, parking areas, staging areas, storage areas, spoil areas, and equipment access areas will be restricted to designated areas. Designated areas will comprise existing disturbed areas (parking lots, access roads, graded areas, etc.) to the extent possible.

- Project related work limits will be defined and work crews will be restricted to designated work areas. Disturbance beyond the actual construction zone is prohibited without site-specific surveys. If sensitive biological resources are detected in the area to be impacted, then appropriate measures will be implemented to avoid impacts (i.e., flag and avoid, erect orange snow fencing, biological monitor present during work, etc.). However, if avoidance is not possible and the sensitive biological resources will be directly impacted by project activities, the biologist will mark and/or stake the site(s) and map the individuals on an aerial map and with a GPS unit. The biologist will then contact the appropriate resource agencies to develop additional avoidance, minimization and/or mitigation measures prior to commencing project activities.

- A 50-foot setback will be maintained from the edge of all jurisdictional areas. The setback zone will be clearly marked in the field.

- Existing roads and trails will be utilized wherever possible to avoid unnecessary impacts. Project-related vehicle traffic will be restricted to established roads, staging areas, and parking areas. Travel outside construction zones is prohibited.

BR-4: Worker Environmental Awareness Program (WEAP)

If special-status wildlife species are observed and determined present within the project site during the pre-construction breeding bird or burrowing owl surveys, then a qualified biologist will prepare and conduct a Worker Environmental Awareness Program (WEAP) that will describe the biological constraints of the project prior to project implementation and construction activities. All on-site personnel who will work within the project site will attend the WEAP prior to performing any work. The WEAP will be administered to all on-site personnel regarding the results of the pre-construction surveys, sensitive biological resources potentially present on the site, restrictions, avoidance, and protection measures, mitigation measures (if any), and individual responsibilities associated with the project. Training materials will be language-appropriate for all construction personnel. Upon completion of the WEAP, workers will sign a form stating they attended the program, understand all protection measures, and will abide all the rules of the WEAP. A record of all trained personnel will be kept with the construction foreman on-site. If new construction personnel are added to the project later, the construction foreman will ensure that new personnel receive training before they start working. The biologist will prepare and provide written hard copies of the WEAP and photos of the sensitive biological resources to the construction foreman.

BR-5: Biological Monitor

If special-status wildlife species are observed and determined present within the project site during the pre-construction breeding bird or burrowing owl surveys, then a biological monitor will be on site to monitor activities that result in the clearing or grading of areas known to contain sensitive biological resources to ensure that impacts do not exceed the limits of grading and to minimize the likelihood of inadvertent impacts on listed species and other wildlife species. The biological monitor will ensure that all biological mitigation measures, best management practices (BMPs), avoidance, and protection measures and mitigation measures described in the relevant project permits and reports are in place and are adhered to. Monitoring will cease when the sensitive habitats have been cleared or impacted.

The biological monitor will have the authority to halt all construction activities and all non-emergency actions if listed species are identified and will be directly impacted. The monitor will notify the appropriate resource agency and consult if needed. If needed and possible, the monitoring biologist will relocate the individual outside of the work area where it will not be harmed. Work can continue at the location if he applicant and the consulted resource agency determine that the activity will not result in impacts on the species.

The appropriate agencies will be notified if a dead or injured protected species is located within the project site. Written notification must be made within 15 days of the date and time of the finding or incident (if known) and must include: location of the carcass, a photograph, cause of death (if known), and other pertinent information.

BR-6: General Vegetation and Wildlife Avoidance and Protection

The project site contains habitats which can support wildlife species. The applicant will implement the following measures to protect vegetation and wildlife, to the extent practical.

- Vegetation will only be disturbed and/or removed immediately before grading or trimming activities in order to reduce erosion, sedimentation, and/or siltation into biologically sensitive areas. Cleared or trimmed vegetation and woody debris will be disposed of in a legal manner at an approved disposal site. Cleared or trimmed non-native, invasive vegetation will be disposed of in a legal manner at an approved disposal site as soon as possible to prevent regrowth and the spread of weeds.

- Vehicles and equipment will be free of caked mud or debris prior to entering the project site to avoid the introduction of new invasive weedy plant species.

- To minimize construction-related mortalities of nocturnally active species such as mammals and snakes, it is recommended that all work be conducted during daylight hours. Night-time work (and use of artificial lighting) will not be permitted unless specifically authorized. If required, night lighting will be directed away from the preserved open space areas to protect species from direct night lighting. All unnecessary lights will be turned off at night to avoid attracting wildlife such as insects, migratory birds, and bats.

- If any wildlife is encountered during the course of project activities, said wildlife will be allowed to freely leave the area unharmed.

- Wildlife will not be disturbed, captured, harassed, or handled. Fishing will be prohibited at the project site. Animal nests, burrows and dens will not be disturbed without prior survey and authorization from a qualified biologist.

- Active nests cannot be removed or disturbed. Nests can be removed or disturbed if determined inactive by a qualified biologist.

- To avoid impacts on wildlife, the applicant will comply with all litter and pollution laws and will institute a litter control program throughout project construction. All contractors, subcontractors, and employees will also obey these laws. Trash and food items will be disposed of promptly in predator-proof containers with resealing lids. These covered trash receptacles will be placed at each designated work site and the contents will be properly disposed at least once a week. Trash removal will reduce the attractiveness of the area to opportunistic predators such as common ravens (*Corvus corax*), coyotes (*Canis latrans*), northern raccoons (*Procyon lotor*), and Virginia opossums (*Didelphis virginiana*).

- Contractors, subcontractors, employees, and site visitors will be prohibited from feeding wildlife and collecting plants and wildlife.

- Disturbance near ponded water will be limited during the rainy season. It could serve as potential habitat for amphibians and sensitive invertebrates.

b) Could the project have a substantial adverse impact 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 Wildlife Service?

Less than Significant with Mitigation Incorporated

Development of the project site will result in direct impacts (permanent loss of vegetation) to plant communities. As described above in the Environmental Setting Section, three plant communities and two non-vegetated features were observed and mapped within the BSA during the field survey. They include (1) black willow thicket, (2) fallow agricultural land, (3) barren/disturbed area, (4) non-vegetated canal, and (5) urban/developed. Black willow thicket and the non-vegetated canal are considered sensitive.

Direct impacts on fallow agricultural land, disturbed/barren, and urban/developed areas are considered less than significant. Urban/Developed is not a plant community and fallow agricultural land and disturbed/barren areas do not meet criteria to be considered sensitive. These plant communities are not considered rare by the California Natural Diversity Database (CNDDB); they are dominated by non-native species; they are widespread in the project vicinity; they generally are considered common enough not be of concern; and/or they exhibit a moderate level of disturbance rendering them less valuable as habitat to support wildlife diversity or special-status species. Direct impacts on these non-sensitive plant communities are considered less than significant and do not meet or exceed the significance thresholds; therefore, mitigation is not required. Indirect impacts on fallow agricultural land and disturbed/barren plant communities are also considered less than significant. Mitigation is not required.

Black willow thicket is located outside of the project site boundary within areas of the BSA. It is considered a sensitive plant community because special-status bird species rely on this community for breeding, shelter, and foraging. In addition, the black willow thicket that is associated with Chino Creek would most likely be considered jurisdictional by the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (RWQCB), and CDFW because it is connected hydrologically to the creek. Moreover, black willow thicket is a community that is becoming rare in the state.

Non-vegetated canal (Chino Creek) is located partially with the project site boundary, but mostly outside of the boundary. The entirety of Chino Creek is depicted as a blue-line stream on United States Geological Survey (USGS) maps and is considered a stream under Sections 1600-1603 of the California Fish and Game Code because it can support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife." The Corps, CDFW, and RWQCB would most likely consider Chino Creek jurisdictional and therefore sensitive. A formal jurisdictional delineation of Chino Creek was not conducted as part of this initial study because the project footprint does not extend into the creek and the creek will not be directly impacted.

Black willow thicket and Chino Creek are not located within the project footprint and will not be directly impacted by the project. Therefore, no direct impacts on sensitive plant communities/areas and riparian habitats are anticipated as a result of construction of the project. No direct impacts would occur and mitigation is not required; however implementation of the project could result in indirect impacts on the sensitive riparian habitat (black willow thicket) located outside of the project footprint within Chino Creek. Indirect impact on black willow thicket and Chino Creek could affect the special-status bird species that depend on riparian habitat. Indirect impacts may include fugitive dust generated during construction or contaminated stormwater runoff leaving the

construction site. As a result, mitigation is required to avoid indirect impacts. With implementation of mitigation measures **BR-3** mentioned above and the following **BR-7**, indirect impacts on black willow thicket would be reduced to less than significant levels.

Mitigation Measures

The following mitigation measure would ensure that indirect impacts related to black willow thicket and Chino Creek are less than significant.

BR-7: Construction Best Management Practices

> Project work crews will be directed to use construction BMPs described in California Stormwater Quality Association's (CASQA) New Development and Redevelopment BMP Handbook where applicable. These measures will address the potential for fugitive dust and quality of stormwater runoff leaving the project site. The BMPs to be used must be identified prior to construction and incorporated into the construction operations.

c) Could the project have an adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less than Significant with Mitigation Incorporated

The jurisdictional assessment confirmed the presence of federal and/or state wetlands, waters, and habitats located within Chino Creek outside of the project site footprint; however a formal jurisdictional delineation was not conducted as part of this initial study because the project footprint does not extend into the creek and will not be directly impacted by site construction and operation. Therefore, no direct impacts on jurisdictional waters are anticipated and mitigation is not required. In addition, no Corps, RWQCB, or CDFW permits for the project will be required.

Implementation of the project could result in indirect impacts on the adjacent jurisdictional waters (Chino Creek) that would be considered significant absent mitigation. Indirect impacts are likely to be temporary during construction, but they could also be long-term as a result of impervious surfaces and permanent development. Construction-related pollution, airborne fugitive dust, erosion, runoff, siltation, sedimentation, and soil compaction could adversely affect water quality and aquatic habitats. Site development may also promote the introduction and spread of invasive, exotic plants, such as arundo (*Arundo donax*) which could result in permanent indirect impacts on jurisdictional waters and water quantity. With implementation of mitigation measures **BR-3** and **BR-7** mentioned above, indirect impacts on jurisdictional waters and wetlands would be reduced to less than significant levels.

d) Could the project interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?

Less than Significant with Mitigation Incorporated

No native wildlife nursery sites were observed within the BSA during the biological survey. Therefore, no direct or indirect impacts on native wildlife nursery sites are anticipated as a result of construction of the project, and mitigation is not required.

The literature review and field survey determined that the project site does not contain wildlife corridors. Therefore, no direct impacts on wildlife corridors are anticipated as a result of construction of the project. No direct impacts would occur and mitigation is not required.

The literature review and field survey determined that Chino Creek could potentially serve as a wildlife corridor. This corridor is not located within the project footprint and will not be directly impacted by the project; however development of the project could result in indirect impacts to Chino Creek. Indirect impacts on wildlife movement though Chino Creek may include construction related noise, lighting, dust, and traffic. Residential and street lighting may have long term indirect impacts on wildlife movement. Artificial light shining on Chino Creek could deter wildlife species that are sensitive to human activities. Another example of long term indirect impacts is that dogs and cats from the residential community could prey on animals traversing the area via Chino Creek. With implementation of mitigation measures **BR-3** mentioned above and the following **BR-8**, indirect impacts on wildlife corridors (Chino Creek) would be reduced to less than significant levels.

Mitigation Measures

The following mitigation measures would help to reduce and/or avoid potential direct or indirect impacts related to wildlife corridors to less than significant levels.

BR-8: Wildlife Corridors and Native Open Space Mitigation

The following measures are recommended, to the extent feasible, to help minimize the potential degradation of native open space habitats and areas utilized as wildlife corridors due to project development.

- Perimeter fencing/walls constructed of solid material will be installed along the back of the residential portion of the project that is located adjacent to the Chino Creek to help serve as an effective barrier to keep out domestic animals.

- Street and residential lighting will be designed to shield light spillage into the creek to protect wildlife species within the area. The overall landscaping will ensure that the Chino Creek is adequately buffered from residential development on site.

e) Could the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact

No native trees or desert shrubs protected by the City of Chino Hills were observed within the project site during the biological survey; therefore the project could not conflict with any local policies or ordinances protecting biological resources. No impacts would occur and mitigation is not required.

f) Could the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact

The BSA is not located in an area covered by a Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP); therefore the project could not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP. No impacts would occur and mitigation is not required.

3.5 CULTURAL RESOURCES				
Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				**X**
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		**X**		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		**X**		
d) Disturb any human remains, including those interred outside of formal cemeteries?		**X**		

The following information was summarized from a Negative Phase I Pedestrian Cultural Resources Survey Report prepared by UltraSystems Environmental, Inc. (UltraSystems, 2014c). The Negative Phase I Pedestrian Cultural Resources Survey Report and Addendum is included as **Appendix C** in this Initial Study.

ENVIRONMENTAL SETTING

Archeological Resources

The project site lies within the traditional tribal territory of the Tongva/Gabrielino, which is believed to have inhabited the area beginning in the Milling Stone or Intermediate period, approximately 3,000 years before present. These people are believed to have established the village of Pashiinonga that was located on a rise above Chino Creek. This village would have been a base with smaller satellite villages and seasonal camps in the vicinity. Because of this history, the entire City is sensitive for prehistoric resources.

The area of potential effect (APE) utilized in the cultural resource report considered a half-mile radius surrounding the subject parcel (see **Figure 3.5-1**). Within this APE there are 10 cultural resource sites, though none of them are located within the boundary of the project site. These resource sites include three prehistoric isolates, one prehistoric site and six historic sites. Currently, none of the resource sites identified have been recommended for listing on the County Register of Historic Places nor are they listed eligible for the National Register of Historic Places listing.

A pedestrian survey conducted subsequent to the records search failed to uncover the presence of archeological resources on the property. Communication with the Native American Heritage Commission (NAHC) indicated that the search of the Sacred Lands File "… failed to indicate the presence of Native American traditional cultural resources in the immediate project area."

Paleontological Resources

The eastern Puente Hills, also known as the Chino Hills, are made up of middle to late Miocene Epoch (15 million to 9 million years old) marine sedimentary rock units overlain in some areas by

Pleistocene Epoch (1.8 million to 10 thousand years old) terrestrial sediments. Based on the numerous fossil findings in Chino Hills, the entire City is considered sensitive for paleontological resources.

REGULATORY SETTING

Archeological and historic resources are regulated at the federal level by the National Historic Preservation Act (NHPA) of 1966. Applicable state regulations include California Public Resources Code Section 5097.98, California Register of Historic Resources (Public Resource Code Section 5024.10 et seq.), California Register of Historic Resources (CRHR) Criteria, California Health and Safety Code Section 7050.5, and California Senate Bill 18 (SB 18, California Tribal Consultation Guidelines). Local regulations include goals and policies of the General Plan and General Plan Update.

DISCUSSION OF IMPACTS

a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?

No Impact

The project site does contain only shed structures. It does not contain any structures that are listed on the National Register of Historic Places or considered eligible for listing. Therefore, construction and operation of the proposed project would not cause an adverse change to a historic resource and no impact is expected.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Less than Significant with Mitigation Incorporated

The Negative Phase I Cultural Resources Survey Report did not identify any archeological resources within the project site. Hence, it is anticipated that construction and operation of the project would unlikely adversely affect significant archeological resources. However, the report did identify a prehistoric burial site (CA-SBR-10821), two Groundstone Isolate sites (P-36-012237 and P-36-012238), and one Lithic Isolate site (P-36-064202) within the half-mile APE (see **Appendix C**)[1]. These sites may suggest the unlikely discovery of unknown buried cultural resources during ground disturbance activities.

The project site is currently vacant land that has not been previously developed. Chino Hills is considered archeologically sensitive since it is located within the traditional tribal territory of the Tongva/Gabrielino (Chino Hills, 2014)[2]. California's SB 18 requires local governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places through the local land use planning process. This includes Native American sanctified cemetery, places of worship, religious or ceremonial site, or sacred shrine[3]. Furthermore, the Gabrieleno Band of Mission Indians has indicated they would like to be involved in the construction phase of the project during ground disturbance activities.

1 See Table 1: Known Cultural Resources Within a ½-mile Radius of the APE
2 See Cultural Resources Impact 4.5.5 b)
3 California Public Resources Code § 5097.9

Due to its proximity to known prehistoric sites, the unlikely discovery of unknown buried archeological resources may occur during grading activities. Therefore, during the construction phase of the project, it is recommended that archaeological and/or Native American cultural monitors be present during all or most ground disturbance activities.

Therefore, with mitigation measure **CR-1** incorporated, impacts would be reduced to less than significant levels.

Mitigation Measure

The following mitigation measure would reduce or avoid potential impacts on cultural resources to less than significant levels.

CR-1: Cultural Monitoring

A qualified archaeologist or Native American cultural monitor, whose credentials are reviewed and found acceptable by the City, shall be present to observe rough grading for site development. If a buried cultural resource is discovered during grading activities, all work in that area will be immediately halted within 50 feet of the discovery and/or diverted until a qualified archaeologist can evaluate the nature and significance of the find. Recommendations on the proper course of action will be made to the City Community Development Director or his/her designee and archaeological monitor. These recommendations may include test excavations to determine the extent and significance of the find; additional documentation of the find; or data recovery excavation if not other options are feasible. If the find is determined to be a historical resource or a unique archeological resource, the applicant shall implement the recommendations of the archeologist in order to mitigate impacts to the find. The mitigation measures shall be designed and implemented in accordance with applicable provisions of Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.

c) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant with Mitigation Incorporated

As previously mentioned, under Environmental Setting for this section, the entire City is considered sensitive for paleontological resources. During construction activities, the potential for destroying unique paleontological resources or unique geologic features is always probable, especially during ground disturbance or grading activities. Due to the sites proximity to Chino Creek Channel and previous fossil discoveries identified throughout Chino Hills, impacts would be less than significant with incorporation of mitigation measure **CR-1**.

d) Would the project disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant with Mitigation Incorporated

As previously discussed in Section 3.5 (a) and (b), Chino Hills is highly sensitive for cultural resources and the project site is in close proximity to other cultural resources within the half-mile APE. One of these known locations is a prehistoric burial site (CA-SBR-10821). Due to its proximity to a known prehistoric burial site, there may be a possibility for discovering additional buried cultural resources such as human remains during remedial grading. Such disturbance would

represent a significant impact requiring mitigation. Therefore, due to the high sensitivity of cultural resources identified throughout Chino Hills and in the unlikely event that human remains are discovered, incorporation of mitigation measures **CR-1,** aforementioned, and **CR-2** below would avoid or reduce impacts to less than significant levels.

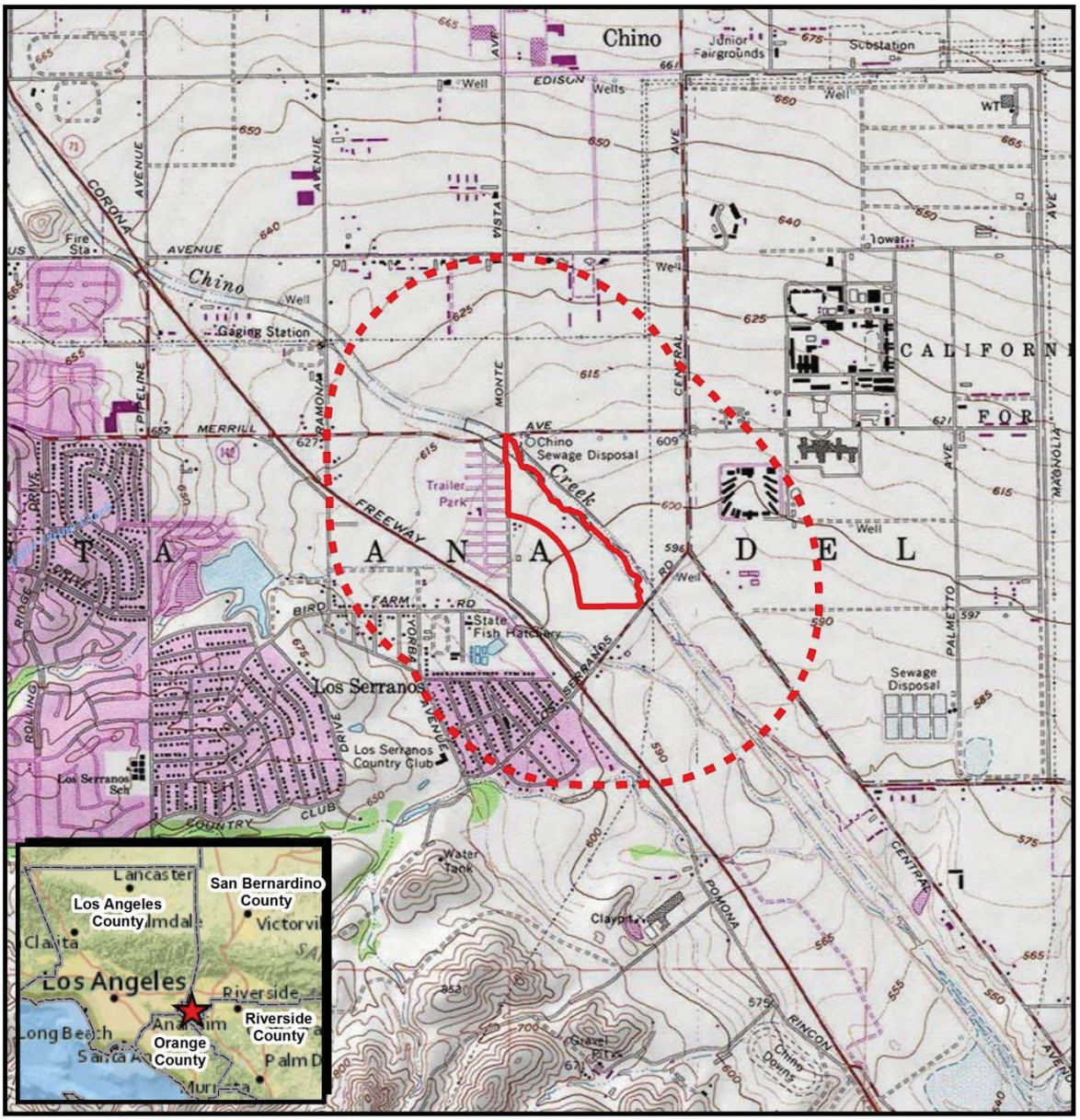
Mitigation Measure

The following mitigation measure would reduce or avoid potential impacts on human remains to less than significant levels.

CR-2: Discovery of Human Remains

If human remains are encountered during excavations associated with this project, work will halt and the County Coroner will be notified (Section 5097.98 of the Public Resources Code). The Coroner will determine whether the remains are of forensic interest. If the coroner, with the aid of the supervising archaeologist, determines that the remains are prehistoric, they will contact the NAHC. The NAHC will be responsible for designating the most likely descendant (MLD), who will be responsible for the ultimate disposition of the remains, as required by Section 7050.5 of the California Health and Safety Code. The MLD will make recommendations within 24 hours of their notification by the NAHC. These recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials (Section 7050.5 of the Health and Safety Code).

Figure 3.5-1
AREA OF POTENTIAL EFFECTS



Document Path: J:\Projects\5937_Fairfield_Ranch_Commons\MXDs\Cultural_Resources\5937_Fairfield_Ranch_Cultural_APE_24K_Scale_2014_08_08.mxd
August 8, 2014
Service Layer Credits: Copyright:© 2011 National Geographic Society, i-cubed, National Geographic, Esri, DeLorme, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.; UltraSystems Environmental, Inc., 2014

Scale 1:24,000

N

0 1,000 2,000 Feet

0 200 400 Meters

Legend

Project Location

Project Area

1/2 Mile Buffer-APE Extent

Fairfield Ranch Commons

Cultural APE

UltraSystems
environmental management planning

3.6 GEOLOGY AND SOILS				
Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) 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 Division of Mines and Geology Special Publication 42.			**X**	
ii) Strong seismic ground shaking?			**X**	
iii) Seismic-related ground failure, including liquefaction?			**X**	
iv) Landslides?			**X**	
b) Result in substantial soil erosion or the loss of topsoil?			**X**	
c) 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?		**X**		
d) Be located on expansive soil, as defined in Table 18-1 B of the Uniform Building Code (1994), creating substantial risks to life or property?		**X**		
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?				**X**

The following information is a summary of the findings from a Geotechnical Engineering Investigation prepared by NorCal Engineering (2013). The geotechnical report is included as **Appendix D**.

ENVIRONMENTAL SETTING

The City of Chino Hills is located in the eastern Puente Hills, in the northern portion of the Peninsular Ranges geomorphic province. The Peninsular Ranges province is characterized by a

series of northwest- to southeast-oriented valleys, hills, and mountains separated by faults associated with and parallel to the San Andreas Fault System.

The project site itself is relatively flat with an elevation of 606 feet above mean sea level. The project site contains a gentle slope averaging 0.5% from northwest to southeast. Soils on the site consist of a top layer of fill and/or disturbed top soil classified predominately as grey brown, clayey silt. These soils were noted to be soft and damp to moist. Underlying the fill lays undisturbed natural soil classified as a brown to dark brown, clayey silt to silty clay. These native soils were observed to be firm and moist to saturated condition. Deeper soils consisted of sandy to clayey silts, clays and silty sands to sands.

REGULATORY SETTING

The project would be subject to state and local laws, regulations, and policies pertaining to geology and soil related hazards including the California Seismic Hazards Mapping Act, Alquist-Priolo Earthquake Fault Zoning Act, California Building Standards Code (CBSC), and the City of Chino Hills General Plan and Municipal Code.

DISCUSSION OF IMPACTS

a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) 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 Division of Mines and Geology Special Publication 42.

Less than Significant Impact

The project site is not located within a designated State of California Alquist-Priolo Earthquake Fault Zone[1]. Although the Chino Fault Zone is located approximately 1.2 miles to the west of the project site, no known active or potentially active faults trend toward or through the property.

Due to the seismic history of the region, all structures, including extension of public utilities and infrastructure to serve the proposed development, will be designed to resist seismic forces in accordance with the criteria and seismic design parameters contained in the most current version of the California Building Code. The construction and placement of all structures and infrastructure facilities would conform to state regulations, seismic design requirements, ordinances, and existing standard requirements. Impacts related to the rupture of known earthquake fault would be less than significant.

ii) Strong seismic ground shaking?

Less than Significant Impact

The proposed project is within a seismically active region, which could potentially cause collapse of structures, buckling of walls, and damage to foundations from strong seismic ground shaking. The

[1] http://gmw.consrv.ca.gov/shmp/download/quad/PRADO_DAM/maps/PRADO.PDF Accessed July 31, 2014.

project would be constructed in conformance with applicable local building codes and requirements under the California Building Code (CBC) to reduce impacts from strong seismic ground shaking. With adherence to building codes, impacts resulting from strong seismic ground shaking would be reduced a less than significant level.

iii) Seismic-related ground failure, including liquefaction?

Less than Significant Impact

The Geotechnical Engineering Investigation (see **Appendix D**) indicates that the project site would experience ground shaking and earthquake activity typical of the Southern California region. It is during severe ground shaking that soils below the groundwater table liquefy. However, potential for liquefaction on the project site is low because fine-grained silt and clay soils were found below the historic 20-foot groundwater level. These types of soils are considered to be non-liquefiable.[2]

Furthermore, the associated seismic-induced settlement would be less than one inch and would occur uniformly across the project site. Differential settlement would be less than one inch over a 100-foot horizontal distance in the building area. Foundations would be constructed in conformance with applicable local building codes and requirements under the CBC to reduce impacts from seismic-related ground failure. Based on these findings, impacts due to seismic-related ground failure, including liquefaction, would be considered less than significant.

iv) Landslides?

Less than Significant Impact

The property is not located within a landslide susceptibility area according to the 2014 Draft General Plan Update PEIR (Chino Hills, 2014). Landslides occur when the stability of the slope changes from a stable to an unstable condition. A change in the stability of a slope can be caused by a number of factors, acting together or alone. Natural causes of landslides include groundwater (pore water) pressure acting to destabilize the slope, loss of vegetative structure, erosion of the toe of a slope by rivers or ocean waves, weakening of a slope through saturation by snow melt or heavy rains, earthquakes adding loads to barely stable slope, earthquake-caused liquefaction destabilizing slopes, and volcanic eruptions. However, none of the conditions that cause landslides occur at this site. The topography within and surrounding the property is relatively flat and no significant hillsides or unstable slopes are within the vicinity of the project site. For these reasons, potential for landslides, including debris flows, within or near the proposed site is less than significant.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact

A General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (NPDES permit) would be required for the construction of this project. NPDES permits establish enforceable limits on discharges, require effluent monitoring, designate reporting requirements, and require construction and post-construction Best Management Practices (BMPs)[3]

[2] Based on a liquid limit of 35 percent or greater and plasticity index of 12 percent of greater.

[3] BMPs are identified in the California Stormwater Best Management Practice Handbook – New Development and Redevelopment, prepared by the California Stormwater Quality Association (CASQA).

to eliminate or reduce point and non-point source discharges of pollutants, including soil[4]. The NPDES Permit also requires the preparation of a Stormwater Pollution Prevention Plan (SWPPP) prior to construction to identify construction and post-construction BMPs to eliminate or reduce soils and pollutants in storm water and non-storm water discharged to sewer systems and other drainages. These preventative measures during construction and post-construction are intended to eliminate or reduce soil and topsoil erosion. With the implementation of BMPs, impacts due to substantial soil erosion or loss of topsoil would be less than significant.

c) Would the project 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?

Less than Significant with Mitigation Incorporated

Based on the results of the Geotechnical Engineering Investigation (**Appendix D)**, existing fill was encountered at depths of one to 1.5 feet. Fill soils primarily consist of silty, clayey, and poorly graded sands with occasional sand clay layers that are susceptible to differential settlement, and do not contain significant amounts of debris or organic matter. On-site fill compaction does not meet the minimum 90 percent of the maximum dry density commonly used for slope stability and structures. However, with compliance to CBC requirements and mitigation measures **GS-1** and **GS-2**, impacts would be less than significant.

Impacts due to landslides and liquefaction are addressed in the above Section 3.6 (a).

Mitigation Measures

GS-1: Site Preparation and Grading

Site preparation, grading, and construction of the proposed project shall adhere to the recommendations set forth in the Geotechnical Engineering Investigation (**Appendix D**) prepared by NorCal Engineering, as applicable.

GS-2: Certified Soils Engineer

A certified soils engineer shall be retained for consultation during design and construction phases. The certified soils engineer shall also provide construction monitoring for necessary soil testing during construction to ensure compliance with the Geotechnical Engineering Investigation and to provide site specific guidance as subsurface materials are encountered.

d) Would the project be located on expansive soil, as defined in Table 18-1 B of the Uniform Building Code (1994), creating substantial risks to life or property?

Less than Significant with Mitigation Incorporated

According to the Geotechnical Engineering Investigation (see **Appendix D**), the project site contains expansive soil; therefore, structures may be subject to movement and hairline cracking of walls and slabs. However, the proposed project is required to comply with the CBC requirements relating to expansive soils. Furthermore, the report provides "Expansive Soil Guidelines" that would be considered during project design and operational maintenance. With adherence to applicable

[4] http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml Accessed October 2013.

building codes and implementation of mitigation measures **GS-1** and **GS-2**, impacts due to expansive soil would be reduced to a less than significant level.

e) Would the project 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?

No Impact

The proposed project would be serviced by municipal sewer systems, and no septic tanks would be required. No impact due to septic tanks or alternative waste water disposal systems would occur.

3.7 GREENHOUSE GAS EMISSIONS				
Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			**X**	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?		**X**		

The following is summarized in part from the Greenhouse Gas Emissions Analysis prepared by UltraSystems (UltraSystems, 2014d). That report is included as **Appendix E**.

ENVIRONMENTAL SETTING

Greenhouse gases (GHG) are defined under the California Global Warming Solutions Act of 2006 (AB 32) as carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Associated with each GHG species is a "global warming potential" (GWP), which is defined as the ratio of degree of warming to the atmosphere that would result from the emission of one mass unit of a given GHG compared with one equivalent mass unit of CO_2 over a given period of time. By this definition, the GWP of CO_2 is always 1. The GWPs of methane and nitrous oxide are 21 and 310, respectively (CCAR, 2009). "Carbon dioxide equivalent" (CO_2e) emissions are calculated by weighting each GHG compound's emissions by its GWP and then summing the products.

Carbon dioxide (CO_2) is a clear, colorless, and odorless gas. Fossil fuel combustion is the main human-related source of CO_2 emissions; electricity generation and transportation are first and second in the amount of CO_2 emissions, respectively.

Methane (CH_4) is a clear, colorless gas, and is the main component of natural gas. Anthropogenic sources of CH_4 are fossil fuel production, biomass burning, waste management, and mobile and stationary combustion of fossil fuel. Wetlands are responsible for the majority of the natural methane emissions.[1] As mentioned above, CH_4, within a 100-year period, is 21 times more effective in trapping heat than is CO_2.

Nitrous oxide (N_2O) is a colorless, clear gas, with a slightly sweet odor. N_2O has both natural and human-related sources, and is removed from the atmosphere mainly by photolysis, or breakdown by sunlight, in the stratosphere. The main human-related sources of N_2O in the United States are agricultural soil management (synthetic nitrogen fertilization), mobile and stationary combustion of fossil fuel, adipic acid production, and nitric acid production.[2] Nitrous oxide is also produced

[1] http://epa.gov/climatechange/ghgemissions/gases/ch4.html Accessed August 5, 2014.
[2] http://epa.gov/climatechange/ghgemissions/gases/n2o.html Accessed August 5, 2014.

from a wide range of biological sources in soil and water. Within a 100-year span, N_2O is 310 times more effective in trapping heat than is CO_2.[3]

REGULATORY SETTING

The federal government has been involved in climate change issues at least since 1978, when Congress passed the National Climate Program Act (92 Stat. 601), under authority of which the National Research Council prepared a report predicting that additional increases in atmospheric CO_2 would lead to non-negligible changes in climate. At the "Earth Summit" in 1992 in Rio de Janeiro, President George H. W. Bush signed the United Nations Framework Convention on Climate Change (UNFCCC), a nonbinding agreement among 154 nations to reduce atmospheric concentrations of carbon dioxide and other greenhouse gases. The treaty was ratified by the U.S. Senate. However, when the UNFCCC signatories met in 1997 in Kyoto, Japan, and adopted a protocol that assigned mandatory targets for industrialized nations to reduce greenhouse gas emissions, the U.S. Senate expressed its opposition to the treaty. The Kyoto Protocol was not submitted to the Senate for ratification.

In Massachusetts et al. v. Environmental Protection Agency et al. [549 U.S. 497 (2007)], the U.S. Supreme Court ruled that CO2 was an air pollutant under the Clean Air Act, and that consequently, the U.S. Environmental Protection Agency (USEPA) had the authority to regulate its emissions. The Court also held that the Administrator must determine whether emissions of greenhouse gases from new motor vehicles cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On April 24, 2009, the USEPA published its intention to find that: (1) the current and projected concentrations of the mix of six key greenhouse gases—CO2, CH4, N2O, HFCs, PFCs and SF6—in the atmosphere threaten the public health and welfare of current and future generations, and that (2) the combined emissions of GHG from new motor vehicles and motor vehicle engines contribute to the atmospheric concentrations of these key greenhouse gases and hence to the threat of climate change (74 Fed. Reg. 18886). These findings are required for subsequent regulations that would control GHG emissions from motor vehicles.

California Climate Change Regulations

Executive Order S-3-05 (GHG Emissions Reductions). Executive Order #S-3-05, signed by Governor Arnold Schwarzenegger on June 1, 2005, calls for a reduction in GHG emissions to 1990 levels by 2020 and for an 80% reduction in GHG emissions to below 1990 levels by 2050.

The California Global Warming Solutions Act of 2006 (AB 32). In September 2006, Governor Arnold Schwarzenegger signed AB 32, the California Global Warming Solutions Act of 2006 (Health and Safety Code § 38500 et seq.), into law. AB 32 was intended to effectively end the scientific debate in California over the existence and consequences of global warming. In general, AB 32 directs the California Air Resources Board (CARB) to do the following:

- On or before June 30, 2007, publicly make available a list of discrete early action GHG emission reduction measures that can be implemented prior to the adoption of the statewide GHG limit and the measures required to achieve compliance with the statewide limit;

[3] Ibid.

- By January 1, 2008, determine the statewide levels of GHG emissions in 1990, and adopt a statewide GHG emissions limit that is equivalent to the 1990 level (an approximately 25% reduction in existing statewide GHG emissions);

- On or before January 1, 2010, adopt regulations to implement the early action GHG emission reduction measures;

- On or before January 1, 2011, adopt quantifiable, verifiable, and enforceable emission reduction measures by regulation that will achieve the statewide GHG emissions limit by 2020, to become operative on January 1, 2012, at the latest. The emission reduction measures may include direct emission reduction measures, alternative compliance mechanisms, and potential monetary and non-monetary incentives that reduce GHG emissions from any sources or categories of sources as CARB finds necessary to achieve the statewide GHG emissions limit; and

- Monitor compliance with and enforce any emission reduction measure adopted pursuant to AB 32.

On December 11, 2008, the CARB approved the (CARB, 2008a) pursuant to AB 32. The Scoping Plan recommends a wide range of measures for reducing GHG emissions, including (but not limited to):

- Expanding and strengthening of existing energy efficiency programs;

- Achieving a statewide renewables energy mix of 33 percent;

- Developing a GHG emissions cap-and-trade program;

- Establishing targets for transportation-related GHG emissions for regions throughout the state, and pursuing policies and incentives to meet those targets;

- Implementing existing state laws and policies, including California's clean car standards, goods movement measures and the Low Carbon Fuel Standard; and

- Targeted fees to fund the state's long-term commitment to administering AB 32.

Executive Order S-01-07 (Low Carbon Fuel Standard). Executive Order #S-01-07 (January 18, 2007) establishes a statewide goal to reduce the carbon intensity of California's transportation fuels by at least 10% by 2020 through establishment of a Low Carbon Fuel Standard. Carbon intensity is the amount of CO_2e per unit of fuel energy emitted from each stage of producing, transporting and using the fuel in a motor vehicle. On April 23, 2009 the Air Resources Board adopted a regulation to implement the standard.

Senate Bill 97. Senate Bill 97 was signed by the governor on August 24, 2007. The bill required the Office of Planning and Research (OPR), by July 1, 2009, to prepare, develop and transmit to the resources agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, including, but not limited to, effects associated with transportation or energy consumption. On April 13, 2009 OPR submitted to the Secretary for Natural Resources its proposed amendments to the State CEQA Guidelines for greenhouse gas emissions. The Resources Agency adopted those guidelines on December 30, 2009, and they became effective on March 18,

2010. The amendments treat GHG emissions as a separate category of impacts; i.e. they are not to be addressed as part of an analysis of air quality impacts.

Section 15064.4, which was added to the CEQA Guidelines, specifies how the significance of impacts from GHGs is to be determined. First, the lead agency should "make a good faith effort" to describe, calculate or estimate the amount of GHG emissions resulting from a project. After that, the lead agency should consider the following factors when assessing the impacts of the GHG emissions on the environment:

- The extent to which the project may increase or reduce GHG emissions, relative to the existing environmental setting;
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional or local plan for the reduction or mitigation of GHG emissions.

The Governor's Office of Planning and Research (OPR) asked the CARB to make recommendations for GHG-related thresholds of significance. On October 24, 2008, the CARB issued a preliminary draft staff proposal for *Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act (CARB, 2008b)*. After holding two public workshops and receiving comments on the proposal, CARB staff decided not to proceed with threshold development (Ito, 2010). Quantitative significance thresholds, if any, are to be set by local agencies.

Senate Bill 375*.* Senate Bill 375 requires coordination of land use and transportation planning to reduce GHG emissions from transportation sources. Regional transportation plans, which are developed by metropolitan transportation organizations such as the Southern California Association of Governments (SCAG), are to include "sustainable community strategies" to reduce GHG emissions.

Title 24. The Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 6, of the *California Code of Regulations*) were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Compliance with Title 24 will result in decreases in GHG emissions. The California Energy Commission adopted the 2008 changes to the Building Energy Efficiency Standards on April 23, 2008 with an aim to promote the objectives listed below.[4]

- Provide California with an adequate, reasonably-priced and environmentally-sound supply of energy.
- Respond to Assembly Bill 32, the Global Warming Solutions Act of 2006, which mandates that California must reduce its greenhouse gas emissions to 1990 levels by 2020.

[4] "2008 Building Energy Efficiency Standards." California Energy Commission, Sacramento, California. (http://www.energy.ca.gov/title24/2008standards/index.html). These became effective January 1, 2010.

- Pursue California energy policy that energy efficiency is the resource of first choice for meeting California's energy needs.

- Act on the findings of California's Integrated Energy Policy Report (IEPR) that Standards are the most cost effective means to achieve energy efficiency, expects the Building Energy Efficiency Standards to continue to be upgraded over time to reduce electricity and peak demand, and recognizes the role of the Standards in reducing energy related to meeting California's water needs and in reducing greenhouse gas emissions.

- Meet the West Coast Governors' Global Warming Initiative commitment to include aggressive energy efficiency measures into updates of state building codes.

- Meet the Executive Order in the Green Building Initiative to improve the energy efficiency of nonresidential buildings through aggressive standards.

The provisions of Title 24, Part 6 apply to all buildings for which an application for a building permit or renewal of an existing permit is required by law. They regulate design and construction of the building envelope, space-conditioning and water-heating systems, indoor and outdoor lighting systems of buildings, and signs located either indoors or outdoors. Title 24, Part 6 specifies mandatory, prescriptive and performance measures, all designed to optimize energy use in buildings and decrease overall consumption of energy to construct and operate residential and nonresidential buildings (CEC, 2008). Mandatory measures establish requirements for manufacturing, construction and installation of certain systems; equipment and building components that are installed in buildings.

Recent Developments: On May 22, 2014 the CARB approved the First Update to the Climate Change Scoping Plan Pursuant to AB 32 (CARB, 2014). The updated scoping plan evaluates the effectiveness of policies from the original scoping plan and adds recommendations for expanding and improving upon those programs including, but not limited to:

- Leveraging public money to fund technologies including medium and heavy duty Zero Emission Vehicles (ZEVs).

- Expanding local, regional, and state transportation plan goals to improve transit efficiency.

- Supporting the High-Speed Rail Authority and Sustainable Freight Strategy.

- Extending Low Carbon Fuel Standards beyond 2020 with more aggressive goals.

- Developing accurate methods for estimating agricultural emissions so that greenhouse gas reduction techniques can be assessed.

- Eliminating disposal of organic matter and promote methane recovery at landfills.

- Instituting the Forest Carbon Plan to model and understand the carbon cycle of forestry.

- Implementing economic incentives for the destruction of short-lived climate pollutants.

- Allowing limited future allowances for Cap-and-Trade to reduce cost spikes.

- Setting interim goals to reach greenhouse gas emissions of 80% of 1990 levels by 2050.

San Bernardino County Regional Greenhouse Gas Reduction Plan

The 2014 San Bernardino Regional Greenhouse Gas Reduction Plan (SANBAG, 2014a) and its Final Environmental Impact Report (FEIR) (SANBAG, 2014b) were certified at the San Bernardino Associated Governments (SANBAG) Board of Directors Meeting on March 5, 2014. The regional plan presents the GHG reduction goals of each of the participating cities. Cities participating in the regional plan include Adelanto, Big Bear Lake, Chino, Chino Hills, Colton, Fontana, Grand Terrace, Hesperia, Highland, Loma Linda, Montclair, Needles, Ontario, Rancho Cucamonga, Redlands, Rialto, San Bernardino, Twenty nine Palms, Victorville, Yucaipa, and Yucca Valley. The regional plan includes an inventory of 2008 GHG emissions, forecast of 2020 emissions, GHG reduction measures for each participating city, and baseline information for the development of city climate action plans (CAPs). The regional plan lists all sectors targeted by reduction measures including: building energy, on-road transportation, off-road equipment, agriculture, land use and urban design, solid waste management, wastewater, and water conveyance.

The Chino Hills Reduction Profile within the SANBAG GHG Reduction Plan (SANBAG, 2014a) lists goals and measures taken in Chino Hills. Municipal and nongovernmental sources in Chino Hills were responsible for an estimated 464,162 metric tons (tonnes)[5] CO_2e in 2008. Primary sources of GHG emissions in Chino Hills in 2008 were road transportation (54%), building energy (33%), and stationary sources (5%). State measures, including the Pavley plus Low Carbon Fuel Standards (LCFS), California Renewable Portfolio Standard (RPS), and other measures are anticipated to reduce GHG emissions in Chino Hills by 107,260 tonnes CO_2e (18.3%) by 2020. Local measures, including improvements in water use efficiency (SB X7-7), solar installation for existing housing, and Smart Bus Technologies, are anticipated to reduce GHG emissions in Chino Hills by another 9,927 tonnes CO_2e (1.7%) in 2020, for a total reduction of 117,187 tonnes.

[5] A metric ton (tonne) is 1,000 kilograms, or about 2,205 pounds.

DISCUSSION OF IMPACTS

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant Impact

In the Draft Program Environmental Impact Report for the General Plan Update (Chino Hills, 2014), the City defined a performance threshold of 6.6 metric tons per year per service population as a threshold for significance under this checklist item. This threshold is based on the South Coast Air Quality Management District (SCAQMD) threshold for planning documents (SCAQMD, 2010). Service population is defined as residents plus employees. For the proposed project, the numbers of residents and employees have been estimated to be 1,142 and 353, respectively; the service population would be 1,495. Therefore, the ratio of metric tons of GHG divided by 1,495 must exceed 6.6 for the impact to be significant.

Direct emission sources are those which produce onsite emissions through the combustion of fossil fuels. Typically, the two main direct emission sources will be use of internal combustion (IC) engines and space heating. Indirect GHG source emissions are those for which the project is responsible, but that occur offsite. For example, the solid waste that is distributed to landfills will decay and emit the GHGs CO_2 and CH_4. GHG are also emitted by combustion of fossil fuels to generate electricity used by the project. Production of the electricity used to convey water to the project and to treat wastewater generated by the project is also an indirect source.

Because of the persistence of GHG in the atmosphere, all the impacts addressed in this section are defined as long-term. Greenhouse gas emissions from construction are amortized over the next 30 years and added to operational emissions for the purpose of estimating annual emissions. Total GHG emissions are then evaluated for compliance with the Chino Hills portion of the SANBAG GHG Reduction Plan (SANBAG, 2014a).

Greenhouse gas emissions from the Project's on-site and off-site Project activities were calculated using the California Emissions Estimator Model (CalEEMod), Version 2013.2.2. CalEEMod is a planning tool for estimating emissions related to land use projects. The model incorporates EMFAC2011 emission factors to estimate on-road vehicle emissions; and emission factors and assumptions from the CARB's OFFROAD2011 model to estimate off-road construction equipment emissions (EIC, 2013). Model-predicted project emissions are compared with applicable thresholds to assess regional air quality impacts. Operational emissions are estimated using CalEEMod and take into account area emissions, such as space heating, from land uses and from the vehicle trips associated with the land uses. Details of the modeling are presented in **Appendix E.**

Construction Emissions

The proposed project will include demolition of existing structures, grading, paving, and erection of new apartments and three industrial buildings. Each construction phase involves the use of a different mix of construction equipment and therefore has its own distinct GHG emissions characteristics. A schedule of equipment use was set up to determine which equipment would be operated simultaneously. Since detailed design information was not available at the time this document was prepared, construction-related emission estimates were based on the most recent preliminary equipment list and construction schedule provided by the City (Walters, 2014) and the

default construction scenario information in CalEEMod. CalEEMod's default values for horsepower and load factors, which are from the CARB's OFFROAD2011 model, were used.

CalEEMod estimated annual GHG emissions in 2015 and 2016 to be **956** and **949 metric tons (tonnes) CO_2e**, respectively.

Operational Emissions

The proposed project will generate direct GHG emissions from the combustion of natural gas for water and space heating, and other fuels for landscaping. Cars, trucks, and other mobile sources also make an important contribution to direct GHG emissions.

Solid waste disposal into landfills creates CO_2 and CH_4 emissions over a span of years. The emissions from solid waste were calculated using CalEEMod, which models the GHG emissions based on the Intergovernmental Panel on Climate Change's (IPCC) methods for quantifying GHG emissions from solid waste (IPCC, 2006).

Calculation of indirect GHG emissions for water use was based on the electricity needed to supply and distribute water. The factors for electricity are based on Title 24, non-Title 24, and lighting standards from the California Energy Commission (CEC). CalEEMod uses default values based on the project location, climate zone, and energy provider. All the default values were used.

Table 3.7-1 (Unmitigated Annual GHG Emissions, 2016 and Beyond) gives a detailed breakdown of the results of the project GHG emissions analysis.

Table 3.7-1
UNMITIGATED ANNUAL PROJECT GHG EMISSIONS, 2016 AND BEYOND
(Emissions in tonnes)

Emission Source		CO_2	CH_4	N_2O	CO_2e
Construction[a]		63.27	0.01	0.00	64
Operations	Area	113.22	0.12	0.002	116
	Energy	2,238.47	0.08	0.03	2,249
	Mobile	5,334.54	0.21	0.00	5,339
	Waste	114.53	6.77	0.00	257
	Water	441.76	3.21	0.08	534
Totals		**8,305.79**	**10.40**	**0.11**	**8,559**

Note: Proposed project is expected to be operational in June 2016.
[a] Amortized over 30 years per SCAQMD Interim CEQA GHG Significance Threshold.

Source: UltraSystems Environmental Inc. with CalEEMod (Version 2013.2.2)

Total unmitigated operational CO_2e emissions from the project would be 8,559 tonnes per year. Energy production and mobile sources account for about 89% of these emissions. The ratio of annual emission to service population would be 5.7, which is below the threshold of 6.6. Therefore under GHG emissions would be less than significant.

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant with Mitigation Incorporated

Although mitigation is not required for project operational CO_2e emissions, several of the project design features applied to criteria pollutant emissions for this project would also reduce GHG emissions. These reduction methods are listed below.

In the following list, the letter-number combinations in brackets refer to air pollutant reduction measures defined by the California Air Pollution Control Officers Association in its guidebook, Quantifying Greenhouse Gas Mitigation Measures. A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures (CAPCOA, 2010).[6]

Project Design Features

PDF-1: Increase housing density [LUT-1]

PDF-2: Increase diversity of land use [LUT-3]

PDF-3: Increase Transit Accessibility [LUT-5]

PDF-4: Install and maintain high-efficiency lighting in both the residential and industrial portions of the project.

PDF-5: Install and maintain low-flow bathroom faucets, kitchen faucets, toilets, and showers in all residential units [WUW-1].

In addition, the implementation of mitigation measures **GG-1** through **GG-3** will further reduce GHG emissions.

Mitigation Measures

GG-1: Use of Project Landscape Equipment

For project landscaping, use electric lawnmowers, leaf blowers and chainsaws at least 50% of the time [A-1]

GG-2: No Fireplaces or Hearths

Apartment units will not have fireplaces or hearths.

GG-3: 100% Reclaimed Water for Irrigation

Use 100% reclaimed water for all irrigation [WSW-1].

With these project design features and the three mitigation measures incorporated in CalEEMod, the estimated GHG emissions are those shown in **Table 3.7-2** (Mitigated Annual GHG Emissions, 2016 and Beyond). Total annual GHG emissions would be reduced by about 11% to 7,663 tonnes per year. The ratio of emissions to service population would be about 5.1.

[6] Available at http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf.

All of these emission reduction measures would be compatible with the San Bernardino County Regional Greenhouse Gas Reduction Plan. Therefore GHG emissions from the project would be less than significant.

Table 3.7-2
MITIGATED[7] ANNUAL GHG EMISSIONS, 2016 AND BEYOND
(Emissions in tonnes)

Emission Source		CO_2	CH_4	N_2O	CO_2e
Construction[a]		63.27	0.01	0.00	64
Operations	Area	4.96	0.005	0.002	5
	Energy	2,113.30	0.08	0.03	2,123
	Mobile	4,813.80	0.19	0.00	4,818
	Waste	114.53	6.77	0.00	257
	Water	356.82	2.57	0.08	430
Totals		**7,403.41**	**9.61**	**0.09**	**7,633**

Note: Proposed project is expected to be operational in June 2016

[a] Amortized over 30 years per SCAQMD Interim CEQA GHG Significance Threshold.

Source: UltraSystems Environmental Inc. with CalEEMod (Version 2013.2.2)

[7] This table reports emissions that would occur after implementation of the project design features and the mitigation measure identified above; there would be no "mitigation" *per se*.

3.8 HAZARDS AND HAZARDOUS MATERIALS				
Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			**X**	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			**X**	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one quarter mile of an existing or proposed school?			**X**	
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?				**X**
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?				**X**
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?				**X**
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			**X**	
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?			**X**	

An Environmental Data Resource record search was performed as part of the Phase I Environmental Site Assessment Report (ESA) for the project site. The following responses were based in part on information contained in the Phase I ESA prepared by PIC Environmental Services (see **Appendix F**).

ENVIRONMENTAL SETTING

The project site was used for agricultural purposes since the 1930s including the likely use of pesticides. The property is not listed as containing hazardous materials and there are no on-site underground storage tanks (USTs) reported in the EDR database and none were observed during the property visit. No leaking underground storage tanks (LUST) are found within 0.5 mile of the project site. Soil testing for pesticides found levels below State and federal regulatory standards. There is no documented occurrence or potential of either petroleum or hazardous materials contamination on-site.

Other Hazards

The closest airport is the Chino Airport located approximately 2.3 miles east of the project site. The Chino Airport Comprehensive Land Use Plan (CACLUP) establishes three safety zones, each with a specific set of land use guidelines. The project site is not located within a CACLUP safety zone and is not subject to CACLUP land use guidelines.

Sensitive Receptors

Several sensitive receptors are in the vicinity of the project site. The BAPS Shri Swaminarayan Mandir temple is located immediately southwest and three educational facilities (i.e., Chaparral Elementary School, TNT Agency Makeup School, and Stonewell Learning Center) are located 0.5 mile of the project site. The closest medical service facility is Pomona Valley Health Center, which can be serviced by State Route 71 to the project site and is approximately 3.3 mile north of the site. The closest residence, Rancho Monte Vista Mobile Home Park, is located immediately west across Monte Vista Avenue.

REGULATORY SETTING

This project would be subject to applicable federal, state, and local programs, regulations, laws, standards, and policies including, but not limited to, the following: Resource Conservation and Recovery Act (RCRA); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); California Hazardous Waste Control Law; Occupational Safety and Health Administration (OSHA); South Coast Air Quality Management District; California Department of Forestry and Fire Protection (CAL-FIRE); Chino Valley Independent Fire District and the County of San Bernardino Department of Public Health.

DISCUSSION OF IMPACTS

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant Impact

During construction, proposed project would include the transport, storage, and usage of chemical agents, solvents, paints, and other hazardous materials that are commonly associated with construction activities. Standard protocols would be adopted to minimize the risk associated with hazardous materials and wastes. After construction, unused hazardous materials may be properly transported for use at other projects. Hazardous wastes may be properly disposed at licensed facilities, or recycled to minimize wastes requiring disposal.

During operation, the proposed project's residential apartment component would use common, everyday hazardous materials such as cleaning products (floor and antiseptic cleaners) and landscaping products (fertilizers, pesticides, and herbicides) that may be hazardous if improperly used or ingested. These products have a low incidence of unsafe use. Materials that may be used during construction and operation are not acutely hazardous.

Because no specific tenants have been identified at this time for the business park and the business park is zoned to be occupied by small- and large- scale businesses involved in distribution, research and development, support services and light manufacturing, hazardous material uses may potentially be the same or greater than the residential apartment component. Future light industrial uses may include routine storage, use, generation, and transport of a range of hazardous substances and wastes. Transportation, storage, use, and disposal of hazardous materials and wastes are regulated by the Department of Toxic Substances Control (DTSC), the United States Environmental Protection Agency (USEPA), and the California Occupational Safety and Health Administration (Cal-OSHA). Because the City does not permit heavy industry, the amount of hazardous substances and wastes in and out of the business park is not anticipated to be substantial.

All businesses at the proposed business park must comply with applicable federal and state regulations governing the particular types and quantities of hazardous materials and wastes involved. Hazardous material and waste storage spaces must be designed, maintained, and safely secured in accordance with the provisions of the California Fire Code and local oversight authority of the Chino Valley Independent Fire District. The Fire District also requires permits for the storage, use, and handling of flammable, combustible, explosive, toxic, or other hazardous materials. This oversight ensures that appropriate precautions are in place to prevent accidental releases of harmful chemicals.

The Chino Hills Municipal Code (CHMC)[1] requires conformance with performance standards established under Chapter 16.48 in order to protect the health and safety of workers, residents, businesses, and property. Performance standards are designed to minimize and mitigate potential environmental impacts that include: noise, air quality, glare, heat, waste disposal, and runoff control for all existing operations and proposed land use projects. Because the project would require adherence to all applicable regulations and subject to Fire District review, impacts from the project would be less than significant.

In sum, adherence to all applicable federal, state, and local agency regulations related to the routine transport, use, or disposal of hazardous materials would prevent or reduce potential impacts to the public and environment. For these reasons, the project would not create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials and less than significant impact would occur.

[1] CHMC Section 16.48.010 Intent and purpose

b) Would the project create a significant hazard to the public or the environment through the reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?

Less than Significant Impact

As previously noted in the above response Section 3.8 a), existing regulatory measures and local oversight by the Chino Valley Independent Fire District on local business operations as well as residential and commercial construction would avoid significant hazard to public or environment through the release of hazardous materials. Prior to the issuance of grading permits for the project, the proposed development plans would be reviewed by Chino Valley Independent Fire District for hazardous material use, safe handling, and storage of materials. The Fire District would require that conditions of approval be applied to the project prior to construction or individual use to reduce hazardous material impacts and ensure that hazardous waste generated on-site would be transported to an appropriate disposal facility in accordance with applicable regulations.

As the operation of proposed project does not anticipate using large quantities of hazardous materials, accidental hazardous material releases would be low under existing regulatory requirements. Compliance with California Fire Code standards for design, storage, operations, maintenance, and spill prevention/response measures, would reduce impacts associated with the handling of hazardous materials during construction and operation of the proposed project to less than significant level.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than Significant Impact

Chaparral Elementary School, is located 0.2 mile southwest of the project site. As mentioned in the above response Section 3.8a) and Section 3.8b), materials that may be used during construction are not acutely hazardous. Operation of the residential apartment would use common, everyday household hazardous products that may be hazardous if improperly used or ingested. These products have a low incidence of unsafe use. The proposed project's construction activities and the operation of the residential apartment are not anticipated to result in significant impacts related to hazardous emissions.

Although specific tenants for the business park are unknown at this time, light industrial uses including manufacturing is permitted by right for parcels zoned Business Park. During operation, the business park is intended to be occupied by small- and large- scale businesses involved in distribution, research and development, support services and light manufacturing. Per the requirements[2] of South Coast Air Quality Management District (SCAQMD) and state Office of Environmental Health Hazard Assessment (OEHHA), any facilities or businesses that may use hazardous substances in sufficient quantities to expose surrounding populations to toxic releases are required to go through a stringent permitting process and prepare a health risk assessment (HRA). This analysis would evaluate hazardous substances in the environment and the potential exposure to human populations. SCAQMD Rule 1401.1, Requirements for New and Relocated Facilities Near Schools, provides additional health protection to children at schools or schools

[2] Both the SCAQMD and the state Office of Environmental Health Hazard Assessment (OEHHA) review HRAs submitted by facilities per the requirements of the Air Toxics "Hot Spots" Information and Assessment Act.

under construction from new or relocated facilities emitting toxic air contaminants. Under existing regulatory and permitting restrictions, an emitting facility that poses significant health risks to a nearby school as well as surrounding population would be prohibited at the proposed business park.

In compliance with the California Health and Safety Code and SCAQMD Rule 1401.1, the proposed project would not permit businesses that emit hazardous emissions or handle hazardous materials in proximity to the existing school or schools under construction. Therefore, impacts would be considered less than significant.

d) Would the project 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?

No Impact

An EDR record search was performed as part of the Phase I ESA Report (see **Appendix F**) for the project site. According to the ESA report, the property is not listed as containing hazardous materials and there are no on-site underground storage tanks reported in the EDR database and none were observed during the property visit. No LUST site is found within half mile radius of the project site. Although the project site has a history of agricultural use, results from soil testing for pesticide are consistently below State and federal regulatory level. The site also has no documented occurrence or potential of either petroleum or hazardous materials contamination. Existence of significant environmental impairments is unlikely. No impact would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?

No Impact

The project site is not located within the vicinity of a public airport. The nearest airport, Chino Airport, is located approximately 2.3 miles east of the project site. Furthermore, the project site is outside the boundary of the Chino Airport Master Plan.[3] Due to distance, the proposed project would not result in a safety hazard for people residing or working and no impact would occur.

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?

No Impact

The project site is not located within the vicinity of a private airstrip[4]; therefore, the project would not result in a safety hazard for people residing or working in the project area. No impact would occur.

[3] http://chinomasterplan.airportstudy.com/master-plan/ Accessed July 30, 2014.

[4] The nearest private airstrip is Shepherd Field, more than 20 miles west of project site.

g) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact

The proposed project would not conflict with the City of Chino Hills 2008 Emergency Operation Plan, which addresses the City's planned responses to emergencies associated with natural disasters and technological incidents. The EOP is intended to provide guided responses to such emergencies as earthquakes, hazardous materials emergencies, flooding and wildfires and do not address normal day-to-day emergencies or well-established and routine procedures used in coping with such emergencies.

To ensure that adequate emergency access and service is provided during project construction and operation, project development and operation plans would be submitted to the Fire District for review, approval, and issuance of residential and business construction permit. Material and equipment would be staged on-site during construction and would not interfere with emergency response vehicles that use major thoroughfares or access roads. Emergency vehicles would continue to have access to project-related and surrounding roadways upon completion of the proposed project. The proposed project also would not require off-site improvements, implementation of new public infrastructure (e.g. roadways) or trenching for new infrastructure which may cause traffic lane closures and traffic congestion delays to motorists.

The proposed project would not physically interfere or impair primary evacuation routes and well-established emergency procedures during construction and operation. Therefore, impacts related to emergency response and evacuation plans would be less than significant.

h) Would the project expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Less than Significant Impact

The California Department of Forestry and Fire Protection (CAL-FIRE) develops Fire Hazard Severity Zone (FHSZ) mapping for the State Responsibility Areas (SRA) and Local Responsibility Areas (LRA).[5] The project site is located in a LRA area with a non-fire hazard designation. The project site is approximately 1.3 miles northeast of a LRA "Very High" FHSZ[6] and 4.9 miles northeast of a SRA "Very High" FHSZ.[7] Furthermore, the project site is adjoined by existing development to the north, east, and west, and the SR-71 is located approximately 0.1 mile to the south. Due to the types of surrounding uses and distance from designated FHSZs, the proposed project would not expose people or structures to wildland fire, and less than significant impact would occur.

5 Fire hazard determinations are based on vegetation type, slope severity, fire history, and weather pattern. Areas are given a rank of Moderate, High, Very High, or Extreme fire hazard for SRAs and Non-Hazard or Very High for LRAs.

6 http://frap.fire.ca.gov/webdata/maps/san_bernardino_sw/fhszs_map.62.pdf Accessed July 28, 2014.

7 http://frap.fire.ca.gov/webdata/maps/orange/fhszs_map.30.pdf Accessed July 28, 2014.

3.9 HYDROLOGY AND WATER QUALITY				
Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Violate any water quality standards or waste discharge requirements?			**X**	
b) Substantially deplete groundwater supplies or interfere substantially 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)?			**X**	
c) Substantially alter 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?			**X**	
d) Substantially alter the existing drainage pattern of the site or area, including through the alternation 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?			**X**	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			**X**	
f) Otherwise substantially degrade water quality?			**X**	
g) Place housing 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?				**X**
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			**X**	
i) Expose 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?			**X**	
j) Inundation by seiche, tsunami, or mudflow?			**X**	

The following responses were based in part on information contained in the Preliminary Hydrology Study (see **Appendix G**) prepared by Alfred Webb Associates on April 28, 2014.

ENVIRONMENTAL SETTING

Surface Water Features

The City's watershed includes a system of streams, water courses, and ponds that run through the hills and usually lie at the bottom of canyons and drainage ravines. Runoff from the City generally drains east and south, toward Chino Creek and the Prado Flood Control Basin, and on to the Santa Ana River Basin.

The project site is located inland at an elevation of 600 feet above mean sea level and is sloped gradually at a grade of 0.5%. The eastern boundary of the property abuts the Chino Creek Channel, which is a concrete lined flood control channel designed to accommodate the 100 year flood event. The southern portion of the project site abuts a fenced easement for the Los Serranos channel, which is an open concrete box channel that discharges into Chino Creek.

Stormwater Drainage

Runoff from the site presently drains to the southeast where it concentrates and flows into the Los Serranos Lake Channel then to the Chino Creek channel ultimately reaching the Prado Dam Management Zone, which is the beginning of Reach 3 of Santa Ana River. The Santa Ana River does not meet water quality standards associated with beneficial uses and is listed as impaired by nutrients, pathogens, and heavy metals (Webb & Associates, 2014).

Flooding

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panel 06071C8500HJ, the project site is within Zone X. Zone X is characterized as moderate to low risk areas with an annual chance of flooding of between 1% and 0.2%.

REGULATORY SETTING

Water Quality

Sections 303, 401, 402 and 404 of the Federal Water Pollution Control Act of 1972 (33 USC 1251 et seq.) (Clean Water Act (CWA)) protects the water qualify of jurisdictional surface waters. The CWA requires states to: (1) protect specific beneficial uses of surface water and groundwater, (2) comply with applicable effluent limitations, (3) implement best management practices (BMPs) to eliminate or reduce discharges of pollutants, and (4) regulate the discharge of dredged or fill material into streams, rivers, wetlands, non-wetland and other surface waters. To comply with these requirements, soil disturbance during construction must be kept to a minimum (up to 0.08 acre), and industry accepted BMPs implemented to contain and reduce the discharge of soil and other pollutants in storm and non-storm water runoff.

The Porter-Cologne Water Quality Control Act (Division 7 of the California Water Code) establishes a regulatory program to augment federal protections under the CWA to protect "waters of the state", which include surface, ground, and ocean water. The Porter-Cologne Act implements the

National Pollutant Discharge Elimination System (NPDES) permitting program. NPDES permits are required for dewatering activities, and are issued by the RWQCBs. They set forth effluent limitations, monitoring, and reporting obligations, and often include best management practices to preclude adverse impacts to groundwater. The State Water Resources Control Board (SWRCB) and Santa Ana RWQCB are the resource agencies that implement water quality laws and would regulate project activities that could potentially impact surface water and groundwater.

Flood Hazard

The Federal Emergency Management Agency (FEMA) has prepared flood insurance rate maps (FIRM) in order to identify those areas that are located within the 100-year floodplain boundary, termed "Special Flood Hazard Areas" (SFHAs). A 100-year flood refers to a flood level with a 1% chance of being equaled or exceeded in any given year. If a property is located within a SFHA, as shown on a flood map published by FEMA, the National Flood Insurance Reform Act of 1994 requires mortgage lenders and servicers to require flood insurance for any loan secured on the property. The purpose of the National Flood Insurance Program (NFIP) designations is to encourage state and local governments to wisely use the lands under their jurisdictions by considering the hazard of flood when rendering decisions on the future use of such lands, thereby minimizing flood damage.

DISCUSSION OF IMPACTS

a) Would the project violate any water quality standards or waste discharge requirements?

Less than Significant Impact

Development of the proposed project can result in two types of water quality impacts: 1) short-term impacts due to construction related discharge of pollutants and through wind and water driven erosion of soil; and 2) long-term impacts from buildings, roads, parking lots (impervious surfaces) that prevent water from being absorbed back into the ground which also results in increase rate and flow of stormwater runoff. Runoff can contain pollutants such as oil, fertilizers, pesticides, trash, soil, and animal waste. These pollutants flow into water bodies such as lakes, streams, rivers, and ultimately drain into the ocean. The increased urban runoff also leads to increase in intensity of flooding and erosion.

Construction Pollutants Control

Clearing, grading, excavation, and construction activities associated with development may impact water quality through sheet erosion of exposed soils and subsequent deposition of particles and pollutants in drainage areas. Land disturbances due to project grading, and excavations would potentially increase soil erosion and off-site conveyance of soil particles in the stormwater runoff.

Through the Clean Water Act (CWA), the USEPA has established regulations under the NPDES program to control direct storm water discharges in order to ensure that water quality standards are upheld. Point source discharges are regulated through the local Regional Water Quality Control Board (RWQCB). Chino Hills is within the Santa Ana Regional Water Quality Control Board (SARWQCB) that is responsible for the issuance of waste discharge requirements, construction stormwater runoff permits, and NPDES permitting. Chino Hills participates as a "co-permittee" under the NPDES Permit and pursuant to such permit, has determined to review and amend its

municipal ordinance to ensure it has the adequate legal authority as may be necessary to carry out the requirements of the NPDES Permit and accomplish the requirements of the Clean Water Act.

New development projects must comply with San Bernardino County's Municipal Stormwater Permit in the Santa Ana Region (Order No. R8-2002-0012). This permit incorporates by reference the Drainage Area Management Plan (DAMP). The DAMP requires new developments to implement appropriate routine structural and nonstructural BMPs. BMPs for new development projects are subject to the Water Quality Management Plan (WQMP) requirements pursuant to Section 7 of the DAMP. Examples of routine structural BMPs include filtration, common area runoff minimizing landscape, energy dissipaters, inlet trash racks, and water quality inlets. Routine nonstructural BMPs include litter control, inspection and maintenance of catch basins, and spill contingency plans.

Projects proposed on land exceeding one-acre in size are subject to NPDES GCP program (Permit No. CAS000002). The applicant is required to submit a Notice of Intent (NOI) to the SARWQCB prior to the commencement of construction activities. In addition, a SWPPP must be prepared and implemented at the site. The SWPPP would include post-construction requirements for design facilities that capture and treat 80% of the storm water at the site before it is allowed to flow into the storm drain system and/or capture and treat the first 0.75 inch of rainfall before it is discharged into the stormwater system. A copy of the SWPPP will be maintained at the site at all times and all construction BMPs identified in the SWPPP will be implemented during construction activities. Revisions to a SWPPP for future implementation of hydrological functions such as landscape design and irrigation features will be added as required.

Implementation of NPDES, SWPPP, DAMP, compliance with the standard conditions, and BMPs would reduce construction-related and operation-related stormwater impacts to less than significant and no mitigation measures are required.

Operational Pollutant Controls

The project will increase impervious surfaces on the site. Prior to the issuance of building permits, new projects are required to provide provisions for structural and treatment control through BMPs. Per the City of Chino Hills Municipal Code Chapter 13.16 Storm Drain System, the applicant must identify site design/source control BMPs and treatment control BMPs that would be used to reduce or avoid potential water quality impacts to the maximum extent practicable.

Post development flows from the site would be conveyed via storm drains to the four (4) proposed detention basins; one basin is located at the southeast corner of each of the four (4) parcels within the project site (see **Figure 2.10**). The basins would serve to detain and filter runoff by allowing the runoff to drain through and be treated by engineered fill and gravel filters before returning to the on-site drainage system. These basins would be trapezoidal in shape, with 2:1 to 4:1 side slopes, having varying widths and lengths, from 4 foot deep to the top of the filter media layer, with total depth of media gravel of approximately 3 feet.

Moreover, future business park uses that may include fuel dispensing or handling of liquids must comply with Chapter 3.16.140 Spill Containment, of the municipal code. This section requires the use of spill containment systems such as dikes, walls, barriers, berms, or other devices designed to contain spillage of the liquid contents of containers. Spill containment systems must be constructed of impermeable and nonreactive materials to the liquids being contained. Compliance with these

requirements would limit the potential for fuels or similar liquid pollutants to reach surface waters downstream of the site.

Overall, effective site design, source control, and treatment control BMPs such as the use of water quality retention basins would alleviate the anticipated and expected pollutants that are of concern during the operational phase of the proposed project. Therefore, the project would not violate any water quality standards or waste discharge requirements and would have a less than significant impact.

b) Would the project substantially deplete groundwater supplies or interfere substantially 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)?

Less than Significant Impact

Geotechnical data (**Appendix D**) indicates depth to groundwater beneath the site is approximately 42 to 48 feet below ground surface. Due to this depth, the project site does not represent a substantial source of recharge.

Development of the proposed project would not result in any substantial changes in the quantity of existing groundwater supplies. No groundwater extraction activities would occur and no wells would be constructed or utilized. There would be a decrease in the percolation of water from the site and into groundwater due to new impervious surfaces on-site; however; the project incorporates four detention basins that are lined with gravel filter media that allow for percolation into the soil under most storm events. In heavy storms, the design of the system allows the heavy flows to bypass the treatment system and enter the existing drainage network as under current conditions.

In sum, project construction and operation would not interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Therefore, impacts are considered less than significant and no mitigation measures are required.

c) Would the project substantially alter 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?

Less than Significant Impact

The eastern boundary of the project site abuts the Chino Creek Channel while the southern property boundary abuts the Los Serranos Channel. Both are part of the San Bernardino County flood control network and have been channelized to protect against erosion and scour. The site itself is undeveloped land that was previously used for agricultural operations and is not equipped with control measures to alleviate soil erosion.

The primary potential for erosion and siltation impacts would occur during the construction phase (e.g., grading, clearing, and excavating activities) of the proposed project. Implementation of the

NPDES permit requirements would reduce potential erosion, siltation, and water quality impacts resulting from the project, as discussed above under checklist response Section 3.9a).

Once developed and occupied, 85% of the site would be paved. Introduction of hard surfaces on the property may increase surface water velocities and rate of flow which has the potential to cause water driven erosion downstream of the property. The proposed drainage system would mimic current drainage patterns by collecting and transporting runoff to the southeast of each parcel where it will be captured for treatment in one of four basins. These basins are designed to allow sediment to settle out of the stormwater and would detain water on-site except under the design year storm event, ensuring that water leaving the property occurs at a rate equal to predevelopment conditions. For these reasons, the project would not result in alteration of streams or substantial erosion and/or siltation on-or-off site. Therefore, impacts are considered to be less than significant.

d) Would the project substantially alter the existing drainage pattern of the site or area, including through the alternation 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?

Less than Significant Impact

Short term construction activities include excavation and compaction of fill soils to meet density and moisture requirements. Subsequent to remedial grading, fine grading to create development pads and establish drainage patterns would be conducted. The grading concept retains existing drainage pattern across the site with post development flows traveling to the southeast ultimately entering the Chino Creek channel.

Long term operation of the project would increase runoff volume and flow rates during a design year storm event over existing conditions. On-site runoff would be collected by downspouts, area drains and catch basins and conveyed by a network of storm drains ranging in size from 30 to 48 inches. Runoff would be directed to one of four detention basins where it is detained and filtered (see **Figure 2.0-11**). **Table 4.9-1** depicts the runoff rates on the project site during a 10 year and 100 year storm event.

Table 3.9-1
POST DEVELOPMENT FLOWS

Drainage Area/Node	*Size (Acres)*	*Q10 (CFS)*	*Q100 (CFS)*
A-1/102	3	6.7	10.4
A-2/201	6.4	18	28.1
A-3/301	5.3	25.6	40.4
A-4/401	4.7	31.9	50.5
A-5/501	4.1	37.1	58.7
A-6/601	8.6	48.3	76.7

Source: Albert Webb Associates 2014

As shown, development of the site as proposed would generate a rate of flow during a 100 year storm event of approximately 76.7 cubic feet per second. The proposed drainage system has been designed to accommodate these flows. Each detention basin includes concrete inlets with an outflow rate equal to the 100 year storm event inflow rate. This design serves to limit the storm water depth within the basins so that the top one foot of basin depth is available as freeboard in order to prevent on-site flooding. The Chino Creek drainage, as part of the San Bernardino flood control system, is also sized to accommodate 100 year flood events. For these reasons, development and occupation of the project would not result in flooding on-or off-site and impacts are considered to be less than significant.

e) Would the project create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

Less than Significant Impact

As discussed above under response to checklist question 3.9(d), the proposed project includes an on-site drainage system that has been designed to provide sufficient capacity to accommodate a 100 year storm event and the existing storm drainage network is designed to accommodate peak flows during a 100 year storm.

As discussed above under response to checklist question 3.9 (a) above, short-term construction and long-term operations would not result in a significant increase of polluted stormwater runoff. Compliance with NDPES, SWPPP, and DAMP regulations would limit these potential impacts to water quality. Therefore, a less than significant impact would occur.

f) Would the project otherwise substantially degrade water quality?

Less than Significant Impact

The proposed project is required to comply with the provisions within NDPES, develop and implement a SWPPP, and adhere to the site, source, and treatment control BMPs identified within the SWPPP. These BMPs are designed to prevent erosion, siltation, and reduce the pollutants entering the storm water system. The project also does not involve removal or contact with existing groundwater.

Compliance with all the applicable rules and regulations would indeed reduce the direct or indirect environmental impacts caused during construction and post-construction operations toward water quality. Project impacts are considered to be less than significant.

g) Would the project place housing 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?

No Impact

The Federal Emergency Management Area (FEMA) Flood Insurance Rate Map (FIRM), Panel 06071C8500HJ, identified the proposed site as lying within Zone X. Zone X is characterized as moderate to low risk areas for FEMA flood hazard zones. Construction and operation of the proposed project would not result in placement of housing in flood hazard area and no impact is expected.

h) Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Less than Significant Impact

The project site is designated as Zone X, which are areas with an annual chance of flooding of between 1% and 0.2%. The project does not propose to place any structures within a 100-year flood hazard zone so the project would not impede or redirect flood flows. Therefore, the proposed project would have less than significant impact.

i) Would the project expose 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?

Less than Significant Impact

There are two small dams within the City of Chino Hills: Los Serranos Lake[1] (also known as Rancho Cielito Reservoir) and Chino Ranch No. 1 Dam (also known as Arnold Reservoir[2]) which could cause localized flooding if damaged. However, the project site is not in an area prone to flooding and is outside the 100 year flood hazard zone as discussed above. In addition, reservoir owners are required to regularly inspect their dams for safety under supervision from the Department of Water Resources, Division of Safety of Dams (DSOD). For these reasons, the possibility of inundation in the

1 Los Serranos Lake is approximately 0.6 miles west of the project site.

2 Arnold Reservoir is approximately 5.2 miles west of the project site.

event of a catastrophic dam failure is considered as remote and impacts would be less than significant.

j) Would the project cause inundation by seiche, tsunami, or mudflow?

Less than Significant Impact

Seiches, tsunamis, and mudflows are all hazardous conditions related to the movement of substantial amounts of water. They tend to occur as a result of a natural disaster or during heavy storms. Seiches are large earthquake-generated waves that occur in rivers, lakes, reservoirs, ponds, and any other onshore large body of water. Unlike tsunamis, they do not occur in the ocean. Tsunamis only occur in the ocean and are large, earthquake-generated waves that start offshore and travel to the coast. Mudflows are defined as fast-moving landslides made of mud and debris, typically caused by heavy rainfall or melting snow in steep hillsides.

The project site is located inland at an elevation of 600 feet above msl and approximately 42 miles from the Pacific Ocean and would not result in hazards or inundation from tsunamis. Since there is no existing large water storage reservoirs or other enclosed bodies of water near the vicinity of the project site hazards from seiches are considered negligible. According to the California Emergency Management Agency this location is not within a tsunami hazard zone. The site is not mapped within landslide hazard zone as shown in the state's Seismic Hazard Zone Report. Hence, the potential for seismically-induced landslides or debris flows is considered less than significant.

3.10 LAND USE AND PLANNING				
Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Physically divide an established community?				**X**
b) 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?			**X**	
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				**X**

ENVIRONMENTAL SETTING

The 36.92 acre project site is characterized as vacant, disturbed land that was historically cultivated with row crops. Agricultural operation has ceased and the site is barren except for a small strip of Chinese ornamental lotus (see **Photo 1**). Irrigation lines remain on-site placed in a parallel pattern across the landscape (see **Photo 2**). Ancillary agricultural related sheds (see **Photo 3** and **4**) and several mature trees are present in the central portion of the property adjacent to the Chino Creek Channel. Utility easements for a natural gas pipeline and sanitary sewer line traverse the site roughly from east to west in the northern half of the project site.

Figure 3.10-1
EXISTING CONDITIONS PHOTOGRAPHS

Photo 1: Chinese ornamental lotus.

Photo 2: Irrigation lines.

Photo 3: Agricultural related shed.

Photo 4: Storage

REGULATORY SETTING

The project site is under the jurisdiction of the City of Chino Hills and therefore would be subject to policies and regulations designed to reduce environmental impacts as found in the City of Chino Hills General Plan and Municipal Code.

The City of Chino Hills General Plan is a policy document designed to give long range guidance for decision-making affecting the future character of the City planning area. It represents the official statement of the community's physical development as well as its economic, social, and environmental goals.

The City of Chino Hills Municipal Code establishes the basic regulations under which land is developed and utilized. This includes allowable uses, building setback requirements, and other development standards.

Of particular note to this project is Measure U (Ordinance 123), which was adopted on November 23, 1999. Measure U states that:

"The maximum density of any land designated for residential density shall not exceed the density established by the Chino Hills Specific Plan, the Chino Hills General Plan, the Zoning Map, or any finalized development agreements in place prior to the passage of the Initiative. Any increase in density greater than that specified above must be approved by a majority vote of the electorate of the City. However, the City Council of the City of Chino Hills may reduce the density of any land designated for residential use. Notwithstanding the fore-going, the City Council may increase residential density as necessary to meet the City's minimum mandated Housing Element requirements as set forth in California Government Code §65580, et seq., as amended from time to time, including, without limitation, the City's share of regional housing needs.

Any land within the City designated for a non-residential use shall not be converted to a residential use without a majority vote of the electorate of the City. Notwithstanding the foregoing, the City Council may increase residential density as necessary to meet the City's minimum mandated Housing Element requirements as set forth in Government Code §65580 et seq., as amended, from time to time without limitation, the City's share of regional housing needs. The City Council may also redesignate non-residential property to residential property as part of a simultaneous transfer of zoning designations between residential and non-residential properties provided that the net effect of the transfer does not increase the total number of residential units allowed on the properties in the transfer. Additionally, while transfers of land use designations within a planned

development shall be permitted in accordance with the transfer standards contained in this paragraph, planned development zoning cannot be transferred to any other property in the City."

DISCUSSION OF IMPACTS

a) Would the project physically divide an established community?

No Impact

The project site is a rectangular lot that consist of vacant land that was previously disturbed by agricultural uses. The proposed project would not adversely impact land uses within the area or act as a physical barrier within the surrounding community, as the site is surrounded by similar development on all sides, and the project consists of an infill development in an urbanized area. Therefore, the proposed project would not physically divide an established community, and no impact would occur.

b) Would the project 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?

Less than Significant Impact

Currently, the entire project site is designated and zoned for Business Park (BP). This land use designation primarily includes small and large-scale businesses involved in research and development, light manufacturing, distribution, or support services, as well as a variety of commercial uses.

As described in Chapter 3.0, Project Description, the applicant is proposing a General Plan amendment to change 14.73 acres of the 36.92-acre project site from Business Park to Very High Density Residential and a zone change to amend the designation on 14.73 acres of the site from Business Park (BP) to Very High Density Residential (RM-3) use. The very high density residential designation is intended to provide housing options for all income levels adjacent to shopping and employment areas. Densities of up to thirty-five (35) units per gross acre are permitted.

The residential portion of the project as proposed is at a density of 23.4 dwelling unit per acre (du/acre), while the business park is developed at an FAR of 0.43:1. This is consistent with the density and lot coverage restrictions for the intended uses. The physical impacts associated with development as proposed are described throughout Chapter 3.0, Environmental Checklist, of this Initial Study. A consistency evaluation that considers the project against adopted and proposed General Plan policies is provided below in **Table 3.10-1**, Adopted and Proposed General Plan Policy Consistency Analysis. These proposed policies cross reference existing General Plan policies. The public review comment period for the proposed General Plan Update Draft EIR recently ended on September 9, 2014 and adoption of the proposed General Plan Update will likely occur after the proposed project's approval process[1]. To ensure that the consistency analysis for the proposed project would be applicable either with or without the adoption of the new General Plan, both existing and proposed General Plan policies are included in the consistency analysis.

[1] Construction of the proposed project is scheduled to begin second quarter of 2015.

The proposed project meets the main objectives of the land use plans and ordinances governing the project site and appropriately balances the requirements of the zoning code with and associated development limitations of the project site. Moreover, as demonstrated throughout this Initial Study, the proposed project would not result in any unmitigated significant adverse environmental impacts or detract from the objectives of any plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental impact. Impacts would be less than significant.

Table 3.10-1
GENERAL PLAN POLICY CONSISTENCY ANALYSIS

CHAPTER 1. LAND USE ELEMENT POLICIES		
Existing 1994 General Plan	**Proposed 2014 General Plan Update**	**Consistency Analysis**
Major Goal 1: Preserve Rural Character. Focused Goal 1-1: Retention of important ridgelines and open space areas.	Policy LU-1.1: Preserve Chino Hills' Rural Character by Limiting Intrusion of Development into Natural Open Spaces. [*Existing Major Goal 1 and Focused Goal 1-1, modified*]	**Consistent.** The project is proposed on land that is designated and zoned for developed use by the General Plan and Chino Hills Municipal Code, respectively.
Policy 1-17: Prohibit new development from obstructing public views from arterial streets of significant open spaces or important viewsheds.	Action LU-1.1.2: Discourage new development from obstructing public views of extremely prominent ridgelines, prominent ridgelines, knolls, significant open spaces, or important visual resources as identified in the Municipal Code. [*Same as existing Policy 1-17*]	**Consistent.** The project site is relatively flat and does not contain important visual resources such as ridgelines, knolls, or outcroppings identified in Chapter 16.08.020 of the Municipal Code.
Policy 1-12: Ensure that new development conforms to the unique natural setting of each area and site, retaining the character of existing landforms and preserving significant native vegetation.	Action LU-1.1.3: Ensure that new development conforms to the unique natural setting of each area and site, retaining the character of existing landforms and preserving significant native vegetation. [*Same as existing Policy 1-12*]	**Consistent.** The project site is an infill parcel that has been heavily disturbed by ongoing agricultural cultivation. Little native vegetation or natural landforms are found on the property.
Policy 1-5: Ridgelines and natural slopes shall be dedicated to and maintained by the City; other landscaped areas shall be dedicated/maintained as provided in City policy.	Action LU-1.1.4: Continue to require ridgelines and natural slopes to be dedicated and maintained as open space as required by the Municipal Code. [*Existing Policy 1-5, modified*]	**Not Applicable.** The site is relatively flat and absent prominent ridgelines or slopes that are protected by code.

Policy 1-13: Determine open space requirements for new projects based on the slope of the land. Require that a percentage of required open space be left in its natural state.	Action LU-1.1.5: Maintain open space requirements for new development based on the slope of the land as required by the Municipal Code; and require that a percentage of required open space be left in its natural state. [*Same as existing Policy 1-13*]	**Consistent.** The site is heavily disturbed by current and historic agricultural operations and is relatively flat. The project design incorporates 15% of the site as landscaped open space consistent with Chapter 16.08.070 Open Space Requirements of the Chino Hills Municipal Code.
Policy 1-14: Cluster residences where appropriate to minimize grading and roadway and driveway intrusion into sensitive habitat areas. Clustering is specifically encouraged in areas abutting preserved open space and Chino Hills State Park.	Action LU-1.1.6: Cluster development where appropriate to minimize grading, and roadway and driveway intrusions into sensitive habitat areas, open spaces, and Chino Hills State Park. [*Existing Policy 1-14, modified*]	**Consistent.** The project site is disturbed by agricultural cultivation and does not contain sensitive habitat. The eastern perimeter of the project site is adjacent to Chino Creek Channel. The proposed project incorporates a 10 foot landscaped setback with split rail fencing to buffer the drainage from development and the proposed drainage system includes a series of retention basins that hold runoff on-site. No discharge of runoff into the creek would occur under normal storm events. No driveways or roadway extensions are proposed by the project that would extend across the drainage.
Principal 2: Terrain suitable for housing may include a variety of level rolling, and hillside sites, but should not include steep or irregular sites, poorly drained areas, and slopes over 30%.	Action LU-1.1.7: Discourage development on slopes over 30%. [*Same as existing Principal 2*]	**Not Applicable**. The project site does not contain slopes of 30% or greater.
Principal 1-h: Natural features such as streams, rock outcroppings, and unique vegetative clusters should be preserved.	Action LU-1.1.9: Promote preservation of natural features such as streams, rock outcroppings, and unique vegetative clusters. [*Existing Principal 1-h*]	**Consistent.** Per CHMC Chapter 16.30, the project is located within 200 feet of Chino Hills Parkway; however; the site is an infill parcel located within a relatively urbanized area that is vacant, relatively flat and does not contain important natural features such as streams, rock outcroppings, or unique vegetative clusters.

Policy 1-4: Use dedicated open space, as opposed to built barriers, as a buffer between development areas, wherever possible.	Action LU-1.1.10: Use dedicated open space, as opposed to build barriers, as a buffer between development areas, wherever possible. [*Same as existing Policy 1-4*]	**Consistent.** The project incorporates landscaped setbacks that vary in width dependent upon the proposed use. Consistent with section 16.10.030, Development Standards, the residential portion of the project incorporates a 20 foot landscaped front setback from adjacent roadways and a 10 foot rear yard setback along the creek. A 12-foot-tall concrete tilt up wall, landscape setback and surface parking would buffer the apartment buildings from proposed business park to the south along the side yard property line. The proposed business park contains setbacks consistent with Section 16.14.040, Development Standards. A 25-foot building setback that includes landscaping is proposed along Fairfield Ranch Road, a 10-foot building setback that includes landscaping would extend along the southern perimeter and a 40-foot building setback that includes landscaping would extend along the eastern perimeter of the business park.
Policy 1-15: Require contour grading, and encourage grading techniques that stimulate the varied gradients and rounded contours of natural landforms.	Action LU-1.1.11: Require contour grading, and encourage grading techniques that simulate the varied gradients and rounded contours of natural landforms. [*Same as existing Policy 1-15*]	**Not Applicable.** The project site is relatively flat and does not contain hills or slopes. All grading would occur consistent with chapter 16.50.030, Grading guidelines applicable to all projects, of the Chino Hills Municipal Code. Also, refer to Action CN-1.1.6.
This policy was not part of the 1994 General Plan.	Action LU-1.1.14: Discourage development intrusions on biological resources. [*New*]	**Consistent.** The project site is disturbed from use as farmland and represents an infill parcel that is designated for urban use by the General Plan.

Policy 1-3: Retain natural drainage courses in all cases where an independent hydrologic review of a specific development project finds that such preservation of natural drainage is physically feasible and where preservation of the natural feature will not render the subject project economically inviable.	Action LU-1.1.15: Retain natural drainage courses in all cases where an independent hydrologic review of a specific development project finds that such preservation of natural drainage is physically feasible and where preservation of the natural feature will not render the subject project economically unviable. [*Same as existing Policy 1-3]*	**Not Applicable.** The project site does not contain a natural drainage course that would be disturbed by development.
Policy 4-5: Natural areas and new residential development shall be buffered by fire-resistive landscape transition zones.	Action LU-1.1.16: Use designated fuel modification zones to buffer natural areas and new residential development. [*Existing Policy 4-5, modified*]	**Not Applicable.** The project site is an infill parcel surrounded by urbanized use. The residential component of the project design incorporates a 10 foot rear yard setback and the business park component of the project design incorporates a 40-foot rear yard setback along the eastern perimeter of the project site to buffer development from the adjacent Chino Creek Channel.
Focused Goal 1-2: Preservation of important view sheds.	Policy LU-1.2: Preserve and enhance the aesthetics resources of Chino Hills, including the City's unique natural resources, roadside views, and scenic resources. [*Existing Focused Goal 1-2 modified*]	**Consistent.** Chino Hills Parkway is a city-designated scenic highway that provides scenic views to the west (upon entering Chino Hills from Chino). The project site is located immediately south from Chino Hills Parkway and would not obstruct views for those entering Chino Hills from its eastern entryway. The project meets the landscape requirements of the Chino Hills Municipal Code for residential and business park uses. All landscaping and irrigation would comply with landscape and water conservation guidelines of the development code.

Policy 1-20: Minimize the visual impacts of development adjacent to prominent ridges through setbacks and landscaping, especially near major canyons.	Action LU-1.2.1: Continue to protect City designated extremely prominent ridgelines, prominent ridgelines, and knolls from intrusion by development. [*Existing Policy 1-20, modified*]	**Not Applicable.** The site is relatively flat and absent from prominent ridgelines or slopes that are protected by Municipal Code Section 16.08.030, Important Visual Resources Defined. The project site straddles the City's eastern boundary and would not obstruct views of visual resources within the City.
Policy 1-1: Permit project development only in accordance with the Specific Plan and the Development Code. Implementation of this goal for individual projects will begin at the Preliminary Development Plan stage and continue to be refined throughout the development review process. Policy 1-9: Emphasize existing rural equestrian orientation along trails and roads by encouraging theme architecture and canopy trees which complement equestrian activities.	Action LU-1.2.2: Require buildings to be designed and to utilize materials and colors to blend with the natural terrain in hillside areas and adjacent to public open spaces, extremely prominent ridgelines, prominent ridgelines, knolls, or important visual resources as identified in the Municipal Code. [*Existing Policy 1-1 and Policy 1-9, modified*]	**Not Applicable.** The site is not located adjacent to public open spaces, ridgelines, or other prominent visual features listed in Municipal Code Section 16.08.030, Important Visual Resources Defined.
Policy 1-19: In conjunction with project development, contour disturbed areas that are to be retained as open space to blend with natural slopes and revegetate the open space with native plants.	Action LU-1.2.4: In conjunction with project development, contour disturbed areas that are to be retained as open space to blend with natural slopes, and revegetate the open space with native plants. [*Same as existing Policy 1-19*]	**Not Applicable.** The site is an infill parcel that is relatively flat. Project grading would be conducted consistent with chapter 16.50.030, Grading guidelines applicable to all projects, of the Municipal code.
Policy 1-21: Minimize the visual bulk of new hillside development with the following techniques: • Building envelope step-back provisions that limit the height of down-Slope building walls and encourage hillside houses to step with the topography; • Site designs that express the	Action LU-1.2.5: Minimize the visual bulk of new development through implementation of the City residential and non-residential design guidelines. [*Existing Policy 1-21, modified*]	**Consistent.** Project is designed consistent with the building height, coverage and density standards established under the municipal code for residential (Chapter 16.10.030) and business park uses (Chapter 16.14.040) as well as landscaping requirements (Chapter 16.07). The project would adhere to the City's residential (CHMC Chapter 16.10) and non-residential design guidelines (CHMC Chapter 16.09).

variation and irregularity of the hillside; • Adequate lot widths and minimum building separations to reduce the "wall effect" of houses lined up along the contour; • Shared guest parking bays between private lots to allow downhill lots to build with varied front setbacks and keep the building mass close to the existing grade; and • Separate garages for houses on uphill lots as a way of reducing building bulk.		
Policy 1-5: Ridgelines and natural slopes shall be dedicated to and maintained by the City; other landscaped areas shall be dedicated/maintained as provided in City policy.	Action LU-1.2.7: Dedicate and maintain landscaped areas as required by the City. [*Existing Policy 1-5, modified*]	**Consistent**. Project is designed to meet the landscape requirements of the municipal code for residential and business park uses (15%). All landscaping and irrigation would comply with plant palette and water conservation guidelines outlined in chapter 16.07 of the code.
Policy 3.9: Ensure the development of an aesthetically attractive and balanced commercial base compatible with the community and recognizing the predominantly residential character of Chino Hills.	Policy LU-2.1: Ensure that development of commercial and business uses are balanced with the predominantly residential character of Chino Hills. [*Existing Policy 3.9, modified*]	**Consistent.** With 8,775 jobs and 22,996 housing units, the City has a current jobs-to-housing balance of 0.38 (City of Chino Hills, 2014). Buildout of the project would generate approximately 353 new jobs based on regional employment density estimates for the light industry category (Natelson Company 2001), which would improve the jobs housing balance. In addition the project also provides residential opportunities in walking distance to these jobs.

This policy was not part of the 1994 General Plan.	Action LU-2.1.1: Ensure that new commercial and business development is consistent and compatible with the existing character of the community and meets City development standards. [*New*]	**Consistent.** The project is designed to promote compatibility with the existing character of the community by incorporating landscaped setbacks, and proposing structures that meet the height, massing, and coverage requirements of the municipal code. Project also meets the standards for business park uses outlined in chapter 16.09 Non-residential Design Guidelines, of the Municipal Code.
This policy was not part of the 1994 General Plan.	Action LU-2.1.3: For new developments, provide appropriate buffers between traffic intensive land uses and roadways and residential uses. [*New*]	**Consistent.** The project incorporates building setbacks with landscaping that vary in width dependent upon the proposed use. Consistent with Chapter 16.10.030, Development Standards, the residential portion of the project incorporates a 20 foot landscaped front setback from adjacent roadways and a 10 foot side yard and rear yard setback along the creek. A 12-foot-tall concrete tilt up wall, landscape setback and surface parking would buffer the apartment buildings from proposed business park to the south.
This policy was not part of the 1994 General Plan.	Policy LU-2.2: Ensure balanced residential development. [*New*]	**Consistent.** The 2014-2021 Housing Element Update provides a range of housing types to meet the needs of all economic segments of the community. Included as an action in the Housing Element was implementation of a General Plan and Zoning update to allow for conversion of portions of the Tres Hermanos property from Commercial to Very High Density Residential Density with a density of up to 35 dwelling units per acre. Among the General Plan amendment required to implement the proposed Fairfield Ranch Commons project is a Housing Element amendment to transfer 346 Very High Density

		Residential Units from Tres Hermanos Site A to the project site. The transfer of 346 Very High Density Residential Units from Tres Hermanos Site A to the project site is in compliance with Measure U as the transfer of units does not increase the total number of residential units allowed on the properties involved in the transfer. Once redesignated, the project site will allow for up to 35 units per acre. Pursuant to Government Code Section 65583, the project site must require a minimum gross density of 20 dwelling units per acre and allow multi-family by right without a conditional use permit, planned unit development or other discretionary action upon completion of the amendment. As proposed, the residential component of the project will have a gross density of 23.4 dwelling units per acre, which is consistent with the gross density requirements.
This policy was not part of the 1994 General Plan.	Policy LU-2.3: Ensure public land uses and utilities blend with surrounding development. [*New*]	**Not Applicable.** The project is not a public use or public utility.
Policy 1-8: Require underground utilities for all new development.	Action LU-2.3.1: Require underground utilities for all new development. [*Same as existing Policy 1-8*]	**Consistent.** The project plans underground all utilities consistent with Chapter 83.041120(c)(1)(a) Subdivision Design and Improvement Standards, of the municipal code.
This policy was not part of the 1994 General Plan.	Action LU-2.3.3: Require all utilities to be designed and installed in a manner that minimizes visual and environmental impacts. [*New*]	**Consistent.** The project plans underground all utilities consistent with Chapter 83.041120(c)(1)(a) Subdivision Design and Improvement Standards, of the municipal code. Refer to Action LU-1.2.5.

This policy was not part of the 1994 General Plan.	Action LU-2.4.4: Require development of the Tres Hermanos area to be planned through the Specific Plan or other master planning process acceptable to the City. [*New*]	**Not Applicable.** The project site is not located in the Tres Hermanos area of the City. Implementation of the proposed project does involve a Housing Element amendment to transfer very high density residential units to the project site, but would not interfere or otherwise obstruct the master planning process for this property.
Objective 3-1: Continue to strive towards the Southern California Association of Governments (SCAG) projected jobs/housing ratio for the year 2010 for the West San Bernardino Valley, which includes the city of Chino Hills, of 1.16 jobs per housing unit.	Policy LU-2.5: Promote land use patterns that support a regional jobs/housing balance. [*Existing Objective 3-1, modified*]	**Consistent.** Also refer to LU-2.1. With 8,775 jobs and 22,996 housing units, the City has a current jobs-to-housing balance of 0.38. Buildout of the project would generate approximately 353 new jobs based on regional employment density estimates for the light industry category (Natelson Company 2001), which would improve the jobs housing balance.
Policy 3-2: Concentrate major business park and commercial uses, which represent a potential employment base, near the Chino Valley Freeway corridor. Policy 3-3: All large region-serving commercial uses shall be located adjacent [to] the Chino Hills Freeway.	Action LU-2.5.3: Concentrate major business park and commercial uses that represent a potential employment base near the Chino Valley Freeway corridor and along major arterials. [*Existing Policies 3-2 and 3-3, modified*]	**Consistent.** The project site is located along the Chino Valley Freeway corridor and includes 14.37 acres of Business Park uses.
This policy was not part of the 1994 General Plan.	Policy LU-3.1: Maintain the character and quality of existing neighborhoods. *[New]*	**Consistent.** Project has been designed consistent with Chapter 16.06.130 General design compatibility and enhancement, of the municipal code. The project maintains an integrated architectural theme that is compatible with and complements surrounding properties.
This policy was not part of the 1994 General Plan.	Policy LU-3.2: Minimize traffic, noise, and other nuisance intrusions in residential neighborhoods. *[New]*	**Consistent.** The project would not extend a roadway through an established neighborhood. The project site plan incorporates building setbacks with landscaping, walls, and architectural details to minimize the intrusion of noise, light, and glare.

This policy was not part of the 1994 General Plan.	Action LU-3.2.1: Locate assembly and other neighborhood serving facilities on the perimeter of residential neighborhoods with access to a collector street. [*Same as existing Principal 1-g*]	**Not Applicable.** The project does not include public assembly space or neighborhood serving commercial uses.
Principal 1-e: Sidewalks should be provided along all streets. Where possible, sidewalks should also be provided in internal green belts.	Action LU-3.2.2: Provide sidewalks along all streets in residential neighborhoods; and where possible, provide sidewalks in internal green belts. *[Same as existing Principal 1-e]*	**Consistent.** The project includes a network of pathways internal to the property that links the residential buildings with the on-site amenities. The project also proposes construction of public sidewalks along Fairfield Ranch Road and Monte Vista Avenue.
Major Goal 1: Preserve Rural Character.	Policy LU-4.1: Promote high quality development. [*Existing Major Goal 1, modified].*	**Consistent.** The apartment community includes amenities such as a fitness center, lap pool, sports court, community courtyard and outdoor fireplace. Buildings incorporate high quality finishes such as concrete roof tile, stucco, and decorative tiles. The project design is subject to review by the Project Review Committee as part of the approval process to ensure the project complies with all City standards.
This policy was not part of the 1994 General Plan.	Action LU-4.1.3: Screen negative views through site planning, architectural, and landscape devices. *[New]*	**Consistent.** Project incorporates 10 foot setback planted with a dense row of evergreens along Chino Creek Channel, which separates the planned residential development from industrial uses to the east. Additionally, a 12-foot-tall concrete tilt up wall, landscape setback and surface parking would buffer the apartment buildings from proposed industrial uses to the south. The business park includes strategically placed concrete tilt up screen walls topped by a trellis to disrupt views of truck bays and parking from off-site locations.

This policy was not part of the 1994 General Plan.	Action LU-4.1.4: Discourage commercial signage that creates visual clutter and obstructs public views into the establishment. *[New]*	**Consistent.** The project would not include neighborhood serving retail space. Signage would be limited to monumentation at the primary driveways. The business park component of the project would adhere to CHMC Section 16.09.080 Sign guidelines for non-residential design guidelines.
Policy 2-6: All development within a recognized residential tract shall be of comparable exterior design and materials. The intent of this policy is to prevent partially completed residential tracts from being completed in a manner which is not aesthetically compatible with existing portions of the tract.	Action LU-4.1.5: Ensure that all development within a recognized residential tract is of comparable or superior exterior design and materials and in accordance with City residential design guidelines to prevent partially completed residential tracts from being completed in a manner that is not aesthetically compatible with existing portions of the tract. *[Existing Policy 2-6, modified]*	**Not Applicable**. The project does not involve buildout of a partially completed tract map.
Objective 2-2: Develop standards relative to trees, underplantings, and groundcovers for streets, center medians, parkways, parking lots, and trails.	Policy LU- 4.2: Utilize extensive landscaping to beautify Chino Hills' urbanized areas. [*Existing Objective 2-2 modified]*	**Consistent.** Project is designed to meet the landscape requirements of the municipal code for residential and business park uses. All landscaping and irrigation would comply with plant palette and water conservation guidelines outlined in Chapter 16.07 of the Municipal Code.
This policy was not part of the 1994 General Plan.	Action LU-4.2.2: Require landscaping to be continuously maintained in good condition. *[New]*	**Consistent.** Project would comply with Chapter 16.06.020 Maintenance of properties, of the municipal code that requires all property in the City to be maintained in a clean, neat, orderly, operable, and usable condition. The project would adhere to CHMC Chapter 16.07 Landscape and Water Conservation Guidelines.
This policy was not part of the 1994 General Plan.	Action LU-4.2.3: Promote landscape materials that consist of drought-resistant plant varieties complementary to the area. *[New]*	**Consistent**. All landscaping and irrigation would comply with plant palette and water conservation guidelines outlined in Chapter 16.07 of the Municipal Code.

This policy was not part of the 1994 General Plan.	Policy LU-5.1: Promote infill, mixed use, and higher density development. *[New]*	**Consistent.** The project site is an infill parcel along the Chino Hills freeway corridor. A variety of land uses occur in the immediate vicinity including residential, industrial, and institutional. While vertical mixed use is not proposed, the project includes both very high density residential and a business park component.
This policy was not part of the 1994 General Plan.	Action LU-5.1.1: Identify sites suitable for mixed use development within an existing urban service area and establish appropriate site-specific standards to accommodate the mixed uses. *[New]*	**Not Applicable.** This action is directed towards sites to be zoned Mixed Use. The project site is not proposed to be zoned Mixed Use.
This policy was not part of the 1994 General Plan.	Action LU-5.1.2: Identify mixed use development standards that support sustainable development. *[New]*	**Not Applicable.** This action is directed towards sites to be zoned Mixed Use. The project site is not proposed to be zoned Mixed Use.
This policy was not part of the 1994 General Plan.	Action LU-5.1.3: Coordinate land use patterns with transportation plans to improve and protect air quality, and reduce vehicular trips. *[New]*	**Consistent.** Project places very high density residential and employment generating business park uses along the Chino Hills freeway corridor.
This policy was not part of the 1994 General Plan.	Action LU-5.1.4: Plan for high density residential and mixed use development near commercial areas, major roadways, and transit facilities. *[New]*	**Consistent.** Project places very high density residential and employment generating business park uses along the Chino Hills freeway corridor.
This policy was not part of the 1994 General Plan.	Action LU-5.1.5: Encourage development to incorporate pedestrian and bicycle trails, fitness areas, and/or other facilities that promote healthy living. *[New]*	**Consistent.** The residential development includes amenities such as a fitness center, lap pool, and outdoor sports court. A system of paths links the units to these and other amenities.
CHAPTER 2. CIRCULATION ELEMENT POLICIES		
Existing 1994 General Plan	**Proposed 2014 General Plan Update**	**Consistency Analysis**
This policy was not part of the 1994 General Plan.	Policy C-1.1: Provide a comprehensive roadway network that supports the movement of people and goods in a safe	**Consistent.** The project includes an on-site roadway network of sufficient width and turning radius, including clear line-of-sight onto

	and efficient manner. *[New]*	surrounding roadways to provide for the safety and efficient movement of people and goods.
Objective 1: Achieve and maintain Level of Service "D" on all roadway links and at all roadway intersections, with the exception, of intersections within 1/2 mile of the State Route 71 Expressway/ Freeway, where Level of Service "E" shall be maintained.	Action C-1.1.1: Achieve and maintain a minimum Level of Service D on all roadway links and at all roadway intersections, with the exception of intersections within one-half mile of the SR-71 Freeway, where a minimum Level of Service E shall be maintained. *[Same as existing Objective 1]*	**Consistent.** A traffic impact report has been prepared for the proposed project by Linscott Law & Greenspan (September 2014). This report found that with implementation of recommended mitigation, all studied roadway intersections would operate at acceptable levels of service.
Objective 2: Maintain San Bernardino County Congestion Management Program (CMP) highway system roadway links and intersections at Level of Service "E".	Action C-1.1.2: Maintain San Bernardino County Congestion Management Program (CMP) highway system roadway links and intersections at Level of Service E. *[Same as existing Objective 2]*	**Consistent.** A traffic impact report has been prepared for the proposed project by Linscott Law & Greenspan (September 2014). Included are measures to ensure the project would not cause vehicle congestion that exceeds acceptable levels of service.
Policy 2-7: In order to provide logical planning boundaries end to simplify issues of access, the City of Chino Hills supports the annexation into the city of the portion of Riverside County generally between Chino Hills and the Chino Valley (Highway 71) Freeway.	Action C-1.1.3: Require traffic impact analyses or traffic studies for private and public projects to ensure that discretionary development projects do not cause roadway congestion in excess of acceptable levels of service within Chino Hills, or on CMP roadway links or intersections. *[Existing Policy 2-7, modified]*	**Consistent.** A traffic impact report has been prepared for the proposed project by Linscott Law & Greenspan (September 2014). Included are measures to ensure the project would not cause vehicle congestion that exceeds acceptable levels of service.
This policy was not part of the 1994 General Plan.	Action C-1.1.4: Require new developments to provide for all roads within their boundaries and to pay their fair share of planned roadway improvement costs. *[New]*	**Consistent**. The project includes an on-site circulation system adequate for the intended use. The applicant must also pay development impact fees, including a traffic impact fee, which can be used to pay for improvements outlined in the City Capital Improvement Plan.

This policy was not part of the 1994 General Plan.	Action C-1.1.6: Continue to enforce heavy truck travel restrictions throughout the City. *[New]*	**Consistent.** The site is afforded good access to the SR-71 through a full interchange at Soquel Canyon Parkway/Central Avenue and a full interchange at Ramona Avenue/Chino Hills Parkway. Based on the trip distribution assumptions developed as part of the project traffic study, the majority of trips travel along state or principal routes as defined in the Circulation Element. The report estimates that up to 35 percent of heavy truck trips generated by project occupancy would travel along SR-71, which is designated as a state route.
This policy was not part of the 1994 General Plan.	Policy C-1.2: Create a safe, efficient, and neighborhood-friendly street system *[New]*	**Consistent.** The site plan has been reviewed by the City Project Review Committee against all relevant development and design standards. The committee includes representatives from the engineering department to ensure compliance with roadway design standards.
This policy was not part of the 1994 General Plan.	Action C-1.2.1: Minimize through traffic in residential neighborhoods through a variety of land use controls and traffic control devices. *[New]*	**Consistent.** The site is afforded good access to the SR-71 through a full interchange at Soquel Canyon Parkway/Central Avenue and a full interchange at Ramona Avenue/Chino Hills Parkway. Based on the trip distribution assumptions developed as part of the project traffic study, as much as 35 percent of heavy truck trips generated by project occupancy would travel along SR-71, which is a designated a state route.
Principal 1-c: Collector streets should be designed to circulate traffic within the neighborhood but discourage through traffic. [*Note: this policy was part of the Land Use Element in the 1994 General Plan*]	Action C-1.2.3: Design collector streets to circulate traffic within the neighborhood but discourage through traffic. [*Same as existing Principal 1-c]*	**Consistent.** The site plan has been reviewed by the City Project Review Committee against all relevant development and design standards. The committee includes representatives from the engineering department to ensure compliance with roadway design standards.

Principal 1-d: Local streets should serve primarily to provide access to homes and other properties. Local streets should not provide through access to and from properties not on the street. [*Note: this policy was part of the Land Use Element in the 1994 General Plan*]	Action C-1.2.4: Design local streets to primarily provide access to homes and other properties. [*Same as existing Principal 1-d*]	**Consistent.** The site plan has been reviewed by the City Project Review Committee against all relevant development and design standards. The committee includes representatives from the engineering department to ensure compliance with roadway design standards.
Policy 2-9: Require all development projects to meet mandatory standards with regard to vertical and horizontal alignments, access control, rights-of-way, cross-sections, intersections, sidewalks, curbs and gutters, cul-de-sacs, driveway widths and grades, right-of-way dedication and improvements, and curb cuts for the disabled.	Action C-1.2.5: Require all development projects to meet mandatory standards with regard to vertical and horizontal alignments, access control, rights of way, cross-sections, intersections, sidewalks, curbs and gutters, cul de sacs, driveway widths and grades, right of way dedication and improvements, and curb cuts for the disabled. [*Same as existing Policy 2-9]*	**Consistent.** The site plan has been reviewed by the City Project Review Committee against all relevant development and design standards. The committee includes representatives from the engineering department to ensure compliance with roadway design standards.
This policy was not part of the 1994 General Plan.	Action C-1.2.7: Provide adequate sight distances for safe vehicular movement at a road's design speed and at all intersections as consistent with City and Caltrans standards. *[New]*	**Consistent.** The site plan has been reviewed by the City Project Review Committee against all relevant development and design standards. The committee includes representatives from the engineering department to ensure compliance with roadway design standards.
Policy 2-10: Prohibit direct driveway access from individual residences to major arterials, major highways, and secondary highways.	Action C-1.2.8: Prohibit direct driveway access from individual residences to major arterials, major highways, secondary highways, and collectors. *[Same as existing Policy 2-10]*	**Consistent.** None of the residential units are accessed by surrounding roadways. All parking spaces and carports are accessible via the on-site circulation system.

This policy was not part of the 1994 General Plan.	Action C-1.2.9: Require driveway placement to be primarily designed for safety and, secondarily, to enhance circulation. *[New]*	**Consistent.** Project is designed to ensure adequate sight distance at all driveways by minimizing obstructions (i.e. landscaping and hardscape/walls/monument signs) within "clear corner areas" on either side of the driveways. Landscaping and hardscapes are designed so a driver's clear line of sight is not obstructed and does not threaten vehicular or pedestrian safety.
This policy was not part of the 1994 General Plan.	Action C-1.2.10: Plan access and circulation of each development project to accommodate vehicles (including emergency vehicles and trash trucks), pedestrians, and bicycles. *[New]*	**Consistent.** An assessment of the proposed site plans for the apartment and business park components of the Project indicates that a (SU-30) service truck and fire truck, as well as a large truck (WB-65) can access and circulate throughout the site.
This policy was not part of the 1994 General Plan.	Action C-1.2.11: Require adequate off-street parking for all developments. *[New]*	**Consistent.** Street parking is currently permitted along the roadways fronting the project. This condition would remain unchanged with construction and operation of the project.
This policy was not part of the 1994 General Plan.	Policy C-3.1: Encourage the use of public transportation for commute and local, and increase citywide transit ridership. *[New]*	**Consistent**. Proposed project includes very high density residential component. Project site is located within 1 mile of transit stop so the project would contribute to ridership.
Policy 2-16: Require bus turn-outs and shelters in residential, commercial, and industrial public use areas.	Action C-3.1.3: Require bus turn-outs in residential, commercial, and industrial public use areas. [*Same as existing Policy 2-16*]	**Not Applicable.** Appropriate bus service facilities already exist in the project area.
This policy was not part of the 1994 General Plan.	Policy C-3.2: Support other alternatives to single occupant vehicular travel. *[New]*	**Consistent.** The project places very high density residential development adjacent to existing and planned employment centers.
This policy was not part of the 1994 General Plan.	Action C-3.2.1: Work with the Chino Valley Unified School District to implement ride sharing, bike routes, and other non-single	**Consistent.** The project is located within 0.25 mile of Chaparral Elementary and is near to a dedicated bike path along Chino Hills Parkway.

	occupant vehicle transportation options. *[New]*	Construction and operation of the project at this location affords the students an opportunity to walk or ride a bike to school.
This policy was not part of the 1994 General Plan.	Action C-3.2.3: Support the citywide Bicycle Master Plan and bikeway improvements. *[New]*	**Consistent.** The project would place housing and employment opportunities near a dedicated bike path along Chino Hills Parkway. Construction and operation of the project at this location affords residents an opportunity to walk or ride a bike to their destination.
This policy was not part of the 1994 General Plan.	Policy C-4.1: Plan for high density mixed use development close to regional transit and non-vehicular transportation corridors. *[New]*	**Consistent.** The project proposes to place mixed use in the form of very high density residential and business park uses along major transportation corridors including SR-71. The project site is also located near existing OmniGo Route 365 with a stop at the intersection of Fairfield Ranch Road and Soquel Canyon Parkway.
This policy was not part of the 1994 General Plan.	Action C-4.1.1: Locate high density housing within walking distance of transit, as determined by state and regional policies. *[New]*	**Consistent.** The project proposes to place very high density housing and business park uses near existing OmniGo Route 365. This transit route currently has a stop at the intersection of Fairfield Ranch Road and Soquel Canyon Parkway, which is within walking distance to the property.
This policy was not part of the 1994 General Plan.	Action C-4.1.2: Require mixed use and/or high density development to incorporate pedestrian-oriented design elements, such as accessibility to transit; safe pedestrian connections and crossings; parks and public open spaces; street furniture, attractive pedestrian-oriented design at the street level; street facing buildings; and street trees and landscaping. *[New]*	**Consistent.** The applicant would enter into a development agreement with the City of Chino Hills that, among other things, requires certain public benefits from the project. The project would also implement street improvements along Monte Vista Avenue and Fairfield Ranch Road. Under the City's Standard Design Guidelines, street improvements would include sidewalk and landscaping. Residential streetscapes would include decorative wall features and elements that include but are not limited to monument signs for community

		signage located at primary entrances, new exterior lighting, decorative perimeter fencing and walls , entryways would have stucco walls, and landscaping/perimeter treatments.
This policy was not part of the 1994 General Plan.	Policy C-5.1: Provide adequate infrastructure improvements in conjunction with development. *[New]*	**Consistent.** Applicant would construct Monte Vista Avenue along Project frontage to ultimate half-section width per the City of Chino Hills "Collector" street standards while Fairfield Ranch Road along the Project frontage would be constructed to ultimate half-section width per the City of Chino Hills "Secondary Highway" street standards. Project applicant would also pay a fair share towards cost of constructing improvements needed to achieve acceptable Level of Service standards for studied roadway intersections at project buildout.
This policy was not part of the 1994 General Plan.	Action C-5.1.1: Plan and design new roadways and expansion/completion of existing roadways to allow for co-location of water, sewer, storm drainage, communications, and energy facilities within the road right of way. *[New]*	**Consistent.** Project site is served by developed circulation system that contains wet and dry utilities collocated within the right-of-way. Project would improve roadways along project frontage to ultimate half width per the City of Chino Hills "Secondary Highway" street standards.
This policy was not part of the 1994 General Plan.	Action C-5.1.2: Require private and public development projects to be responsible for providing road improvements along all frontages abutting a public street right of way in accordance with the design specifications for that roadway. *[New]*	Consistent. The project would construct Monte Vista Avenue along Project frontage to ultimate half-section width per the City of Chino Hills "Collector" street standards while Fairfield Ranch Road along the Project frontage would be constructed to ultimate half-section width per the City of Chino Hills "Secondary Highway" street standards.
This policy was not part of the 1994 General Plan.	Action C-5.1.3: Require private and public development projects to be responsible for	Project would conduct restriping of Monte Vista Avenue at Driveway No. 1 to provide a separate

	providing traffic control devices and wet and dry utility improvements necessary to meet the needs of the project, and to properly integrate into the established and planned infrastructure systems. *[New]*	southbound left-turn lane with a minimum storage of 100-feet and install all necessary pavement markings and signs associated per City of Chino Hills Standard Design Guidelines and CA MUTCD. Project applicant would also install "STOP" signs and stop bars at the proposed apartment driveways and business park driveways on Monte Vista Avenue and/or Fairfield Ranch Road.
CHAPTER 3. HOUSING ELEMENT POLICIES		
Existing 1994 General Plan	**2006-2014 Housing Element[2]**	**Consistency Analysis**
Not applicable.	Policy H-1.1: Provide a variety of residential opportunities in the City, including large lot estates, low density single-family homes, medium density townhomes, and high density condominiums and apartments.	**Consistent.** The project would provide very high density housing in the form of apartments to help meet the City's regional housing obligations. The project proposes a General Plan Amendment (GPA) to change the land use designation of 14.73 acres from "Business Park" to "Very High Density Residential" and a Housing Element amendment to transfer 346 very high density residential units to the project site. The proposed amendment to the Housing Element is in compliance with Measure U as the transfer of units does not increase the total number of residential units allowed on the properties involved in the transfer. The project also requires a Zone Change to change the zoning designation of 14.73 acres from BP (Business Park) to "RM-3 (Very High Density Residential)".

[2] The 2014 General Plan Update does not include Housing Element. Schedules for Housing Element updates are established by the California Government Code and promulgated by the State Department of Housing and Community Development (HCD). According to these schedules, the City's current 2006-2014 Housing Element was adopted on September 12, 2012.

Not applicable.	Action H-1.1.2: Avoid concentration of higher density housing in any single portion of the City.	**Consistent.** The surrounding uses are comprised of a mixture of land uses such as: Business Park, Commercial, Open Space, Low Density Residential, Institutional/Public Facility, Medium Density Residential, and High Density Residential.
Not applicable.	Action H-1.1.3: Encourage multi-family projects of high quality design.	**Consistent.** The project proposes features that include unit types with one, two, and three bedrooms (some with attached garages). A clubhouse that serves as a community center with the following amenities: indoor gym, pool, spa, outdoor sports court, landscaped courtyard with fountain, outdoor kitchen with barbeque and outdoor dining area with fireplace. Exterior design features include: a contemporary architectural style with balconies, siding materials that consist of concrete roof tile, metal railing, vinyl windows, stucco, decorative tile, grille, chimney, and foam corbel.
Not applicable.	Policy H-1.4: Provide for new housing sites to satisfy requirements of state housing law and consistent with Measure U.	**Consistent.** The project would provide Very High Density housing in the City. The transfer of 346 Very High Density Residential Units from Tres Hermanos Site A to the project site is in compliance with Measure U as the transfer of units does not increase the total number of residential units allowed on the properties involved in the transfer. Once re-designated, the project site will allow for up to 35 units per acre. Pursuant to Government Code Section 65583, the project site must require a minimum gross density of 20 dwelling units per acre and allow multi-family by right without a conditional use

		permit, planned unit development or other discretionary action upon completion of the amendment. As proposed, the residential component of the project will have a gross density of 23.4 dwelling units per acre, which is consistent with the gross density requirements required to meet state housing law.
CHAPTER 4. CONSERVATION ELEMENT POLICIES		
Existing 1994 General Plan	**Proposed 2014 General Plan Update**	**Consistency Analysis**
Policy 1-1: Preserve and protect rural and natural scenic qualities by creating open space and wildlife corridors, and by integrating existing natural features into new development.	Policy CN-1.1: Preserve and protect Chino Hills' rural and natural scenic qualities. [*Existing Policy 1-1, modified*]	**Not Applicable.** The project site is located within an urbanized area of Chino Hills with industrial uses to the north and east as well as commercial and light industrial uses to the south.
Focused Goal 1-1: Retention of Important ridgelines and open space areas. Focused Goal 1-2: Preservation of important viewsheds (See 1994 Land Use Element).	Action CN-1.1.1: Protect identified extremely prominent ridgelines, prominent ridgelines, and knolls. [*Existing Focused Goal 1-1 and 1-2, merged and modified*]	**Not Applicable.** The project site is not located within or near extremely prominent ridgelines, prominent ridgelines, and knolls. Also refer to LU-1.1.4.
This policy was not part of the 1994 General Plan.	Action CN-1.1.2: Preserve the character of natural open spaces by integrating existing natural features into new development. [*New]*	**Not Applicable.** The project site is located on disturbed vacant land.
This policy was not part of the 1994 General Plan.	Action CN-1.1.6: Encourage natural contour grading. *[New]*	**Not Applicable.** The project site is located on relatively flat parcel.
Policy 1-6: In areas of steep and rugged topography, emphasize existing tree groupings, especially oaks, by planting additional tree groupings in areas of new development. Use additional tree plantings to blend new development and manufactured slopes with the natural setting, especially in highly	Action CN-1.1.7: Use existing trees and additional tree planting to blend new development and manufactured slopes with the natural setting, especially in highly visible locations. *[Existing Policy 1-6, modified]*	**Consistent.** Per the preliminary landscaping plans, the project would incorporate several tree and palm tree species throughout the sites exterior for streetscape design. The project does not propose to use any existing trees. The project site is relatively flat disturbed vacant land.

visible locations such as prominent ridgelines. Encourage natural contour grading.		
Policy 2-4: Trees which in the opinion of the City function as an important part of the City's or a neighborhood's aesthetic character may not be removed without specific permission from the City, regardless of their location.	Action CN-1.2.4: Require City approval to remove trees that in the opinion of the City function as an important part of the City's or a neighborhood's aesthetics character. *[Existing Policy 2-4, modified]*	**Not Applicable.** There are no significant trees that have been identified by the City as important.
CHAPTER 5. SAFETY ELEMENT POLICIES		
Existing 1994 General Plan	**Proposed 2014 General Plan Update**	**Consistency Analysis**
Safety Policy 1-2.5: Conduct site-specific studies on the soils, seismicity, and groundwater conditions to evaluate the potential for liquefaction and related ground failure phenomena in canyon bottoms and the alluvial flatlands on the eastern portion of the city. Mitigation measures would be designed based on these studies. In some areas, it is not economically feasible to completely mitigate these hazards, but their effects can be minimized by measures such as densification of near-surface soils, and dewatering.	Policy S-1.1: Regulate development in high-risk seismic, landslide and liquefaction hazard areas to avoid exposure to hazards. [*Existing Policy 1-2.5 modified]*	**Consistent.** The proposed project would follow the recommendations sets forth in the Geotechnical Engineering Investigation and adhere to the CBC.
Safety Policy 1-2.3: Observe prudent land use planning in the Fault Hazard Zone delineated for the Chino fault as follows: • Critical structures, including schools, hospitals, high-occupancy facilities (shopping centers, auditoriums,	Action S-1.1.1: Observe prudent land use planning in the Fault Hazard Zone delineated for the Chino Fault, restricting high occupancy and emergency operation facilities and limiting residential development. *[Existing Policy 1-2.3]*	**Not applicable.** According to the Geotechnical Engineering Investigation and California Geologic Survey mapping, the proposed project is not located within a Fault Hazard Zone.

etc.), fire and police stations, and emergency operation centers should not be located within the Fault Hazard Zone delineated for the Chino fault. • Limited residential development would be permissible within the zone, but with the acknowledgment that lower lot densities may result from restrictions which specify nonstructural areas as part of buildable lots. • Restricted fault zone areas may be used as parks or recreational areas. • Water tanks and reservoirs should not be sited within the Fault Hazard Zone unless trenching studies conclude that the potential for surface fault rupture is low to none, and the structures can be designed for the high ground accelerations expected to occur at the site from a maximum credible earthquake on the Chino fault. • Streets and utility lines probably would not be constrained significantly by the fault zone; however, major transmission or distribution lines that extend across the fault zone should be planned with redundancies in the system, or with flexible joints and/or strong welds that can accommodate some fault movement. Do not align streets or utility lines over the fault.		

Safety Policy 1-2.5: Conduct site-specific studies on the soils, seismicity, and groundwater conditions to evaluate the potential for liquefaction and related ground failure phenomena in canyon bottoms and the alluvial flatlands on the eastern portion of the city. Mitigation measures would be designed based on these studies. In some areas, it is not economically feasible to completely mitigate these hazards, but their effects can be minimized by measures such as densification of near-surface soils, and dewatering.	Action S-1.1.2: Conduct site-specific studies on soils, seismicity, and groundwater conditions to evaluate the potential for liquefaction and related ground failure phenomena in canyon floors and the alluvial flatlands. *[Existing Policy 1-2.5, modified]*	**Consistent.** A Geotechnical Engineering Investigation was prepared by NorCal Engineering in June 2013. This study indicates that depth to groundwater precludes potential for liquefaction and related ground failure. Recommendations are provided to address the potential for seismic hazards including ground shaking.
Safety Objective 2-3: Discourage any grading beyond that necessary to create adequate building pads. Follow grading guidelines contained in the City's Development Code, which will be completed by late 1994.	Action S-1.1.6: Discourage any grading beyond that necessary to create adequate and stable building pads. [Existing Objective 2-3, modified]	**Consistent.** The proposed project would follow the recommendations sets forth in the Geotechnical Engineering Investigation and adhere to the CBC.
Safety Objective 2-3: Discourage any grading beyond that necessary to create adequate building pads. Follow grading guidelines contained in the City's Development Code, which will be completed by late 1994.	Action S-1.1.7: Require all development to conform to the grading guidelines contained in the City Development Code. *[Existing Objective 2-3, modified]*	**Consistent.** The proposed project would follow the recommendations sets forth in the Geotechnical Engineering Investigation and adhere to the CBC.
Safety Policy 1-2.3: Observe prudent land use planning in the Fault Hazard Zone delineated for the Chino fault as follows: • Critical structures, including schools, hospitals, high-occupancy facilities (shopping centers, auditoriums, etc.), fire and police stations, and emergency operation centers should	Action S-1.1.8: Require fault zones to be clearly identified on tract and parcel maps to increase public awareness of fault rupture hazards. *[Existing Policy 1-2.3, modified]*	**Not applicable.** According to the Geotechnical Engineering Investigation and CGS mapping, the proposed project is not located within a Fault Hazard Zone.

not be located within the Fault Hazard Zone delineated for the Chino fault. • Limited residential development would be permissible within the zone, but with the acknowledgment that lower lot densities may result from restrictions which specify nonstructural areas as part of buildable lots. • Restricted fault zone areas may be used as parks or recreational areas. • Water tanks and reservoirs should not be sited within the Fault Hazard Zone unless trenching studies conclude that the potential for surface fault rupture is low to none, and the structures can be designed for the high ground accelerations expected to occur at the site from a maximum credible earthquake on the Chino fault. • Streets and utility lines probably would not be constrained significantly by the fault zone; however, major transmission or distribution lines that extend across the fault zone should be planned with redundancies in the system, or with flexible joints and/or strong welds that can accommodate some fault movement. Do not align streets or utility lines over the fault.		

This policy was not part of the 1994 General Plan.	Action S-1.1.9: Within geologic hazard overlay areas, require developments to minimize landscape irrigation. *[New]*	**Consistent.** The proposed project would have an engineer monitoring during project construction. Furthermore, the project would follow the recommendations set forth in the Geotechnical Engineering Investigation and adhere to the CBC.
Land Use Policy 4-2: Require erosion control techniques for all new construction.	Action S-1.1.10: Require new development to minimize peak runoff as required by the Municipal Code. [*Existing Land Use Policy 4-2]*	**Consistent.** The proposed project would have an engineer monitoring during project construction. Furthermore, the project would follow the recommendations set forth in the Geotechnical Engineering Investigation and adhere to the CBC.
Safety Policy 3-4.2: Require prompt revegetation and/or construction of newly graded sites to control erosion.	Action S-2.2.9: Require prompt revegetation and/or construction of newly graded sites to control erosion. *[Same as existing Policy 3-4.2]*	**Consistent.** The proposed project would have an engineer monitoring during project construction. Furthermore, the project would follow the recommendations set forth in the Geotechnical Engineering Investigation and adhere to the CBC.
Safety Policy 3-4.3: Limit grading operations during the rainy season.	Action S-2.2.10: Limit grading operations during the rainy season. *[Same as existing Policy 3-4.3]*	**Consistent.** The proposed project would have an engineer monitoring during project construction. Furthermore, the project would follow the recommendations set forth in the Geotechnical Engineering Investigation and adhere to the CBC.
Safety Policy 3-4.4: Review individual project designs to ensure the stability of slopes adjacent to flood control facilities, which could be blocked due to slope failures.	Action S-2.2.11: Review individual project designs to ensure the stability of slopes adjacent to flood control facilities, which could be blocked due to slope failures. *[Same as existing Policy 3-4.4]*	**Consistent.** The proposed project is contingent upon review and approval by the Chino Hills Public Works Department.
This policy was not part of the 1994 General Plan.	Policy S-3.1: Ensure that new development has sufficient fire protection, police, and emergency medical services available. *[New]*	**Consistent.** Based on information provided by Fire Marshall Jeremy Ault in his correspondence letter dated July 2014, existing fire protection and emergency services would be sufficient to cater to the needs of the proposed development. Based on the correspondence dated August 2014 from Officer John Webster, police protection services currently have adequate staffing levels of service and would not require the expansion

		or construction of a new police station.
This policy was not part of the 1994 General Plan.	Action S-3.1.1: Require the review of development proposals to determine impacts on emergency services and ensure developments meet appropriate safety standards. *[New]*	**Consistent.** The Chino Valley Fire Department would review site plans, site construction, and the actual structure prior to occupancy to ensure that required fire protection safety features, and emergency access measures are implemented.
This policy was not part of the 1994 General Plan.	Action S-3.1.2: Provide police services that are responsive to citizens' needs to ensure a safe and secure environment for people and property in the community. *[New]*	**Consistent.** The current and desired Deputy-to-resident ratio is one Deputy per 2,000 citizens with average response times within approximately 3 minutes and 25 seconds for all emergency calls and 7 minutes and 50 seconds for non-emergency calls.
CHAPTER 6. PARKS, RECREATION AND OPEN SPACE ELEMENT POLICIES		
Existing 1994 General Plan	**2008 Parks, Recreation, and Open Space Element[3]**	**Consistency Analysis**
Not applicable.	Policy 1-1: Develop a method for protecting and maintaining the open space in perpetuity, and oversee the protection of these areas.	**Consistent.** Proposed on-site open space would be regularly maintained by property management.
Not applicable.	Policy 1-2: Accept for development as public open space, only land that meets the recommendations of the City Landscape Standards.	**Consistent.** Proposed private and common open space would meet the City Landscape Standards.
Not applicable.	Policy 1-3: Protect prominent ridgelines and knolls in their natural condition.	**Not applicable.** The project site is flat.
Not applicable.	Policy 1-4: Protect native trees and cliffsides because they provide habitat for wildlife such as birds that keep the rodent population in check and add to the aesthetic value of the open space.	**Not applicable.** Project site is abandoned agricultural land that is void of native trees.

[3] The 2014 General Plan Update does not include Parks, Recreation, and Open Space Element. The existing Parks, Recreation, and Open Space Element was adopted by the City of Chino Hills on June 10, 2008.

Not applicable.	Policy 1-5: Protect the natural springs and waterways because they provide needed habitat for wildlife, and have the greatest biological diversity.	**Not applicable.** Project site is abandoned agricultural land with exposed soil and a small strip of ornamental vegetation.
Not applicable.	Policy 1-8: Provide wildlife habitat through the protection and enhancement of natural resources.	**Not applicable.** Project site is abandoned agricultural land that lacks suitable habitats for wildlife.
Not applicable.	Policy 1-9: Promote economic viability by balancing managed preservation areas, revenue generating recreational opportunities, and potential commercial ventures such as wood lots, grazing and/or agricultural production where appropriate.	**Consistent.** The proposed project promotes the highest economical use of the land.
Not applicable.	Policy 1-10: Encourage dedications of open space adjacent to or connecting to the State Park.	**Not applicable.** Project site is not located adjacent to the State Park. Appropriate circulation design is not required to connect the common open space at the project site to existing circulation network that connect to Chino State Park.
Not applicable.	Policy 1-11: Make open space areas available for the community by providing safe and controlled trail system access points.	**Not applicable.** No existing trail systems are adjacent to the Project site. Appropriate circulatory network would be provided within the very high density residential portion of the project to connect on-site common open space facilities (i.e. , lap pool, sports court, community courtyard and outdoor fireplace).
Not applicable.	Policy 1-12: Limit grading for trails and other development in the hillsides by maintaining the natural topography where feasible.	**Not applicable.** The project site is located on flat terrain.

Not applicable.	Policy 2-1: Provide local park facilities and recreation areas that are appropriate for the individual neighborhoods and communities in which they are located and that reflect the needs and interests of the population they serve.	**Consistent.** The proposed common open space and recreational facilities are specifically designed to accommodate the new residential population generated by the proposed project.
Not applicable.	Policy 2-4: Accept for development as public park land only land that meets the recommendations of the City, Landscape Standards.	**Consistent.** Proposed private and common open space will meet the City Landscape Standards.
Not applicable.	Policy 2-6: Provide in each park site various facilities that, at a minimum, include bike racks, picnic tables, benches, drinking fountain, restrooms, signage, concrete trash receptacles, tot lot and accommodations for at least one other sport or recreational activity.	**Consistent.** Appropriate site facilities and accommodations would be provided for the indoor and outdoor recreational facilities.
Not applicable.	Policy 2-8: Create recreation opportunities for residents through use of the trail network.	**Not Applicable.** Proposed project does not include construction of new trails.
Not applicable.	Policy 2-9: Require park land dedicated to the City by developers of property to meet or exceed the development standards established by the City.	**Consistent.** Proposed project would pay appropriate in-lieu dedication fees or dedicate land for recreational facilities that meet the City development standards.
Not applicable.	Policy 2-10: Acquire and/or preserve diverse open spaces and provide for the advantageous use of these areas for recreation purposes and visual enjoyment.	**Consistent.** The proposed project would provide open space amenities including scented flower gardens, dog walk area, sport courts, and other facilities for recreational and visual enjoyments.
Not applicable.	Policy 2-12: Provide multi-use facilities for the City's residents, including space for meeting rooms, athletic activities, kitchen facilities, and recreation classes and programs.	**Consistent.** Payment of in-lieu dedication fees would support the provision of these multi-use facilities for City's residents.

Not applicable.	Policy 2-13: Locate the community centers where they are accessible to public transportation systems.	**Not applicable.** No community center is constructed as part of the proposed project.
Not applicable.	Policy 2-20: Work with the School District to detuning if the school buildings that are no longer used and no longer needed could be used for park and recreation activities.	**Not applicable.** Project does not involve the conversion of any school building.
Not applicable.	Policy 2-21: Encourage individual and group participation in the support and development of new park and recreation facilities and programs.	**Consistent**. Proposed project would undergo an environmental review process and allow public comment on proposed recreational amenities.
Not applicable.	Policy 3-1: Provide a multi-use trail system that safely accommodates bicycles, hikers, and equestrians.	**Not Applicable.** Proposed project does not include construction of new trails.
Not applicable.	Policy 3-2: Integrate the planning for the trail network with the planning for streetscapes, parks, and open space.	**Not Applicable.** Proposed project does not include construction of new trails.
Not applicable.	Policy 3-3: Accept for development as public trails, only lands that meet the standards contained in the Trails Master Plan.	**Not Applicable.** Proposed project does not include construction of new trails.
Not applicable.	Policy 3-4: Require all new development projects to implement the Trails Master Plan.	**Not Applicable.** Proposed project does not include construction of new trails.
Not applicable.	Policy 3-6: Where possible, tie the open space and parks within the City into the trail system.	**Not Applicable.** Proposed project does not include construction of new trails.
Not applicable.	Policy 3-7: Develop, in coordination with the State Department of Parks and Recreation, trail connections to Chino Hills State Park.	**Not Applicable.** Proposed project does not include construction of new trails.

Not applicable.	Policy 3-9: Whenever possible, provide trail connections to regional trails, local trails, and recreation facilities in adjacent communities.	**Not Applicable.** Proposed project does not include construction of new trails.
Not applicable.	Policy 3-13: Provide a convenient trail system that promotes use of modes of transportation other than the automobile.	**Not Applicable.** Proposed project does not include construction of new trails.
Not applicable.	Policy 3-14: Mitigate impacts to residential homeowners adjacent to public trails through appropriate trail design.	**Not Applicable.** Proposed project does not include construction of new trails.
Not applicable.	Policy 4-1: Enrich the cultural and creative life of the community through a diverse program of recreation opportunities for all ages and populations.	**Consistent.** Proposed project would include recreational amenities appropriate to residents and guests of all ages and populations.
Not applicable.	Policy 5-3: Include public participation in the design process for future park and facility development.	**Consistent.** Proposed project would undergo an environmental review process and allow public comment on proposed recreational amenities.
Not applicable.	Policy 6-1: Locate parks and other recreation facilities for maximum visibility from surrounding streets.	**Consistent.** To the extent feasible, proposed project would locate common open space to maximize visibility from surrounding streets.
Not applicable.	Policy 6-2: Maintain all parks, trails, and open space to provide a pleasant and safe experience for users.	**Consistent.** Proposed project would provide safe and pleasant recreational amenities appropriate to residents and guests of all ages and populations.
Not applicable.	Policy 6-3: Promote use of drought tolerant and native plant material where appropriate in parks.	**Consistent.** Proposed project would comply with the City Landscape Standards and promote the use of drought tolerant and native plants.
Not applicable.	Policy 6-4: Maintain lighting levels suitable for safety as well as the nighttime use of community and city-wide facilities without undue glare impacts to nearby residential areas.	**Consistent.** Proposed outdoor recreational amenities and common open space would comply with applicable lighting standards and would not result in undue lighting impacts to nearby residential areas.

Not applicable.	Policy 6-6: Develop a dedicated scenic pedestrian network throughout the City.	**Not applicable.** Proposed project is a site-specific infill development that does not span the entire city.
Not applicable.	Policy 7-1: Achieve visual unity and a high standard of quality through proper care of all landscape and hardscape material.	**Consistent.** Project would comply with Chapter 16.06.020 Maintenance of properties, of the municipal code that requires all property in the City to be maintained in a clean, neat, orderly, operable, and usable condition. The project would adhere to CHMC Chapter 16.07 Landscape and Water Conservation Guidelines.
Not applicable.	Policy 7-2: Prune trees as necessary to preserve visual access for pedestrians and vehicular traffic.	**Consistent.** To the extent feasible, the proposed project would prune trees to preserve visual access for pedestrians and vehicular traffic.
Not applicable.	Policy 7-3: Protect and carefully maintain the landscape to foster its value for air pollution mitigation, fire safety, wildlife habitat and recreation activities.	**Consistent.** Private and common open space on-site will be regularly maintained to provide functional facilities for guests and residents.
Not applicable.	Policy 7-4: Protect the native vegetation and wildlife habitat in the City's open space areas and preserve the wildlife corridors.	**Not applicable.** Proposed common open space is intended for human use and may have ornamental vegetation generally not suitable for wildlife.
Not applicable.	Policy 7-5: Continue a fuel modification program for the City's open space areas in order to protect private property from loss due to wildland fires.	**Not applicable.** Project site is located in an urban setting and is surrounded by residential, industrial, commercial uses.
Not applicable.	Policy 7-6: Require all construction to meet City Landscape Standards.	**Consistent.** Project is designed to meet the landscape requirements of the municipal code for residential and business park uses (15%). All landscaping and irrigation would comply with plant palette and water conservation guidelines outlined in CHMC Chapter 16.07.

Not applicable.	Policy 7-7: Cooperate with private and government agencies (such as Inland Empire Resource Conservation District, California Conservation Carps, etc.) to ensure that the best management practices are utilized.	**Consistent.** Proposed project would implement applicable best management practices during construction and operation of the common open space.
Not applicable.	Policy 7-9: Design park facilities to minimize water use and maintenance demands.	**Consistent.** On-site outdoor common open space and indoor recreational facilities would minimize water use and demand on maintenance through such measures as planting of drought-resistant plants and use of water efficient fixtures.
Not applicable.	Policy 7-10: Save water, control maintenance casts, reduce trash, and economize wherever possible through design, construction and management without sacrificing the quality of the landscape.	**Consistent.** Proposed project would implement water efficient measures and reduce solid waste generation through recycling programs during construction and operation.
Not applicable.	Policy 7-11: Fallow water conservation principles in all aspects of landscape maintenance including plant selection and development of irrigation systems.	**Consistent.** Proposed project would follow fallow water principles in all aspects of landscape maintenance.
Not applicable.	Policy 7-12: Consider using reclaimed water for irrigation of City landscapes when this source of water becomes available.	**Consistent.** The proposed project would comply with the City Landscape Standards and implement applicable water conservation or irrigation standards. Reclaimed water installation will be provided for the entire project for landscape irrigation.
CHAPTER 7. NOISE ELEMENT POLICIES		
Existing 1994 General Plan	**Proposed 2014 General Plan Update**	**Consistency Analysis**
Policy 1-1: To the extent feasible, improve noise conditions in Chino Hills through the active, ongoing efforts of the City in coordination with other government agencies.	Action N-1.1.1: Control noise conditions in Chino Hills through the active, ongoing efforts of the City in coordination with other government agencies. [*Existing Policy 1-1 modified*]	**Consistent.** Intergovernmental coordination would be taken accordingly.
Policy 1-2: Increase public input on	Action N-1.1.2: Increase public input on	**Consistent.** Proposed project would undergo an

environmental noise issues, and establish a program for the monitoring and abatement of local noise sources.	environmental noise issues, and establish a program for the monitoring and abatement of local noise sources. [*Existing Policy 1-2*]	environmental review process and allow public comment on noise issues.
Policy 1-3: Prohibit large commercial truck traffic in noise-sensitive areas, such as school sites, located in Chino Hills.	Action N-1.1.3: Prohibit large commercial truck traffic in noise-sensitive areas, such as school sites, located in Chino Hills. [*Same as existing Policy 1-3*]	**Consistent.** The project site is designated as Business Park and is not located within the immediate vicinity of a school. Access to the site is provided by SR-71 at two interchanges. SR-71 is designated as a state truck route. Over 30% of heavy truck trips are projected to travel on this route to reach the project.
Policy 1-4: Minimize through vehicular traffic in the City's residential areas.	Action N-1.1.5: Minimize through vehicular traffic in the City's residential areas. [*Same as existing Policy 1-4*]	**Consistent.** Access to the site is provided by SR-71 at two interchanges along with Soquel Canyon Road and Chino Hills Parkway. SR-71 is designated as a state truck route, while Soquel Canyon Road and Chino Hills Parkway are designated as major arterial roadways in the City Circulation Element.
Policy 1-6: Enforce state motor vehicle noise standards for cars, trucks, and motorcycles.	Action N-1.1.6: Enforce state motor vehicle noise standards for cars, trucks, and motorcycles. [*Same as existing Policy 1-6*]	**Not applicable.** This is out of the project scope.
Policy 1-7: Incorporate sound attenuation measures in residential developments to achieve the City's standards. Such sound attenuation measures may include noise barriers, replacing existing windows and doors with sound-rated assemblies, insulating exterior walls and attics, and/or installing forced air ventilation.	Action N-1.1.7: Incorporate sound attenuation measures in residential developments to achieve the City's standards. Such sound attenuation measures may include noise barriers, replacing existing windows and doors with sound-rated assemblies, insulating exterior walls and attics, and/or installing forced air ventilation. [*Same as existing Policy 1-7*]	**Consistent.** A noise study has been conducted for the project and is available for review in Appendix H. Interior noise levels will be below the City's interior noise standards with implementation of mitigation that requires residential windows with a direct line of sight to Monte Vista Avenue or Fairfield Ranch Road be rated for sound transmission class (STC) 30 or higher.
Policy 1-13: Ensure that equipment, machinery, fan, and air conditioning noise does not exceed specified levels, established in the City's Noise Ordinance.	Action N-1.1.8: Ensure that equipment, machinery, fan, and air conditioning noise does not exceed specified levels, established in the City's Noise Ordinance. [*Same as existing Policy 1-13*]	**Consistent.** Project proposes the placement of mechanical equipment at ground level, use of shielding walls and landscaping to screen equipment from view and comply with City's Noise Ordinance.

Policy 1-8: Incorporate ambient noise level considerations into land use decisions involving schools, hospitals, and similar noise sensitive uses.	Action N-2.1.4: Incorporate ambient noise level considerations into land use decisions involving schools, hospitals, and similar noise sensitive uses. [*Same as existing Policy 1-8*]	**Consistent.** A noise study has been conducted for the project and is available for review in Appendix H. Interior noise levels will be below the City's interior noise standards with implementation of mitigation that requires residential windows with a direct line of sight to Monte Vista Avenue or Fairfield Ranch Road be rated for sound transmission class (STC) 30 or higher.
Policy 1-9: Ensure all new developments provide adequate sound insulation or other protection from existing and projected noise sources.	Action N-2.1.5: Ensure all new developments provide adequate sound insulation or other protection from existing and projected noise sources.[*Same as Policy 1-9*]	**Consistent.** A noise study has been conducted for the project and is available for review in Appendix H. Interior noise levels will be below the City's interior noise standards with implementation of mitigation that requires residential windows with a direct line of sight to Monte Vista Avenue or Fairfield Ranch Road be rated for sound transmission class (STC) 30 or higher.
Policy 1-10: Utilize the development approval process to ensure that buildings are sited and traffic circulation systems designed to minimize the impact of noise generating activities on noise sensitive land uses.	Deleted.	**Consistent.** Proposed project is subject to development approval process (i.e., Site Plan Review 14SPR02*)*
Policy 1-11: Enforce standards that specify acceptable noise limits for various land uses throughout the City. Table N· 1 shows criteria used to assess the compatibility of proposed land uses with the noise environment. These criteria are the bases of specific Noise Standards.	Action N-2.1.1: Enforce the standards of Table 7-1 – Land Use/Noise Compatibility Matrix, which specify acceptable exterior and interior noise limits for various land uses throughout the City. [*Existing Policy 1-11 modified*].	**Consistent.** A noise study has been conducted for the project and is available for review in Appendix H. Interior noise levels will be below the City's interior noise standards with implementation of mitigation that requires residential windows with a direct line of sight to Monte Vista Avenue or Fairfield Ranch Road be rated for sound transmission class (STC) 30 or higher.
Policy 1-12: Enforce the provisions of the State of California Uniform Building	Action N-2.1.7: Ensure that all new hotels, motels, multi-family and single-family	**Consistent.** A noise study has been conducted for the project and is available for review in

Code, which specifies that the indoor noise levels for multi-family residential living spaces not exceed 45 dB CNEL due to the combined effect of all noise sources. The State requires implementation of this standard when the outdoor noise levels exceed 60 dB CNEL. The Noise Referral Zones (the. 60 dB CNEL contour) can be used to determine when this standard needs to be addressed. The Code requires that this standard be applied to all flew hotels, motels, apartment houses and dwellings other than detached single-family dwellings. The City will also, as a matter of policy, apply this standard to single family dwellings.	dwellings to be developed within an area where the outdoor CNEL exceeds 60 dB are designed to achieve an indoor CNEL of 45 dB or less. [*Existing Policy 1-12 modified*]	Appendix H. Interior noise levels will be below the City's interior noise standards with implementation of mitigation that requires residential windows with a direct line of sight to Monte Vista Avenue or Fairfield Ranch Road be rated for sound transmission class (STC) 30 or higher.
This policy was not part of the 1994 General Plan.	Policy N-1.1: Protect public health and welfare by eliminating or minimizing the effects of existing noise problems. [*New*]	**Consistent.** A noise study conducted for the project did not identify existing noise problems**.** Based on the findings of the noise study, all noise generated during construction and operation of the project would comply with the City standards identified in Title 6, 8 and 16 of the Municipal Code.
This policy was not part of the 1994 General Plan.	Policy N-2.1: Minimize increases in noise levels due to new land use and transportation facility decisions. [*New*]	**Consistent.** Increases in ambient and future noise levels with construction and operation of the project would be less than significant with the incorporation of mitigation measures NO-1 through NO-6.
This policy was not part of the 1994 General Plan.	Policy N-1.2: Where complaints are received by residents with regard to non-transportation noise sources (e.g., commercial/retail equipment or activities, fans, air conditioners, etc.), the City will protect the public health and welfare by implementing the following Action	**Consistent**. Based on the findings of the noise study, all noise generated during construction and operation of the project would comply with the City standards identified in Title 6, 8 and 16 of the Municipal Code. Mitigation has also been identified that requires the City to conduct ambient sampling at the exterior of residence(s)

	Statement as necessary to ensure that the non-transportation noise source does not exceed the noise standards identified in Chapters 6, 8 and 16 of the City of Chino Hills Municipal Code. [*New*]	if the City receives complaints from local residents about construction noise.
This policy was not part of the 1994 General Plan.	Action N-2.1.3: Require a noise study to be performed and appropriate noise attenuation to be incorporated to reduce interior noise levels to 45 dB CNEL or less prior to approving any multi-family or mixed-use residential development in an area with a CNEL of 65 dB or greater. [*New*]	**Consistent.** A noise study has been conducted for the project and is available for review in Appendix H. Interior noise levels will be below the City's interior noise standards with implementation of mitigation that requires residential windows with a direct line of sight to Monte Vista Avenue or Fairfield Ranch Road be rated for sound transmission class (STC) 30 or higher.

c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact

There are no adopted habitat conservation or natural community conservation plans with the City of Chino Hills. There are also no applicable approved local, regional, or state habitat conservation plans. As a result, no impacts would occur to any applicable habitat conservation plans or natural community conservation plans.

3.11 MINERAL RESOURCES				
Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) 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?				**X**
b) 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?				**X**

ENVIRONMENTAL SETTING

According to the City of Chino Hills General Plan Update (2014), there are no known significant mineral resources or deposits of regional or statewide importance located in Chino Hills. The California Division of Oil, Gas and Geothermal Resources have not identified any oil, gas, or geothermal resources on or within 1,500 feet[1] of the project site. Furthermore, the City's Conservation Element (2014) indicates that oil is currently produced and primarily available within the Chino Hills State Park.

REGULATORY SETTING

The project site is under the jurisdiction of the City of Chino Hills (City) and therefore would be subject to the City's General Plan (1994), Conservation Element, and Chino Hills Municipal Code (CHMC).

DISCUSSION OF IMPACTS

a) Would the project 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?

No Impact

No mineral resources of statewide or regional importance have been identified in the City. Therefore, project construction and operation would not result in the loss of availability of any known mineral resource that would be of local, regional, or statewide importance. No impact would occur and no mitigation measures would be necessary.

1 http://maps.conservation.ca.gov/doggr/index.html#close Accessed on August 7, 2014.

b) Would the project 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?

No Impact

The City of Chino Hills General Plan Conservation Element does not designate any portion of the City as a locally important mineral resource recovery site. Project construction and operation would not result in the loss of availability of any known mineral resource so no impact would occur.

3.12 NOISE				
Would the project result in:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Exposure of persons to or generation of noise level in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		**X**		
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			**X**	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			**X**	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		**X**		
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?				**X**
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?				**X**

The following is summarized in part from the Noise Technical Study prepared by UltraSystems Environmental, Inc. (UltraSystems, 2014e). The noise analysis is included as **Appendix H**.

EXISTING CONDITIONS

Characteristics of Sound

Sound is a pressure wave transmitted through the air. It is described in terms of loudness or amplitude (measured in decibels), frequency or pitch (measured in hertz [Hz] or cycles per second), and duration (measured in seconds or minutes). The decibel (dB) scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Because the human ear is not equally sensitive to all frequencies, a special frequency-dependent rating scale is used to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against upper and lower frequencies in a manner approximating the sensitivity of the human ear. The scale is based on a reference pressure level of 20 micropascals (zero dBA). The

scale ranges from zero (for the average least perceptible sound) to about 130 (for the average human pain level).

Noise Measurement Scales

Several rating scales have been developed to analyze adverse effects of community noise on people. Since environmental noise fluctuates over time, these scales consider that the effect of noise on people depends largely upon the total acoustical energy content of the noise, as well as the time of day when the noise occurs. Those that are applicable to this analysis are as follows:

- L_{eq}, the equivalent noise level, is an average of sound level over a defined time period (such as 1 minute, 15 minutes, 1 hour or 24 hours). Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure.

- L_{90} is a noise level that is exceeded 90 percent of the time at a given location; it is often used as a measure of "background" noise.

- CNEL, the Community Noise Equivalent Level, is a 24-hour average L_{eq} with a 4.77-A-weighted decibel (dBA) "penalty" added to noise during the hours of 7:00 p.m. to 10:00 p.m., and a 10-dBA penalty added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime (Caltrans, 2009). The logarithmic effect of these additions is that a 60-dBA 24-hour L_{eq} would result in a calculation of 66.7 dBA CNEL.

- L_{dn}, the day-night average noise, is a 24-hour average L_{eq} with an additional 10-dBA "penalty" added to noise that occurs between 10 p.m. and 7 a.m. The L_{dn} metric yields values within 1 dBA of the CNEL metric. As a matter of practice, L_{dn} and CNEL values are considered to be equivalent and are treated as such in this assessment.

Noise Setting

The main source of noise in Chino Hills is on-road traffic. State Route 71 (SR-71) is less than a quarter mile to the southwest and creates continuous noise audible throughout much of the project site. Chino Hills Parkway, an arterial road carrying local and regional traffic, is adjacent to the northernmost extension of the project site and generates noise levels near 70 dBA during peak traffic hours.[1]

The Noise Element of the 2014 General Plan Update (Chino Hills, 2014) indicates that CNEL values in the general area of the project site are currently 60 to 65 dBA, and are not projected to change with future development.[2]

[1] Based on UltraSystems' noise measurements taken at the intersection of Chino Hills Parkway and Monte Vista Avenue.

[2] See Figures 7-3 and 7-4 of the 2014 General Plan Update. "Future environment" assumed to be at general plan buildout.

REGULATORY SETTING

The primary regulatory documents that establish noise standards within the city of Chino Hills are the City of Chino Hills General Plan Noise Element (Chino Hills, 1994), its proposed update (Chino Hills, 2014),[3] and the City's Municipal Code.[4] The City Municipal Code mandates that the current general plan be followed. There are very few differences between the noise elements of the 1994 General Plan and the proposed 2014 General Plan Update. One of the most notable changes is that the proposed update relaxes the residential land use exterior noise standard from 60 to 65 dBA CNEL. Interior noise levels are fixed at 45 dBA in both versions and the Noise Element of the 2014 General Plan Update states that exterior noise levels shall "be such that interior noise level will not exceed 45 dB CNEL."

The Municipal Code Section 8.08.020 specifically prohibits all construction not occurring between the hours of 7:00 AM to 7:00 PM on weekdays and 8:00 AM to 6:00 PM on Saturdays. The Noise Element of the General Plan sets noise standards by land use type and is not modified by the proposed General Plan Update. Section 16.48.020 of the City Municipal Code prohibits the creation of noise on one property that results in noise levels on another property that exceed:

- the established noise standard for more than 30 minutes in any hour; or
- 5 dBA above the noise standard for more than five minutes in any hour;[5] or
- 15 dBA above the noise standard for more than one minute in any hour; or
- 20 dBA for any period of time.

DISCUSSION OF IMPACT

a) Would the project expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant Impact with Mitigation Incorporated

Construction

The 1994 Chino Hills General Plan limits exterior noise at residential land uses to below 60 dBA CNEL. The proposed 2014 General Plan Update (Chino Hills, 2014) would relax the exterior noise standard to 65 dBA CNEL. The Noise Element of the General Plan Update indicates that CNEL values in the general area of the project site are currently 60 to 65 dBA. As discussed further in **Section 3.12 d)**, noise levels at the nearest sensitive receiver are projected to range from 60.5 to 64.5 dBA during project construction. This noise level exceeds the current exterior noise standard. Mitigation measures **NO-1** through **NO-5** would reduce noise levels during construction to prevent

[3] Per guidance by the City (Walters, 2014a), the noise evaluation was based upon both the 1994 General Plan and the 2014 update, because the update was expected to be adopted before the environmental review was complete.

[4] The Chino Hills Municipal Code is accessed through https://library.municode.com/index.aspx?clientId=16034&stateId=5&stateName=California&customBanner=16034.jpg&imageclass=L&cl=16034.txt.

[5] The City Municipal Code is redundant and limits 5 and 10 dBA exceedances of the same duration.

exceedances of established standards. Therefore, temporary construction noise impacts would be less than significant with incorporation of the mitigation measures **NO-1** through **NO-5**.

Mitigation Measures

NO-1: **Construction Hours**
All construction activities are to be limited to between the hours of 7:00 AM to 7:00 PM on weekdays and 8:00 AM to 6:00 PM on Saturdays. No construction activities will take place at any time on Sunday or a Federal holiday.

NO-2: Operating Construction Equipment
The construction contractor will ensure that all construction equipment, fixed or mobile, is properly operating (tuned-up) and that mufflers are working adequately.

NO-3: Local Resident Complaints
If the City of Chino Hills receives complaints from local residents about any construction noise that will at that point be scheduled to continue for five or more days, the City will conduct ambient sampling at the exterior of residence(s) to determine the increase in exposure during construction. The applicant will be responsible for all City costs associated with construction noise monitoring.

NO-4: Temporary Shields and Noise Barriers
If the increase in residential exposure is 10 dBA L_{eq} or more, then the construction contractor will provide temporary shields and noise barriers, including sound blankets, between the areas of active construction and sensitive receivers. Noise barriers typically reduce noise levels by up to 10 dBA.[6] Placement of the noise barriers shall be confirmed by a City-retained acoustical consultant.

NO-5: Short-term Noise Exposure Measuring
If mitigation measure NO-4 is implemented, the construction contractor will measure short-term noise exposures outside the barrier and at the exterior of the residence(s) at least twice daily to determine whether the barrier should remain in place.

Operation

The main source of noise in Chino Hills is on-road traffic. According to the Noise Element of the City of Chino Hills General Plan, "Motor vehicle noise is of concern because of its high number of Individual events which often create a sustained noise level and its proximity to areas sensitive to noise exposure. State Highway 71 is the single greatest noise generator in the city." **Figure 3.12-1** displays the location of sensitive receivers near the project site. Traffic noise modeling indicates that the project operation would result in exposure to noise levels exceeding the General Plan guidelines. **Table 3.12-1** displays the projected noise due to traffic at sensitive receivers.

[6] "Noise Barrier Design – Visual Quality." 6 July 2011. Internet URL: http://www.fhwa.dot.gov/environment/noise/noise_barriers/design_construction/keepdown.cfm.

Table 3.12-1
MAXIMUM TRAFFIC NOISE EXPOSURE AT SENSITIVE RECEIVERS

Receiver	Projected Noise Level (dBA CNEL)[a]			
	2016 Buildout Year		2035 Horizon Year	
	Without Project	With Project	Without Project	With Project
Rancho Monte Vista Mobile Home Park	76.1	76.4	76.3	76.6
BAPS Shri Swaminarayan Mandir Temple	71.8	71.8	74.2	74.2
Project Site	72.2	73.4	73.3	74.0

Source: Modeling with TNM 2.5
[a]Noise levels were calculated by assuming traffic noise only and using TNM 2.5 with existing traffic levels.

As discussed further in Section 3.12 (c), the project would not significantly contribute to the increase in traffic related noise. Mitigation measure **NO-6** would require that "all residential windows with a direct line of sight to Monte Vista Avenue or Fairfield Ranch Road will be rated for a sound transmission class (STC) of 30 or higher." Therefore, interior noise levels will be below the City's interior noise standards for residential land uses and the impacts would be less than significant with incorporation of mitigation measure **NO-6**.

Mitigation Measure

NO-6: **Residential Windows**
All residential windows with a direct line of sight to Monte Vista Avenue or Fairfield Ranch Road will be rated for a sound transmission class (STC) of 30 or higher.

b) Would the project expose persons to or generate excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact

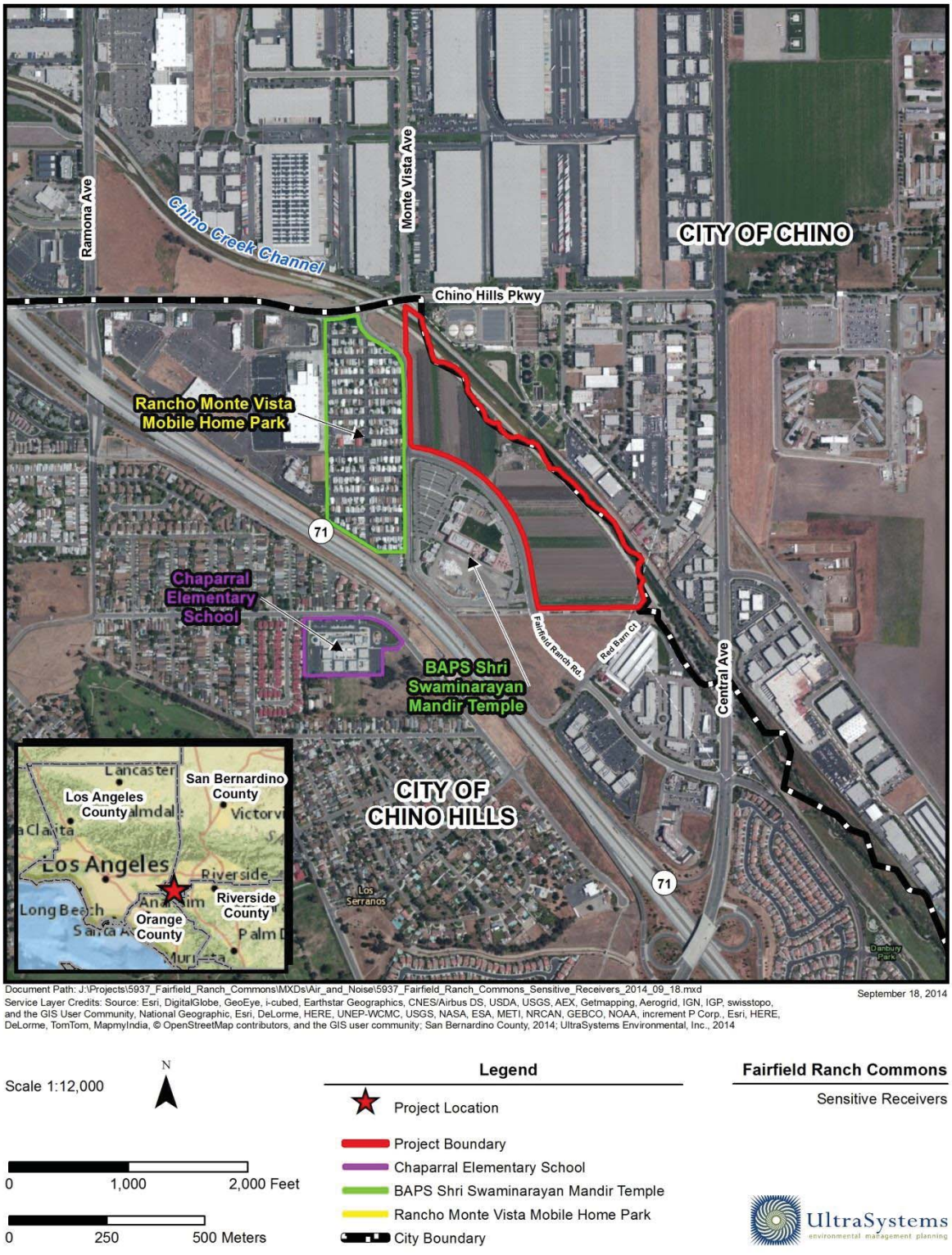
Construction of the proposed project could potentially increase groundborne vibration or noise on the project site, but construction effects would be temporary. **Table 3.12-2** below displays the peak particle vibration (PPV) and groundborne noise that may be experienced at the nearest sensitive receiver.

Table 3.12-2
VIBRATION LEVELS OF CONSTRUCTION EQUIPMENT

Equipment	PPV at 80 feet (in/sec)[a]	Vibration dB at 80 feet (VdB)[a]
Loaded trucks	0.0133	73
Jack hammer	0.0061	69
Small bulldozer	0.0005	48

Source: Calculated by UltraSystems from FTA data.
[a]80 feet is representative of the nearest sensitive receiver to the proposed construction.

Figure 3.12-1
SENSITIVE RECEIVERS



Based on the information presented in **Table 3.12-2**, vibration levels could reach approximately 73 VdB at single-family residences in the Rancho Monte Vista Mobile Home Park approximately 80 feet west of the project site. The Federal Transit Authority (FTA) threshold for human annoyance is 80 VdB.[7] The general threshold where minor damage can occur in fragile buildings is 100 VdB. As vibration levels would not reach 100 VdB, structural damage would not occur as a result of construction activities.

Operation of the residential portion of the project would not generate significant groundborne vibration or noise on the project site. Operation of the light industrial portion of the project would not include ground disturbance and therefore would not generate a significant increase groundborne vibration or noise levels. Therefore, groundborne vibration and noise impacts would be less than significant.

c) Would the project cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than Significant Impact

The proposed residential and industrial developments have distinct noise characteristics. On-site (stationary) noise sources from the residential parcels of the proposed project would include operation of mechanical equipment such as air conditioners, lawnmowers, leaf blowers, and building maintenance equipment; and children playing outdoors. However, noise levels associated with operation of the project's residential parcels are expected to be comparable to those of nearby residential areas.

On-site noise sources from the industrial parcels of the proposed project may include truck traffic and idling, materials handling equipment such as forklifts, and other noise specific to the warehouse occupant. Noise levels from these sources are expected to be comparable to existing land uses to the south and east. However may have an impact on the project's residential parcels to the northwest.

Noise impacts from the industrial parcels on the project's residential receivers would be predominately due to truck traffic near the boundary between the residential and industrial sections. Industrial machinery may produce noise levels above 85 dB, but will likely be indoors and therefore shielded. Industrial parcels 1 and 2 would not result in impacts to the residential receivers because of significant noise attenuation by buildings, walls, and the distance from the receivers. On the other hand, trucks entering or exiting industrial parcel 3 would come within approximately 125 feet of the nearest residence with one six-foot wall[8] providing partial noise attenuation. The total truck traffic generated by parcel 3 was determined to be 267 trips per day by scaling the total traffic at all industrial lots (Saiyed, 2014) by the ratio of parcel 3 truck bays to total

---

7 *Table 8-1 in Transit Noise and Vibration Impact Assessment*, FTA-VA-90-1003-06. U.S. Department of Transportation, Federal Transit Administration (May 2006). Available at: http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf.

8 Applicant is proposing a 12 foot wall separating the residential from industrial developments. Section 16.06.120 Fences, walls, and hedges, of the Municipal Code limit the height of residential rear yard to no more than 6 feet. For purposes of this analysis, a 6 foot wall height is assumed.

truck bays.[9] Noise levels were then modeled by assuming a worst-case scenario of 24-hour operation with increased traffic during morning and night peak hours.[10]

Industrial onsite truck traffic noise was calculated by methods prescribed by the Federal Transit Administration for vehicle pass-by events (FTA, 2006). The analysis found that truck traffic at industrial parcels would generate peak noise levels of 57.2 dBA and CNEL values of 58.0 dBA at the nearest future project residence. According to the traffic analysis discussed in Section 5.2.2, noise levels near this location are projected to be 61 dBA in 2016 without the project. Therefore, the project would cause a noise level increase of 1.8 dBA CNEL. According to the U.S. Environmental Protection Agency (USEPA, 1974), a difference of more than 3 dBA is a perceptible change in environmental noise, which is less than significant. Noise from the project industrial parcels will not result in a substantial increase in ambient noise levels at the project residential parcels.

The nearest part of the industrial development is approximately 750 feet away from the Rancho Monte Vista Mobile Home Park. This distance would provide enough sound attenuation to keep the long-term increase in exposure less than significant.

The addition of project-generated traffic to adjacent surface streets could affect sensitive receivers in proximity to the project site. Traffic related noise was modeled using the Federal Highway Administration Traffic Noise Model Version 2.5. Noise levels were modeled at many points along the boundary of sensitive receivers. The highest permanent project-related increases in noise due to traffic are displayed below in **Table 3.12-3.**

Maximum project-related noise levels increases would range from 0.8 to 1.9 dBA CNEL. This change in sound levels is not perceptible to the average person. Permanent impacts due to operation and project-related traffic would be less than significant.

Table 3.12-3
MAXIMUM TRAFFIC NOISE INCREASES AT SENSITIVE RECEIVERS

Receiver	Projected Increase (dBA CNEL)	
	2016 Buildout Year	2035 Horizon Year
Rancho Monte Vista Mobile Home Park	1.4	1.3
BAPS Shri Swaminarayan Mandir Temple	0.8	0.8
Project Site	1.7	1.9

Source: Modeling with TNM 2.5
[a] Receivers were modeled at multiple points along their perimeter. The maximum projected change in noise level is displayed above.

[9] Ratio of vehicle truck bays equals the truck bays in industrial parcel 3 divided by the total truck bays in all industrial parcels.
[10] The Traffic Impact Analysis Report contained total daily truck traffic and truck traffic during AM and PM peak hours. Non-peak hour traffic was modeled as equally distributed throughout the day.

d) Would the project cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than Significant Impact with Mitigation Incorporated

Noise from construction activities would come from the operation of construction equipment, vendor trips, and worker commuter vehicles. The closest sensitive receivers to the project site are the single-family residences in the Monte Vista Mobile Home Park located approximately 80 feet west of the project site. **Table 3.12-4** estimates the noise level at the sensitive receiver closest to the project site.

Table 3.12-4
ESTIMATED CONSTRUCTION NOISE EXPOSURES AT NEAREST SENSITIVE RECEIVER

Construction Phase	Projected 1-Hour L_{eq} (dBA)	Change from Ambient (dBA)
Demolition	60.5	5.9
Site Preparation	61.6	7.0
Grading	64.5	9.9
Building Construction	61.5	6.9
Paving & Interior Fixturization	62.1	7.5

Projected noise levels at the nearest sensitive receiver would range from 60.5 to 64.5 dBA. Although the absolute noise levels behind the soundwalls will not be unusually high during construction, the increase in short-term noise exposure would be up to 9.9 dBA L_{eq}. Nearby residents may perceive the construction noise negatively during the any or all phases. Mitigation measures **NO-1** through **NO-5** would reduce noise impacts from construction to less than significant. These mitigation measures limit construction to specific daytime hours and ensure that equipment will be operated correctly. They also establish criteria for a noise monitoring program and noise level thresholds at which noise shielding must take place.

As noted above, the City of Chino Hills Municipal Code limits construction activities to the hours of 7:00 AM to 7:00 PM on weekdays and 8:00 AM to 6:00 PM on Saturdays. The project would be required to comply with the City's Municipal code requirements and construction would only take place during the specified hours. Therefore impacts related to construction noise would be less than significant with the incorporation of mitigation measures **NO-1** through **NO-5**.

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?

No Impact

The project site is not located within the vicinity of an airport. The nearest airport, Chino Airport, is located approximately 2.3 miles east of the project site, and is outside the boundary of the Chino

Airport Master Plan.[11] Due to this distance, the proposed project would not expose people residing or working in the project area to excessive noise levels.

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?

No Impact

The project site is not located within the vicinity of a private airstrip. Therefore, the proposed project would not expose people to excessive noise levels related to private airstrip. No impact would occur.

[11] http://chinomasterplan.airportstudy.com/master-plan/ Accessed July 30, 2014.

3.13 POPULATION AND HOUSING				
Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			**X**	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				**X**
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				**X**

ENVIRONMENTAL SETTING

The City of Chino Hills has experienced substantial growth since its incorporation. As the City nears build-out, its population growth has slowed considerably. According to the 2010 Census, Chino Hills' population was 74,799, a 12.0 percent increase over the 2000 Census count. The most recent population data indicates the City population totals 76,131 residents.

According to the Housing Element (2014-2021), Chino Hills has grown from a community with a housing stock of approximately 4,200 units in 1980 to 23,784 units in 2012. Over 97 percent of the developable residential lands are currently built-out. The remaining available residential sites are predominately located in the hillside and environmentally sensitive areas. Of the residential sites that do remain, none are zoned for Very High Density development.

REGULATORY SETTING

The project site is under the jurisdiction of the City of Chino Hills and therefore would be subject to applicable policies, codes, and regulations stipulated in the City of Chino Hills General Plan (1994), Housing Element, Measure U (Ordinance No. 123), and Chino Hills Municipal Code (CHMC).

The City's Housing Element provides for adequate housing for residents of all economic levels and is a mandatory element to the City General Plan. The Housing Element contains analysis of housing needs and programs designed to meet housing needs of local residents. The Housing Element considers trends in Chino Hills' population, households, and the type of housing available. Through the implementation of policies and programs contained in the Housing Element, the City would meet its Regional Housing Needs Assessment (RHNA) allocation for the 2014-2021 planning period.

Measure U[1] requires city-wide approval in order to increase land use density beyond the currently permitted capacity for proposed residential development projects. This applies to existing permitted densities stipulated by the City's General Plan or Zoning Map. Typically, this requirement is approved during local elections with a majority of residents voting in favor for this action. If a

[1] City of Chino Hills Ordinance No. 123, adopted on November 23, 1999.

majority of voters approves the initiative, the designated City Council or Planning Commission may consider implementation; however; there are two exceptions to this measure when it was initially adopted. The first exception to Measure U includes an increase in residential density, if necessary, in order for the City to meet its minimum mandated Housing Element requirements[2]. The second exception to this measure is whether the City can provide its share of regional housing needs.

DISCUSSION OF IMPACTS

a) Would the project induce substantial growth in an area either directly (for example, by proposing new homes and business) or indirectly (for example, through extension of roads or other infrastructure)?

Less than Significant Impact

Occupancy of the project would directly induce population growth. The average household size for Chino Hills is 3.30 persons per household and the project proposes 346 dwelling units (d/u). This would result in an increased population of 1,142 (346 d/u x 3.30 occupants/unit). The California Department of Finance estimates Chino Hills' current total population at 76,131 residents[3]. Hence, the total resident population after project implementation would be estimated at 77,273 (see **Table 3.13-1**, Population Growth Forecast). The Southern California Association of Governments (SCAG) projects a total population of 78,400 by 2035 (SCAG, 2012).

Table 3.13-1
POPULATION GROWTH FORECAST

Total Dwelling Units:	Average** Household Size:	Projected Population Increase:	Total population:	Projected Total Population:	SCAG* Projected Population (2035):
346	3.30	1,142	76,131[4]	77,273	78,400

Source: *(SCAG, 2012) and **State of California Department of Finance (2014)

The project also includes three industrial park buildings which would not directly induce population. The project proposes to develop three concrete tilt up structures ranging from 120,516 to 326,641 square feet in building footprint. The business park zoning designation allows for a wide range of nonresidential uses, generally encompassing light industrial, retail, and other commercial development uses. Since the light industrial use component would be introduced as an existing use by right, it is not anticipated to directly induce population growth.

According to data from the California Department of Finance, the total civilian labor force in Chino Hills is estimated at 41,136 persons with 37,241 persons currently employed. These figures suggest that an estimated 3,895 persons are currently unemployed (a 9.5% unemployment rate). During the project's operational phase, employment opportunities are projected to rise with an estimated 353 new positions based on regional employment estimates for the light industry category.[5] Project operation would increase the total labor force to 37,594 persons employed, lower the amount of

2 Established by California Government Code Section 65580, et seq.
3 http://www.dof.ca.gov/ Accessed on August 1, 2014.
4 http://www.dof.ca.gov/research/demographic/ Accessed on August 5, 2014.
5 The Natelson Company, Employment Density Summary Report, October, 2001.

unemployed to 3,542 persons, and result in a reduced unemployment rate of 8.7% (a 0.80% rate decrease) for Chino Hills. Hence, Chino Hills has an adequate supply of existing residents that are available to join the employed labor force and could fill new positions generated by the project in lieu of non-residents.

No major public infrastructure improvements would be necessary since there are existing roadways and infrastructure facilities. The projected population increase, as a result this project's residential component, is within SCAG's 2035 population growth forecast for Chino Hills. Employment opportunities generated by the project would potentially provide new prospects to Chino Hills' residents, increase the employed labor force, and decrease the unemployment rate. Environmental impacts associated with population increases have been addressed throughout the environmental analysis section (see Section 3.1 through 3.18). Therefore, impacts relating to population growth would be less than significant and mitigation measures would not be necessary.

b) Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact

The site consists of fallow agricultural land that is not currently in production. Only a small portion of the site has a few crops that may or may not be actively cultivated. Hence, the project would occur on disturbed agricultural land and would not displace any existing housing. The project would provide 346 multi-family residential dwelling units as additional housing for Chino Hills. Therefore, no impact would occur and no mitigation measures would be necessary.

c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact

As discussed in Section 3.13 b), implementation of the project would not result in the loss of residential units; rather; the project would increase the amount of available housing. No persons or housing units would be displaced and the construction of replacement housing would not be required. Therefore, no impact would occur and no mitigation measures would be necessary.

3.14 PUBLIC SERVICES					
		Potentially Significant Impact	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, 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:					
a)	Fire protection?			**X**	
b)	Police protection?			**X**	
c)	Schools?			**X**	
d)	Parks?			**X**	
e)	Other public facilities?			**X**	

ENVIRONMENTAL SETTING

Fire Protection

The Chino Valley Independent Fire District ("Fire District") provides fire protection services in the City of Chino Hills. The Fire District serves an approximately 80-square-mile area that includes the cities of Chino Hills, and Chino, and surrounding unincorporated areas. The Chino Valley Independent Fire District comprises six fire stations housing over 80 professional firefighters, strategically located to provide fire and emergency medical services throughout the community.

Fire Station 61 located at 5078 Schaefer Avenue, Chino, CA, provides fire service in the project area[1]. Other stations respond to emergencies in the project area, as needed. Station 61 consists of a total of eight personnel and comprises one engine company with four firefighters and an additional truck company with hazmat trained staffed. Existing standard response time for fire service in the project area is less than 5 minutes[1].

Police Protection

The City of Chino Hills contracts with the San Bernardino Sheriff's Department to receive law enforcement services[2]. The Chino Hills Police Station is located in the Chino Hills Government Center at 14077 Peyton Drive. Currently, the Police Department has 52 sworn personnel, which includes 38 deputies, 4 detectives, 8 sergeants, 1 lieutenant, and 1 captain. The Department also has 15 civilian personnel.

The Police Department's desired officer-to-resident service ratio is 1 deputy per 2,000 residents. With a current City population of 76,240 residents, the Police Department currently achieves this ratio. In 2012, the Police Department handled 36,694 calls for service, and obtained an average response time for all emergency calls of approximately 3 minutes and 30 seconds. This response time is faster than the Department's goal of responding to all calls for service in less than 7 minutes and 30 seconds (Chino Hills, 2014).

1 Fire Marshall Jeremy Ault, correspondence letter, July 2014.

2 Chino Hills Police Department Homepage, Accessed August 2014.

Schools

The Chino Valley Unified School District (USD) provides primary and secondary public education services to students living in the local area. In the District, there are currently 22 elementary schools, seven middle schools, six high schools, and three alternative and adult schools.

School facilities currently serving the project area include Dickson Elementary School, Ramona Junior High School and Don Lugo High School. **Table 3.14-1**[3] provides current student enrollment numbers and their respective student enrollment capacity for each school facility that serves the project area.

Table 3.14-1
CHINO VALLEY UNIFIED SCHOOL DISTRICT STUDENT ENROLLMENT & CAPACITY

School	Address	*Current Student Enrollment	Student Enrollment capacity
Dickson Elementary School	3930 Pamela Drive, Chino, CA	640	814
Ramona Junior High School	4575 Walnut Avenue, Chino, CA	579	1,339
Don Lugo High School	13400 Pipeline Avenue, Chino, CA	1,758	3,245

*Note: Projected 2014/15 school year enrollment

Parks

Parks and recreation facilities in the City include 40 parks with a total of approximately 300 acres of parkland (Chino Hills, 2014). Facilities within the parks include natural open spaces, community buildings, lakes, streams, sports courts and fields, picnic areas, playgrounds, a skate park, an equestrian center, and equestrian staging areas.

The Chino Hills State Park is located approximately 2.0 miles south of the project site. The Chino Hills State Park includes 14,102 acres of parkland and 65 miles of trails. Other Community parks and recreation facilities located nearest to the project site include the following:

- Glenmead Park located approximately 1.6 miles west of the project site, comprises total park area of 3.2 acres.
- Hilltop Park located approximately 1.6 miles west of the project site, comprises total park area of 6.4 acres.
- Danbury Park is located approximately 1.5 miles south of the project site, comprises total park area of 5.7 acres.
- Ayala Park, located approximately 2.0 miles northeast of the project site, comprises total park area of 140 acres.

These community parks located near the project site provide a range of amenities including tot lots, volleyball and basketball courts, softball, baseball, and soccer fields and picnic facilities to residents in the project area.

[3] http://apps.schoolsitelocator.com/index.html?districtCode=58952 Accessed on July 28, 2014.

Other Public Facilities

The Chino Hills Civic Center serves as the governmental core for the City. This area includes the City Hall, Fire District administrative offices, the Police Department building, and the James S. Thalman Chino Hills Public Library, which is a branch of the San Bernardino County library system. This library located at 14020 City Center Drive, approximately 3.2 miles northeast of the proposed project site is the nearest public library. The library is open on the weekends and weekdays as follows: Monday-Thursday 10:00am-8:00pm, on Friday from 10:00am to 6:00pm, on Saturday from 9:00am to 5:00pm and on Sunday from 1:00pm to 5:00pm. This Library includes a Teen Zone, a Kids Zone, programs and classes for beginners and adults, study room space, and public-use computers.

Other public libraries located in close proximity to the project include the Chino Branch Library located at 13180 Central Avenue and Cal Aero Preserve Academy Branch Library located at 15850 Main Street, in the City of Chino. Each is operated as a community resource and gathering place to provide library materials, computer access, and study room space, serving their respective parts of the planning area.

REGULATORY SETTING

The project site is under the jurisdiction of the City of Chino Hills and therefore would be subject to applicable policies, codes, and regulations stipulated in the City of Chino Hills General Plan and Municipal Code. Additional regulations that cover resources affected by the project include:

Chino Valley Independent Fire District Master Plan

According to the Chino Valley Independent Fire District Master Plan, adopted July 11, 2012, the Fire District's mission is to protect the lives and property of the community from detrimental effects of fires, medical emergencies and other hazardous conditions. The Master Plan also outlines Fire District's current organization and existing services, and identifies future facility needs.

Assembly Bill 2926

In 1986, the State Legislature approved Assembly Bill 2926 (AB 2926), to assist in providing facilities to serve students generated by new development projects. This bill allows school districts to collect standardized impact fees from developers of new residential and commercial/industrial building space prior to issuance of building permits. Part of this bill establishes these standard fees as a sufficient mitigation measure to offset impacts on public school facilities in the CEQA process.

Quimby Act

The Quimby Act (California Government Code §66477) of 1975 and subsequent amendments, allows cities and counties to pass ordinances requiring that developers set aside land, donate conservation easements, or pay fees for park improvements. This act allows local agencies to establish ordinances requiring developers of residential subdivisions to provide impact fees for land and/or recreational facilities. Revenues generated through the Quimby Act are used to fund construction of new parks. Pursuant to the requirements of the Quimby Act, local ordinances are required to include definite standards for determining the proportion of the subdivision to be dedicated and the amount of the fee to be paid. The City of Chino Hills has a Quimby Fund as well as a Parks Facilities Fee to fund parks construction. The City requires payment of standardized Park

and Recreation Development Impact fees and Quimby In-lieu fees from developers of new residential developments to offset impacts on parks and recreation facilities.

DISCUSSION OF IMPACTS

a) Fire protection?

Less Than Significant Impact

The project would be served by Fire District's Fire Station 61, which is located at a distance of approximately 2 miles from the project site (Fire Marshall Jeremy Ault, correspondence letter, July 2014). Other stations would respond to emergencies at the project site as needed. Construction and operation of the proposed project would increase demand for fire protection services compared to existing conditions due to increased human presence and activity. The project design plans propose to promote emergency access by including a turning radius that is sufficient to accommodate large fire trucks, dedicating fire lanes, and strategic placement of fire hydrants throughout the development site.

The Fire District would review site plans, site construction, and the actual structure prior to occupancy to ensure that required fire protection safety features, including building sprinklers and emergency access, are implemented. Development with modern materials and in accordance with current standards, inclusive of fire resistant materials, fire alarms and detection systems, automatic fire sprinklers, would enhance safety from fire, and would support fire protection services (Title 24, California Code of Regulations, Part 9). Fire District's response time for the proposed project would fall within the standard response time, which is less than 5 minutes (Fire Marshall Jeremy Ault, correspondence letter, July 2014). Therefore, the proposed project would not substantially affect Station 61's level of service, and would not result in the need to construct new or physically altered fire protection facilities that could have an environmental impact. As such, impacts related to fire protection would be less than significant.

b) Police protection?

Less Than Significant Impact

Law enforcement at the project site would be provided by officers stationed at the Chino Hills Police Station, located approximately 3.0 miles northwest of the project site. The project would incrementally increase the demand for police protection services compared to existing conditions due to the addition of approximately 1,142 new residents (see Section 3.13, Population and Housing for further detail).

Based on the Police Department's current and desired officer-to-resident ratio of 1 deputy per 2,000 residents, the proposed project would not require additional deputies. Any incremental increase in calls for service could be accommodated by existing law enforcement personnel and equipment. The project would not result in the need to construct new or physically altered police protection facilities that could have an environmental impact. Therefore, impacts related to police services would be less than significant.

c) Schools?

Less Than Significant Impact

Construction and occupancy of the proposed project would generate new students requiring education. Using generation rates provided by Chino Valley USD (see Table 3.14-2), the project at full occupancy is predicted to generate 47 elementary school students, 15 junior high students, and 23 high school students. **Table 3.14-3** compares the total number of students predicted at full occupancy against the remaining capacities of the schools serving the project site. Based on the remaining capacity for each school, there would be no need for additional school facilities or expansion of existing facilities to accommodate new students.

Table 3.14-2
CHINO VALLEY UNIFIED SCHOOL DISTRICT STUDENT GENERATION RATES

Type of Dwelling Unit	Elementary School Grade K-6	Junior High School Grade 7-8	High School Grade 9-12	All Students
Single Family	0.2835	0.0637	0.1242	0.4714
Multi-Family	0.1209	0.0239	0.0394	0.1814
Apartment	0.1354	0.0437	0.0655	0.2445

Source: E-mail from Gregory J. Stachura Assistant Superintendent, Facilities, Planning & Operations, Chino Valley USD

Table 3.14-3
STUDENT GENERATION AND REMAINING CAPACITY

School	Students Generated by Project	Existing Available Capacity	Remaining Capacity
Dickson Elementary School	47	174	127
Ramona Junior High School	15	760	745
Don Lugo High School	23	1487	1464

*Note: Projected 2014/15 school year enrollment

In accordance with State law the applicant would be required to pay school impact fees. Pursuant to Section 65995 (3)(h) of the California Government Code (Senate Bill 50, chaptered August 27, 1998), the payment of statutory fees "...is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization." There are no new school facilities or additions to existing facilities proposed by Chino Valley USD. Based on this discussion, the project would not exceed the school district's remaining student enrollment capacity. Thus, payment of the development fees is considered full mitigation for the proposed project's impacts under CEQA and impacts would be less than significant.

d) Parks?

Less Than Significant Impact

Private recreation amenities that will be provided by the project include an indoor gym, pool and spa, outdoor sports court, landscaped courtyard with fountain, outdoor kitchen with barbeque and

outdoor dining area with fireplace. The nearest public community parks are Glenmead Park and Hilltop Park located approximately 1.6 miles west and Danbury Park located approximately 1.5 miles south of the proposed project site. Chino Hills State Park is located approximately 2.0 miles south of the project site and Ayala Park, which is the largest community park in the City of Chino, is located approximately 2.0 miles northeast of the project site.

Development of the proposed project would lead to the development of 346 new residential units and will result in an increase of an estimated 1,142 new residents within the project area. The City of Chino Hills requires the payment of development impact fees for impact on parkland, due to the development of residential and multifamily developments based upon a rate of $2,422 per dwelling unit. Although implementation of the project would cause an incremental increase in demand for parks and recreation facilities, this increase would be offset by the payment of Quimby In-lieu fees[4] (governed by Chino Hills Ordinance 66) and by the inclusion of landscaped courtyards and other recreation areas onsite. Therefore, impact to parks and parkland facilities is anticipated to be less than significant.

e) Other public facilities?

Less Than Significant Impact

As discussed in the environmental setting section above, the nearest public library is the James S. Thalman Chino Hills Branch Library. Other public libraries located in close proximity to the project include the Chino Branch Library and Cal Aero Preserve Academy Branch Library. Each of these libraries operates as a community resource and provides library materials, public computer access, and study room space. It is estimated that the proposed project could add up to 1,142 residents. This increase is minimal (less than one percent of the City's population) and will not trigger the need for additional libraries. Therefore, impact to other public facilities such as libraries is anticipated to be less than significant.

[4] City of Chino Hills Municipal Code, Chapter 3.40, Section 3.40.090(A.), Quimby In-lieu Fees.

3.15 RECREATION				
Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Would the project 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?			**X**	
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?			**X**	

ENVIRONMENTAL SETTING

The City of Chino Hills Parks and Recreation Department provides recreational opportunities for all residents. There are currently 44 parks located throughout Chino Hills. According to the Parks, Recreation and Open Space Element of the General Plan, the City of Chino Hills has exceeded the parkland standard of three acres of parkland per 1,000 residents. Chino Hills currently has 284 acres of parkland and a population of 76,131 residents in 2014.

The parkland is comprised of developed, usable acreage made up of active recreational areas containing features such as sports fields, picnic areas, playgrounds/"tot lots", skating facilities, and other support facilities. These facilities are operated and regularly maintained by the City. The Chino Hills State Park, which is not administered or operated by the City, offers an additional 14,102 acres of open space, 7,366 acres of which are within the City's boundaries. The State Park has over 90 miles of trails (38 miles of trails in the City) for hiking, biking, and equestrian riding, and other recreation opportunities for residents of Chino Hills (Chino Hills, 2014).

REGULATORY SETTING

The project would be subject to the plans and policies of the Parks, Recreation, and Open Space Element of the City of Chino Hills General Plan and subject to the requirements of Chino Hills Municipal Code Section 16.86.020 for parkland dedication.

DISCUSSION OF IMPACTS

a) 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?

Less than Significant Impact

Development of the proposed project would increase population and result in higher demand for parks and recreational facilities. According to the Chino Hills Municipal Code Section 16.86.020, a standard of three acres of usable land for each 1,000 persons residing within Chino Hills is required

to be dedicated for neighborhood or community park and recreation facilities. The proposed project would include 346 multifamily residential units and generate approximately 1,142 new residents[1]. Based on the City parkland and recreation standard and the projected residential population increase, the proposed project would require approximately 3.43 acres of land dedicated to park and recreational facilities. The California Department of Finance estimates the City to have a total population of 76,131 residents in 2014. To meet the parkland dedication standard, the City should have 228 acres of parkland for the existing population and an additional 3.43 acres for the projected population increase, totaling 231.43 acres of park and recreation land.

The City of Chino Hills has 284 acres of parkland, which is made up of 44 parks, 38 miles of trails, five community buildings, and a total of 3,000 acres of publicly owned open space (Chino Hills, 2014). The City's current 284 acres of parkland and existing recreational facilities are sufficient to accommodate the parkland required for the new residential population (i.e., 3.43 acres) as well as the City's existing population (i.e., 228 acres). Furthermore, the proposed project would include a number of recreational opportunities to residents and guests. A total of 0.65 acres is dedicated to private open space and a total of 5.10 acres is dedicated to common open space. On-site recreational amenities include sport court, enclosed garden, formal strolling flower/scented garden, open turf play area, tot-lot play area, gym, dog walk area, pool area, and other amenities.

The City of Chino Hills requires the payment of development impact fees for impact on parkland related to the development of residential and multifamily developments. Although implementation of the project would cause an incremental increase in demand for parks and recreation facilities, this increase would be offset by the payment of Quimby In-lieu fees[2] (governed by Chino Hills Ordinance 66) and by the inclusion of landscaped courtyards and other recreational facilities onsite. Therefore, impact to parks and parkland facilities is anticipated to be less than significant.

In addition to the residential use, the project site also includes a Business Park Zone comprising of three light industrial buildings. The employees anticipated to work at the Business Park are unlikely to use nearby parks and recreational facilities during working hours. Use of park and recreational facilities by nonresident employees during after work hours would likely be limited. Therefore, impacts related to the use of parks and recreational facilities, such that substantial physical deterioration of the facility would occur or accelerate substantial physical deterioration, would be less than significant.

b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Less than Significant Impact

The proposed project would provide outdoor and indoor recreational amenities on-site as well as common open space for residents and guests. The project does not include the construction or expansion of any off-site recreational facilities. The proposed on-site recreational facilities are included as part of the project and are evaluated throughout this Initial Study/Mitigated Negative Declaration (IS/MND). Construction-related physical impacts are addressed in other topic areas in Chapter 4. Thus, the development of common open space, outdoor and indoor recreational facilities would not result in environmental impacts beyond those already identified in this document. Therefore, impacts would be less than significant.

1 Projected residential population growth is based on an average of 3.30 occupants per residential units.
2 City of Chino Hills Municipal Code, Chapter 3.40, Section 3.40.090(A.), Quimby In-lieu fees.

3.16 TRANSPORTATION AND TRAFFIC				
Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?		**X**		
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?		**X**		
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, which results in substantial safety risks?				**X**
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			**X**	
e) Result in inadequate emergency access?			**X**	
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			**X**	

The following is summarized in part from the Traffic Study, prepared by Law and Greenspan (2014). The Traffic Study is included as **Appendix I**.

ENVIRONMENTAL SETTING

Highways and Roads

State Route 71 (SR-71), known as the Chino Valley Freeway, provides regional access to the City of Chino Hills. SR-71 currently provides three mixed flow lanes in each direction with a carpool (high-occupancy vehicle) lane in both directions on either side of Soquel Canyon Parkway/Central Avenue and Ramona Avenue/Chino Hills Parkway. A full interchange at Soquel Canyon Parkway/Central Avenue and a full interchange at Ramona Avenue/Chino Hills Parkway provide regional access to the site.

Local access is provided by a network of streets including Central Avenue, Soquel Canyon Road, Butterfield Ranch Road, Chino Hills Parkway, Ramona Avenue, Fairfield Ranch Road, and Monte Vista Avenue. **Figure 3.16-1** illustrates the locations of the 17 intersections studied in the traffic report.

Table 3.16-1 summarizes the existing operating condition of studied intersection locations during the PM peak hour**.** As shown, the Central Avenue at El Prado Road intersection currently operates at an unacceptable Level of Service (LOS E) during the PM peak hour. The remaining study intersections currently operate at LOS D or better during the weekday AM and PM peak hours.

Table 3.16-1
EXISTING PEAK HOUR LEVEL OF SERVICE

Key Intersections	Time Period	City/ Jurisdiction	Control Type	Delay (sec/veh)	V/C Ratio	LOS
1. Pipeline Road at Chino Hills Parkway	AM	Chino Hills/	8∅ Traffic	42.6	0.716	D
	PM	Caltrans	Signal	50.9	0.776	D
2. SR-71 SB Ramp at Chino Hills Parkway	AM	Chino Hills/	4∅ Traffic	11.7	0.346	B
	PM	Caltrans	Signal	13.9	0.400	B
3. SR-71 NB Ramp at Chino Hills Parkway	AM	Chino Hills/	4∅ Traffic	22.4	0.605	C
	PM	Caltrans	Signal	19.2	0.577	B
4. Ramona Avenue at Chino Hills Parkway	AM	Chino Hills/	8∅ Traffic	30.9	0.557	C
	PM	Chino	Signal	36.3	0.638	D
5. Monte Vista Avenue (S) at Chino Hills Parkway	AM	Chino Hills/	One-Way	15.8	0.210	C
	PM	Chino	Stop	18.5	0.239	C
6. Monte Vista Avenue (N) at Chino Hills Parkway	AM	Chino	5∅ Traffic	18.4	0.358	B
	PM		Signal	20.9	0.327	C
7. Central Avenue at Chino Hills Parkway	AM	Chino	6∅ Traffic	41.5	0.564	D
	PM		Signal	45.5	0.637	D
8. SR-71 NB Ramp at Ramona Avenue	AM	Chino Hills/	4∅ Traffic	22.7	0.472	C
	PM	Caltrans	Signal	23.0	0.497	C

Key Intersections	Time Period	City/ Jurisdiction	Control Type	Delay (sec/veh)	V/C Ratio	LOS
9. SR-71 SB Ramp at Ramona Avenue	AM	Chino Hills/	4∅ Traffic	19.5	0.355	B
	PM	Caltrans	Signal	21.5	0.446	C
10. Central Avenue at El Prado Road	AM	Chino	6∅ Traffic	45.8	0.914	D
	PM		Signal	**56.9**	**0.925**	**E**
11. Central Avenue at Fairfield Ranch Road	AM	Chino Hills	8∅ Traffic	49.8	0.766	D
	PM		Signal	37.2	0.561	D
12. SR-71 NB Ramps at Central Ave / Soquel Canyon Pkwy	AM	Chino Hills/	2∅ Traffic	31.5	0.906	C
	PM	Caltrans	Signal	16.4	0.443	B
13. SR-71 SB Ramps at Central Ave / Soquel Canyon Pkwy	AM	Chino Hills/	2∅ Traffic	19.1	0.645	B
	PM	Caltrans	Signal	23.4	0.809	C
14. Pomona Rincon Road at Soquel Canyon Parkway	AM	Chino Hills	3∅ Traffic	25.5	0.919	C
	PM		Signal	9.4	0.241	A
15. Butterfield Ranch Road at Soquel Canyon Parkway	AM	Chino Hills	8∅ Traffic	36.6	0.551	D
	PM		Signal	37.3	0.367	D
16. Monte Vista Avenue at Eucalyptus Avenue	AM	Chino	2∅ Traffic	14.1	0.142	B
	PM		Signal	14.0	0.168	B
17. Central Avenue at Eucalyptus Avenue	AM	Chino	6∅ Traffic	18.8	0.421	B
	PM		Signal	28.0	0.557	C

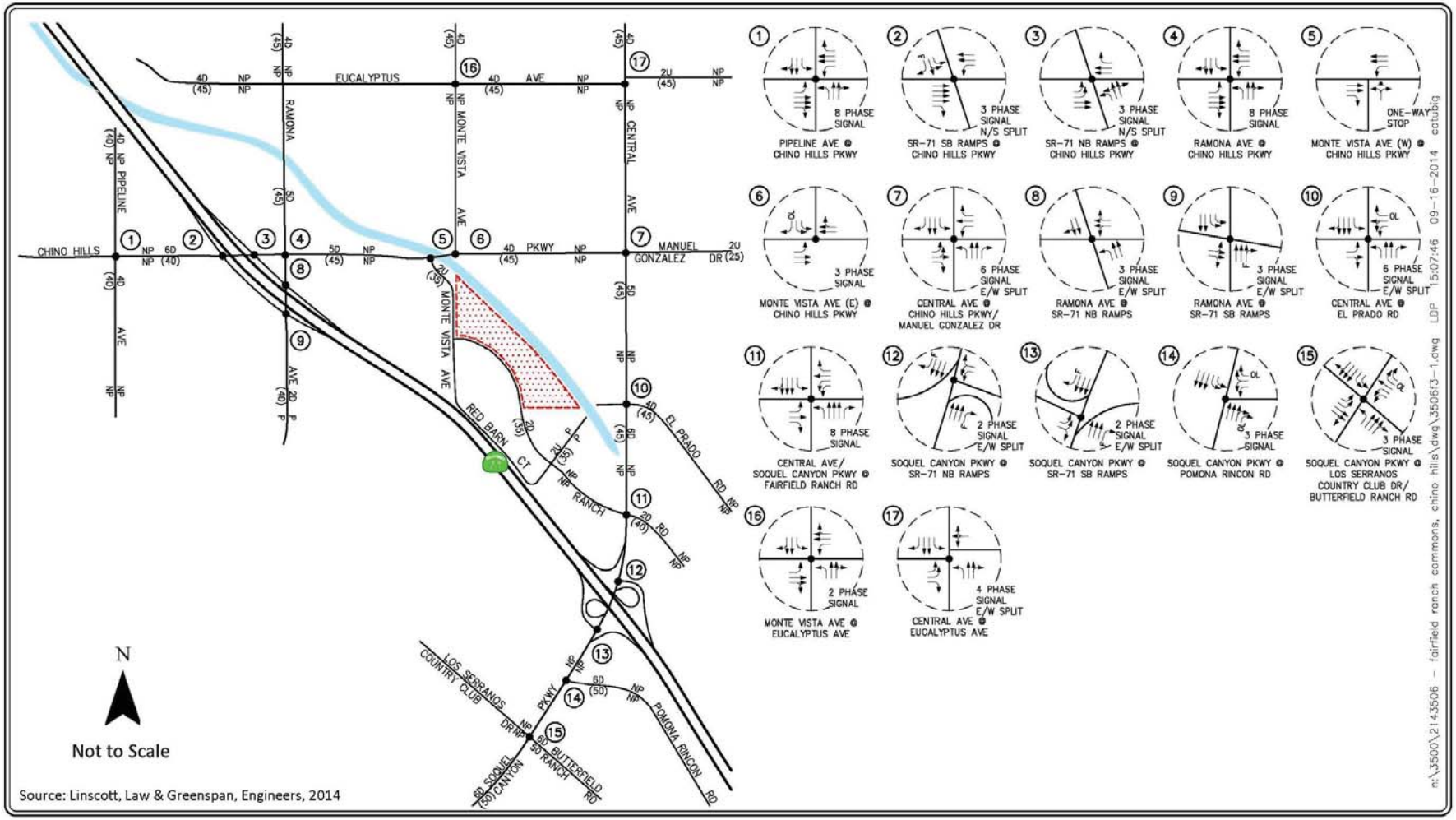
Source: Linscott, Law, and Greenspan Engineers, September 2014
Note:
Bold LOS values indicate adverse service levels based on City LOS standards.
LOS = Level of Service, please refer to *Tables 3-1* and *3-2* for the LOS definitions.
V/C=volume-to-capacity
Ø = Phase
NB=northbound
SB=southbound

Transit

OmniTrans is the public transit agency that serves the City. The transit agency operates 27 fixed bus routes that connect cities throughout San Bernardino Valley. OmniTrans also operates three other transit services:

- OmniLink – a public dial-a-ride service that provides on-demand curb-to-curb service.
- Access - an Americans with Disabilities (ADA) that provides paratransit service.
- OmniGo – a local shuttle bus service provides access to local points of interest. The project site's closest public transit stop is for OmniGo Route 365 at the intersection of Central Avenue and Fairfield Ranch Road.

Figure 3.16-1
STUDY INTERSECTION LOCATIONS



UltraSystems
environmental management planning

Fairfield Ranch Commons

Existing Roadway Conditions and Intersection Controls

Non- motorized Transit

The City of Chino Hills Bicycle Master Plan identifies bike lanes through the City with connections to adjacent communities. Chino Hills Parkway located immediately to the north of the site is designated as a Class 2 bike lane on the Bicycle Master Plan.

Airports

The nearest airport is the Chino Airport located approximately 2.3 miles east of the project site. It is a non-commercial and general aviation airport for independent pilots, students and trainers and corporate users.

REGULATORY SETTING

The proposed project would be subject to the plans and policies of the Circulation Element of the City of Chino Hills General Plan and the countywide Congestion Management Program (CMP) developed by San Bernardino Associated Governments (SANBAG).

The City's Circulation Element identifies the following performance targets:

- Action C-1.1.1: Achieve and maintain a minimum Level of Service D on all roadway links and at all roadway intersections, with the exception of intersections within one-half mile of the SR-71 Freeway, where a minimum Level of Service E shall be maintained.

- Action C-1.1.2: Maintain San Bernardino County Congestion Management Program (CMP) highway system roadway links and intersections at Level of Service E.

The City of Chino Hills Municipal Code (CHMC) establishes standards for parking and speed limits and governs the design and construction of streets, sidewalks, and right-of-way.

CMP is a state-mandated program enacted by California State Legislature with the passage of Proposition 111 in 1990. The program addresses the impact of local growth on regional transportation system.

METHODOLOGY

The traffic report analyzed existing and future weekday AM peak hour and PM peak hour traffic conditions for a near-term (Year 2016) and long-term (Post-2035) traffic setting upon completion of the proposed project. Peak hour traffic forecasts for the Year 2016 horizon year have been projected by increasing existing traffic volumes by an annual growth rate of 2.0% per year and adding traffic volumes generated by cumulative projects. Long-term (Post-2035) traffic projections were derived from the San Bernardino Traffic Analysis Model (SBTAM).

Based on the Highway Capacity Manual (HCM), the operating condition of signalized roadway intersections is measured in terms of level of service (LOS), which has five categories to measure the condition of signalized intersections. LOS is defined in terms of control delay, which is a measure of driver discomfort, frustration, fuel consumption, and lost travel time (see **Table 3.16-2**). The delay experienced by a motorist is made up of a number of factors that relate to control, geometries, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during ideal conditions: in the absence

of traffic control, in the absence of geometric delay, in the absence of any incidents, and when there are no other vehicles on the road.

Table 3.16-2
LEVEL OF SERVICE DEFINITIONS

Level of Service (LOS)	Control Delay per Vehicle (Seconds/Vehicle)	Level of Service Description
A	< 10.0	This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
B	> 10.0 and < 20.0	This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.
C	> 20.0 and < 35.0	Average traffic delays. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.
D	> 35.0 and < 55.0	Long traffic delays At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high *v/c* ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	> 55.0 and < 80.0	Very long traffic delays This level is considered by many agencies (i.e. SANBAG) to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high *v/c* ratios. Individual cycle failures are frequent occurrences.
F	≥ 80.0	Severe congestion This level, considered to be unacceptable to most drivers, often occurs with over saturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high *v/c* ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors to such delay levels.

Source: Linscott, Law, & Greenspan Engineers, September 2014.

DISCUSSION OF IMPACTS

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Less than Significant with Mitigation Incorporated

The proposed project is forecast to generate up to 5,188 daily passenger car trip equivalents[1] (PCE trips), with up to 633 PCE trips (439 inbound, 194 outbound) produced during the AM peak hour and up to 628 PCE trips (182 inbound, 446 outbound) produced during the PM peak hour on a "typical" weekday condition.

These vehicle trips have been distributed onto the existing circulation system based on a variety of factors and then added to existing traffic volumes to evaluate Existing Plus Project conditions. **Table 3.16-3, Existing Plus Project LOS,** summarizes the peak hour level of service at the seventeen (17) key study intersections under Existing Plus Project traffic conditions. As shown, traffic associated with the proposed project will have a significant impact at two of the key study intersections (i.e., Key Intersections #5 and #11) and contribute to the adverse service level at another location (i.e., Key Intersection #10) that is currently operating at an unacceptable LOS E .

The remaining key study intersections are forecast to operate at an acceptable LOS with the addition of project generated traffic. Impacts at the three affected intersections (i.e., Key Intersections #5, #10, and #11) would be mitigated through implementation of recommended improvements outlined below in mitigation measures **TR-1** through **TR-3**.

Mitigation Measures

Per the City of Chino Hills requirements, the project would construct improvements and/or pay a proportional "fair-share" of the improvement costs of the impacted intersections to mitigate the project's traffic impacts. The project applicant would construct and/or pay a fair-share of the construction costs to implement the following mitigation measures for Existing Plus Project conditions:

TR-1: Monte Vista Avenue (S) at Chino Hills Parkway

Install a traffic signal and design for three-phase operation with protected westbound left-turn phasing on Chino Hills Parkway. Provide crosswalks on the south and west legs. Widen Monte Vista Avenue and restripe the westbound approach to provide a separate right-turn lane. Modify existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Hills Standard Design Guidelines and/or California Manual on Uniform Traffic Control Devices (CA MUTCD). Implementation of this improvement will require the approval of the City of Chino Hills.

TR-2: Central Avenue at El Prado Road

[1] Trip generation potential of the business park is presented in passenger car equivalents. A PCE factor of 1.5 has been applied to large 2-axle trucks, a factor of 3.0 for 3-axle trucks and a factor of 4.0 for 4+-axle trucks. These PCE factors are consistent with the values recommended in the San Bernardino County CMP.

Modify existing traffic signal and install a northbound right-turn overlap phase on Central Avenue. Install "No U-turn" signs for westbound traffic on El Prado Road. Implementation of this improvement will require the approval of the City of Chino.

TR-3: Central Avenue at Fairfield Ranch Road

Remove the existing crosswalk across the south leg of intersection on Central Avenue and install a crosswalk across the west leg of the intersection on Fairfield Ranch Road. Modify the existing traffic signal and existing striping accordingly and install all necessary striping, pavement markings, and signs per the City of Chino Hills Standard Design Guidelines and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino Hills.

Table 3.16-3
EXISTING PLUS PROJECT LEVEL OF SERVICE

Key Intersections	Time Period	Existing Traffic Conditions			Existing Plus Project Traffic Conditions			Significant Impact	Existing Plus Project With Improvements		
		Delay	V/C	LOS	Delay	V/C	LOS	Yes/No	Delay	V/C	LOS
1. Pipeline Road at Chino Hills Parkway	AM	42.6	0.716	D	43.2	0.724	D	No	--	--	--
	PM	50.9	0.776	D	51.9	0.790	D	No	--	--	--
2. SR-71 SB Ramp at Chino Hills Parkway	AM	11.7	0.346	B	13.7	0.391	B	No	--	--	--
	PM	13.9	0.400	B	14.8	0.422	B	No	--	--	--
3. SR-71 NB Ramp at Chino Hills Parkway	AM	22.4	0.605	C	22.0	0.613	C	No	--	--	--
	PM	19.2	0.577	B	18.7	0.508	B	No	--	--	--
4. Ramona Avenue at Chino Hills Parkway	AM	30.9	0.557	C	31.9	0.596	C	No	--	--	--
	PM	36.3	0.638	D	39.2	0.699	D	No	--	--	--
5. Monte Vista Avenue (S) at Chino Hills Parkway	AM	15.8	0.210	C	24.6	0.479	C	No	16.0	0.418	B
	PM	18.5	0.239	C	**73.8**	**0.816**	**F**	**Yes**	16.4	0.511	B
6. Monte Vista Avenue (N) at Chino Hills Parkway	AM	18.4	0.358	B	18.7	0.377	B	No	--	--	--
	PM	20.9	0.327	C	21.1	0.346	C	No	--	--	--
7. Central Avenue at Chino Hills Parkway	AM	41.5	0.564	D	42.8	0.573	D	No	--	--	--
	PM	45.5	0.637	D	45.8	0.638	D	No	--	--	--
8. SR-71 NB Ramp at Ramona Avenue	AM	22.7	0.472	C	22.7	0.472	C	No	--	--	--
	PM	23.0	0.497	C	23.0	0.497	C	No	--	--	--
9. SR-71 SB Ramp at Ramona Avenue	AM	19.5	0.355	B	19.5	0.355	B	No	--	--	--
	PM	21.5	0.446	C	21.5	0.446	C	No	--	--	--

Table 3.16-3
EXISTING PLUS PROJECT LEVEL OF SERVICE (Continued)

Key Intersections	Time Period	Existing Traffic Conditions			Existing Plus Project Traffic Conditions			Significant Impact	Existing Plus Project With Improvements		
		Delay	V/C	LOS	Delay	V/C	LOS	Yes/No	Delay	V/C	LOS
10. Central Avenue at El Prado Road	AM	45.8	0.914	D	47.8	0.923	D	No	33.4	0.827	C
	PM	**56.9**	**0.925**	**E**	**61.8**	**0.952**	**E**	**Yes**	34.4	0.740	C
11. Central Avenue at Fairfield Ranch Road	AM	49.8	0.766	D	**83.8**	**0.946**	**F**	**Yes**	54.8	0.745	D
	PM	37.2	0.561	D	41.1	0.561	D	No	39.3	0.555	D
12. SR-71 NB Ramps at Central Ave / Soquel Canyon Pkwy	AM	31.5	0.906	C	43.5	0.993	D	No	--	--	--
	PM	16.4	0.443	B	18.1	0.485	B	No	--	--	--
13. SR-71 SB Ramps at Central Ave / Soquel Canyon Pkwy	AM	19.1	0.645	B	19.3	0.657	B	No	--	--	--
	PM	23.4	0.809	C	23.8	0.812	C	No	--	--	--
14. Pomona Rincon Road at Soquel Canyon Parkway	AM	18.7	0.593	B	18.6	0.596	B	No	--	--	--
	PM	9.4	0.236	A	9.3	0.239	A	No	--	--	--
15. Butterfield Ranch Road at Soquel Canyon Parkway	AM	36.6	0.551	D	36.7	0.556	D	No	--	--	--
	PM	37.3	0.367	D	36.9	0.371	D	No	--	--	--
16. Monte Vista Avenue at Eucalyptus Avenue	AM	14.1	0.142	B	14.2	0.150	B	No	--	--	--
	PM	14.0	0.168	B	14.2	0.175	B	No	--	--	--
17. Central Avenue at Eucalyptus Avenue	AM	18.8	0.421	B	19.0	0.436	B	No	--	--	--
	PM	28.0	0.557	C	28.6	0.564	C	No	--	--	--

Source: Linscott, Law, & Greenspan Engineers, September 2014.

Year 2016 Plus Project Conditions

The results of the traffic impact analysis under the Year 2016[2] Plus Project condition indicates that the proposed project will have a cumulative impact at the seven key study locations outlined below. The remaining ten intersections are forecast to operate at acceptable levels of service during the AM peak and PM peak hour in the Year 2016. Impacts at the seven affected intersections would be mitigated through implementation of recommended improvements outlined below in mitigation measures **TR-4** through **TR-10**.

1. Pipeline Rd at Chino Hills Pkwy	(LOS E in PM)
5. Monte Vista Ave (S) at Chino Hills Pkwy	(LOS E in AM, LOS F in PM)
7. Central Ave at Chino Hills Pkwy	(LOS E in PM)
10. Central Ave at El Prado Rd	(LOS F in AM, LOS F in PM)
11. Central Ave at Fairfield Ranch Rd	(LOS F in AM)
12. SR-71 NB Ramps at Central Ave	(LOS F in AM)
13. SR-71 SB Ramps at Soquel Cyn	(LOS F in AM)

Mitigation Measures

Per the City of Chino Hills requirements, the project would construct improvements and/or pay a proportional "fair-share" of the improvement costs of the impacted intersections to mitigate the project's traffic impacts. The project applicant would construct and/or pay a fair-share of the construction costs to implement the following mitigation measures for Year 2016 Plus Project conditions:

TR-4: Pipeline Avenue at Chino Hills Parkway

Widen and/or restripe the southbound approach on Pipeline Avenue to provide a second left-turn lane. A preliminary assessment of existing conditions indicates that this improvement could be accomplished via the restriping of Pipeline Avenue, but could require widening within the existing right-of-way to provide additional pavement (via narrowing of the existing sidewalks) to meet the City of Chino Hills design criteria. Modify existing traffic signal and existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Hills Standard Design Guidelines and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino Hills and/or Caltrans.

TR-5: Monte Vista Avenue (S) at Chino Hills Parkway

(*Same as recommended TR-1 for Existing Plus Project Recommended Improvements*)
Install a traffic signal and design for three-phase operation with protected westbound left-turn phasing on Chino Hills Parkway. Provide crosswalks on the south and west legs. Widen Monte Vista Avenue and restripe the westbound approach to provide a separate right-turn lane. Modify existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Hills Standard Design Guidelines and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino Hills.

[2] Future growth in traffic compared to existing conditions has been calculated at two percent (2%) per year. When applied to the Year 2014 traffic volumes, this factor results in a 4.0% growth to the near-term horizon year 2016.

TR-6: Central Avenue at Chino Hills Parkway

Remove the existing crosswalk across the north leg of intersection on Central Avenue and install a crosswalk across the south leg of the intersection on Central Avenue. Modify the existing traffic signal and existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Hills Standard Design Guidelines and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino Hills.

TR-7: Central Avenue at El Prado Road

(Same as recommended TR-2 for Existing Plus Project Recommended Improvements)
Modify existing traffic signal and install a northbound right turn overlap phase on Central Avenue. Install "No U-turn" signs for westbound traffic on El Prado Road. Implementation of this improvement will require the approval of the City of Chino.

TR-8: Central Avenue at Fairfield Ranch Road

Restripe the northbound approach on Central Avenue to provide a second left-turn lane. A preliminary assessment of existing conditions indicates that this improvement could be accomplished via the restriping of Central Avenue. Remove the existing crosswalk across the south leg of intersection on Central Avenue and install a crosswalk across the west leg of the intersection on Fairfield Ranch Road. Modify the existing traffic signal and existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Hills Standard Design Guidelines and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino Hills.

TR-9: SR-71 Northbound Ramps at Central Avenue

Widen the northbound off-ramp to provide an exclusive northbound right-turn lane and maintain the existing northbound left-turn lane and northbound shared left-turn/right-turn lane. Modify existing traffic signal and existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Hills Standard Design Guidelines, Caltrans requirements and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino Hills and/or Caltrans.

TR-10: SR-71 Southbound Ramps at Soquel Canyon Parkway

Widen the southbound off-ramp to provide an exclusive southbound right-turn lane and maintain the existing southbound left-turn lane and southbound shared left-turn/right-turn lane. Modify existing traffic signal and existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Hills Standard Design Guidelines, Caltrans requirements and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino Hills and/or Caltrans.

Year 2035 Plus Project Conditions

The results of the traffic impact analysis under the Year 2035 Plus Project condition indicates that the proposed project will have a cumulative impact at seven (7) of the seventeen (17) key study

locations.[3] The remaining ten (10) intersections are forecast to operate at acceptable levels of service during the AM peak and PM peak hour in the Year 2035. The locations projected to operate at an adverse LOS in the Year 2035 Plus Project traffic conditions are as follows:

1. Pipeline Rd at Chino Hills Pkwy	(LOS E in AM, LOS E in PM)
5. Monte Vista Ave (S) at Chino Hills Pkwy	(LOS E in AM, LOS F in PM)
7. Central Ave at Chino Hills Pkwy	(LOS E in AM, LOS E in PM)
10. Central Ave at El Prado Rd	(LOS F in AM)
11. Central Ave at Fairfield Ranch Rd	(LOS E in PM)
12. SR-71 NB Ramps at Central Ave	(LOS F in AM)
17. Central Avenue at Eucalyptus Ave	(LOS E in PM)

Impacts at the seven affected intersections would be mitigated through implementation of recommended improvements outlined below in mitigation measures **TR-11** through **TR-17**.

Mitigation Measures

Per the City of Chino Hills requirements, the project would construct improvements and/or pay a proportional "fair-share" of the improvement costs of the impacted intersections to mitigate the project's traffic impacts. The project applicant would construct and/or pay a fair-share of the construction costs to implement the following mitigation measures for Year 2035 Plus Project conditions:

TR-11: Pipeline Avenue at Chino Hills Parkway

Widen and/or restripe the southbound approach on Pipeline Avenue to provide a second left-turn lane. A preliminary assessment of existing conditions indicates that this improvement could be accomplished via the restriping of Pipeline Avenue, but could require widening within the existing right of way to provide additional pavement (via narrowing of the existing sidewalks) to meet the City of Chino Hills design criteria. Restripe the westbound approach on Chino Hills Parkway Avenue to provide a second left-turn lane. A preliminary assessment of existing conditions indicates that this improvement could be accomplished via the restriping of Chino Hills Parkway. Modify existing traffic signal and existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Hills Standard Design Guidelines and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino Hills and/or Caltrans.

TR-12: Monte Vista Avenue (S) at Chino Hills Parkway

(Same as recommended TR-1 for Existing Plus Project Recommended Improvements and TR-5 for Year 2016 Recommended Improvements)

Install a traffic signal and design for three-phase operation with protected westbound left-turn phasing on Chino Hills Parkway. Provide crosswalks on the south and west legs. Widen Monte Vista Avenue and restripe the northbound approach to provide a separate right-turn lane. Modify existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Hills Standard Design Guidelines and/or CA

[3] Twelve (12) cumulative projects in the City of Chino Hills and fourteen (14) cumulative projects in the City of Chino have been identified. These 26 cumulative projects have been included as part of the analysis. In total, the cumulative projects identified are forecast to generate 61,242 daily trips, with 3,840 trips (2,006 inbound and 1,834 outbound) forecast during the AM peak hour and 4,621 trips (2,083 inbound and 2,538 outbound) forecast during the PM peak hour.

MUTCD. Implementation of this improvement will require the approval of the City of Chino Hills.

TR-13: Central Avenue at Chino Hills Parkway

(Same as recommended TR-6 for Year 2016 Recommended Improvements)
Remove the existing crosswalk across the north leg of intersection on Central Avenue and install a crosswalk across the south leg of the intersection on Central Avenue. Modify the existing traffic signal and existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Hills Standard Design Guidelines and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino Hills.

TR-14: Central Avenue at El Prado Road

Restripe the southbound approach on Central Avenue to provide a second left-turn lane. A preliminary assessment of existing conditions indicates that this improvement could be accomplished via the restriping of Central Avenue. Modify existing traffic signal and install a northbound right-turn overlap phase on Central Avenue. Install "No U-turn" signs for westbound traffic on El Prado Road. Implementation of this improvement will require the approval of the City of Chino.

TR-15: Central Avenue at Fairfield Ranch Road

(Same as recommended TR-8 for Year 2016 Recommended Improvements)
Restripe the northbound approach on Central Avenue to provide a second left-turn lane. A preliminary assessment of existing conditions indicates that this improvement could be accomplished via the restriping of Central Avenue. Remove the existing crosswalk across the south leg of intersection on Central Avenue and install a crosswalk across the west leg of the intersection on Fairfield Ranch Road. Modify the existing traffic signal and existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Hills Standard Design Guidelines and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino Hills.

TR-16: SR-71 Northbound Ramps at Central Avenue

(Same as recommended TR-9 for Year 2016 Recommended Improvements)
Widen the northbound off-ramp to provide an exclusive northbound right-turn lane and maintain the existing northbound left-turn lane and northbound shared left-turn/right-turn lane. Modify existing traffic signal and existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Hills Standard Design Guidelines, Caltrans requirements and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino Hills and/or Caltrans.

TR-17: Central Avenue at Eucalyptus Avenue

Restripe Central Avenue to provide a third northbound through (approach) lane and a third northbound receiving (departure) lane. A preliminary assessment of existing conditions indicates that this improvement could be accomplished via the restriping of Central Avenue. Modify existing traffic signal and existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Design Guidelines, and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino.

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Less than Significant with Mitigation Incorporated

The project would pay its fair share of the improvement costs at impacted intersections (mitigation measures **TR-1** through **TR-17**) per the City of Chino Hills requirements and consistent with the San Bernardino County CMP guidelines. With construction of these improvements, the impacted intersections are forecast to operate at LOS D or better during the AM peak hour and PM peak hour and the project would not conflict with the LOS standards outlined in the Circulation Element of the City of Chino Hills General Plan or the San Bernardino Congestion Management Plan. For these reasons, impact would be less than significant after the incorporation of mitigation measures TR-1 through TR-17.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, which results in substantial safety risks?

No Impact

The project site is not located within the vicinity of a public airport. The nearest airport, Chino Airport, is located approximately 2.3 miles east of the project site. Furthermore, the project site is outside the boundary of the Chino Airport Master Plan.[4] Therefore, no impact is anticipated.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than Significant Impact

The traffic report found that project driveways would provide adequate access to the site and are forecast to operate at LOS A or LOS B. Motorists entering and exiting the project site will be able to do so comfortably without undue congestion. Further, internal circulation for the project is adequate. An assessment of the proposed site plans for the apartment and business park components of the project indicates that a (SU-30) service truck and fire truck, as well as a large truck (WB-65) can access the Project site and circulate throughout site. Refer to Figures 11-1 through 11-5 of the traffic study found in **Appendix I** for details. Thus, traffic impacts related to design features and incompatible uses would be less than significant.

e) Result in inadequate emergency access?

Less than Significant Impact

The proposed project would provide adequate emergency access to meet the approval and permitting requirements of the Chino Valley Independent Fire District. The Fire District's review of site plans, site construction, and the inspection of building structures prior occupancy ensure that required fire protection safety features, including building sprinklers and emergency access, are implemented. The proposed driveways for the residential complex and the business park would

[4] http://chinomasterplan.airportstudy.com/master-plan/ Accessed July 30, 2014.

provide emergency access to the project site and not impede such access to other adjoining properties. For this reason, impacts related to emergency access would be less than significant.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Less than Significant Impact

The project would not conflict with policies and programs intended to promote public transit and alternative methods of travel. The closest bike trail to the site is located along Chino Hills Parkway, which is approximately 500 feet north of the project site. Construction activity would be temporary and all improvements including striping, pavement markings, and signs would be constructed per the City of Chino Hills Standard Design Guidelines. Construction and operation of the project would require improvements along certain locations of Chino Hills Parkway over time as conditions warrant. Therefore, impacts are less than significant.

3.17 UTILITIES AND SERVICE SYSTEMS				
Would the project:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				**X**
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				**X**
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			**X**	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			**X**	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project determined that it has adequate to serve the project's projected demand in addition to the provider's existing commitments?			**X**	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			**X**	
g) Comply with federal, state, and local statutes and regulations related to solid waste?				**X**

ENVIRONMENTAL SETTING

Water Supply

Water supply in the City of Chino Hills comes from a combination of sources including imported water, local wells, local surface water, and recycled water. According to the City of Chino Hills 2010 Urban Water Management Plan, from Fiscal Years 2005-06 to 2010-11, the City received an average of 17,692 acre-feet per year (AFY) of water from several agencies. **Table 3.17-1** below provides a list of City's different sources for water supply and their contribution towards the City's average annual water demand.

Table 3.17-1
WATER SUPPLY IN THE CITY OF CHINO HILLS

Agency	Source of Water	Percentage of City's Annual Average Water Demand
Monte Vista Water District	Imported water, groundwater	36%
Water Facilities Authority	Imported raw water from the State Water Project and the Colorado River	29%
City of Chino Hills	Groundwater wells	10%
Chino Basin Desalter Authority	Desalted water	17%
Inland Empire Utilities Agency	Recycled water	8%

Source: City of Chino Hills, 2010 Urban Water Management Plan

The City of Chino Hills owns and maintains the local water system that delivers water from the primary supply sources listed in the table above. Water supply in the project area is provided through the City's distribution system, which includes more than 319 miles of water mains, 12 pump stations, 19 reservoirs and more than 21,000 individual water connections (Chino Hills, 2014).

Wastewater

The City of Chino Hills Sewer Division is responsible for the collection, and conveyance of wastewater, which is discharged into a regional system operated by the Inland Empire Utilities Agency (IEUA). The City's sewer infrastructure includes more than 200 miles of sewer lines and 17 pumps and motors[1]; preventive maintenance of this system and minor repairs is provided by the City's Public Works Department.

According to the IEUA 2010 Urban Water Management Plan (IEUA, 2011), the IEUA service area has a population of approximately 850,000 residents. IEUA provides municipal/industrial wastewater treatment services to a 242-square mile area that generally encompasses the Chino Basin. Chino Hills is a member agency of the IEUA. Through the Regional Sewer System, the IEUA conveys primarily domestic wastewater to four water recycling facilities, while wastewater containing high levels of dissolved salts is collected by the Non-Reclaimable Wastewater System.

Wastewater in the project area is conveyed to IEUA's Carbon Canyon Wastewater Reclamation Facility (CCWRF) Treatment Plant that works in tandem with Regional Plant No. 2 (RP-2) for treatment and disposal of wastewater. CCWRF provides primary, secondary, and tertiary treatment, as well as disinfection, after which the recycled water may be reused. CCWRF treats an average annual flow of 9.5 million gallons per day[2]. The IEUA transfers biosolids that settle out during primary treatment to Regional Solids Plant No. 2, where it is turned into compost for beneficial reuse.

1 City of Chino Hills official website. Accessed August 2014
2 http://www.ieua.org/ Accessed August 2014.
2 http://www.ieua.org/ Accessed August 2014.

The City of Chino Hills is located in the jurisdiction of the Santa Ana Regional Water Quality Control Board (SARWQCB), which is responsible for the development and enforcement of water quality objectives to meet the requirements of the Federal Clean Water Act, California Porter-Cologne Act, and the National Pollutant Discharge Elimination System (NPDES). IEUA's regional wastewater treatment and reclamation facilities operate in accordance with the Waste Discharge Requirements established by the Santa Ana Regional Water Quality Control Board, through issuance of an NPDES Permit at each facility. These permits set restrictions on treatment volumes and processes and handling of discharges from the treatment plants into surface and ground waters.

Solid Waste

According to the information listed by The California Integrated Waste Management Board in its Solid Waste Information System (SWIS), there are eleven (11) San Bernardino County-operated landfills including both regional and local facilities. In addition, 52 other facilities encompassing the full complement of solid waste services are identified in the SWIS, including facilities operated and managed by the County of San Bernardino Department of Public Works, Solid Waste Management Division (SWMD) and facilities operated and managed by private owners/ operators. The SWMD is responsible for the operation and management of the County's solid waste disposal system which consists of six regional landfills, five community collection centers, and eight transfer stations.

Solid Waste from the City of Chino Hills is hauled by Republic Services, the City's franchised hauler, to material recovery facilities in Anaheim, with the remaining waste taken to the Olinda Alpha Landfill located at 1942 North Valencia Avenue in Brea, CA. Olinda Alpha Landfill is owned and operated by the County of Orange Integrated Waste Management Department (IWMD). The Olinda Alpha Landfill accepts municipal solid waste from commercial haulers and the public. The landfill is permitted to receive a daily maximum of 8,000 tons of waste per day. The landfill is approximately 565 acres with 420 acres permitted for refuse disposal. The Olinda Alpha Landfill opened in 1960; currently the landfill is scheduled to terminate importation of any out-of-county waste within the next five years, and is expected to reach capacity by 2030. At that time, the City will have a number of alternative sites to transfer their waste, including the Otay Landfill in Chula Vista, the Sycamore Canyon Landfill in San Diego County near the San Diego and Santee border, the Sunshine Canyon Landfill in Sylmar, the Apex Landfill in Clark County Nevada, and other landfills owned and operated by Republic Services, which currently operates 13 landfills in California (City of Chino, Hills 2014).

The City of Chino Hills currently generates approximately 2.8 pounds of trash per day per capita, and 62% of the City's trash is diverted from landfill disposal through materials recovery and recycling efforts. In conjunction with trash pick-up, Chino Hills operates a recycling program, "Chino Hills Recycles," that directs customers to sort trash into three separate and helps control the volume of waste sent to landfills. The three separate trash bins include:

- Gray Bin for household metal, plastic, glass and paper products;
- Black Bin for yard waste
- Green Bin for food and animal waste, and other trash that does not sort into either the Gray or Black Bin.

The City contracts with Republic Services for all trash and recyclable collection services in the City. For residential areas, the City provides three 110-gallon collection bins to collect solid waste, green waste, and recyclables. The City restricts disposal of Household Hazardous, Electronic (E-waste) or

Universal Waste in trash, recycle or green waste bins. San Bernardino County operates a Household Hazardous Waste Collection Center for disposal of household hazardous waste.

REGULATORY SETTING

Porter Cologne (Porter-Cologne) Water Quality Control Act

The Porter-Cologne Water Quality Control Act gives the State Water Resources Control Board (SWRCB) authority over state water rights and water quality policy. Porter-Cologne also establishes nine Regional Water Quality Control Boards (RWQCBs) to oversee water quality on a day-to-day basis at the local/regional level. The City of Chino Hills is overseen by the SARWQCB.

Urban Water Management Planning Act

Pursuant to requirements of the Urban Water Management Planning Act (UWMPA), codified in §§10610-10656 in Division 5 of the CWC, "[e]very urban water supplier shall prepare and adopt an urban water management plan in the manner set forth in Article 3 (commencing with §10640)" (§10620[a], CWC). As defined therein, an "urban water supplier" is defined as a publicly or privately owned supplier providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet (AF) of water annually (§10617, CWC). Each urban water supplier shall update its plan at least once every five years (§10621, CWC). The urban water management plan must address: current and projected water supplies, water demand, supply reliability, conservation measures, response to potential water shortages, and an evaluation of water supply and demand.

The 2010 update of the City of Chino Hills' Urban Water Management Plan (UWMP) was prepared in accordance with the California Urban Water Management Planning Act which requires plans to be submitted to the State of California Department of Water Resources (DWR) every five years. The City's UWMP serves as the primary source documentation for future Water Supply Assessments and Written Verifications required under SB 610 and SB 221.

City of Chino Hills Municipal Code Chapter 13.08 - Water Conservation

This ordinance establishes municipal procedures to respond and minimize impacts of water shortages through the practice of water conservation pursuant to California Water Code § 375 et seq., based upon the need to conserve water supplies and to avoid or minimize the effects of any future shortage.

City of Chino Hills Municipal Code Chapter 13.32 - Reclaimed Water Regulations

This ordinance reiterates the City's policy that reclaimed water should be used for any purpose approved for reclaimed water use, when it is economically, financially, technically and institutionally feasible to do so. Use of potable water for nondomestic uses is contrary to City policy, and is to be avoided to the maximum extent feasible.

California Integrated Solid Waste Management Act

California Integrated Solid Waste Management Act of 1989 (AB 939), codified in Division 30, §40000 et seq. of the Public Resources Code, requires every City and county in the state to reduce or recycle 25% of the solid wastes disposed in landfills by the year 1995 and 50% by the year 2000.

Monetary penalties can be imposed against jurisdictions that are unable to meet AB 939 diversion objectives and established deadlines. AB 939 requires that all cities and counties in California maintain at least fifteen years of available countywide solid waste disposal capacity. AB 939 mandates local governments to develop a long-term strategy for the management and diversion of solid waste and also mandates recycling, composting, and regulations for safe landfill disposal. All requirements established by AB 939 are implemented through the County of San Bernardino Countywide Integrated Waste Management Plan.

California Solid Waste Reuse and Recycling Access Act

California Solid Waste Reuse and Recycling Access Act of 1991 (AB 1327), codified in §§42900-through 42911 of the California Public Resources Code, requires that the California Integrated Waste Management Board draft a model ordinance requiring the designation of areas for collecting and loading recyclable materials in "development projects."

City of Chino Hills Municipal Code Chapter 13.20 - Integrated Waste Management

This ordinance establishes municipal procedures for controlling vectors and carrying out mandatory duties related to the collection, transfer and disposal of solid waste, recyclables, and compostables, or any combination of the three.

City of Chino Hills Municipal Code Chapter 13.40 - Materials and Waste Management Plan for Construction and Demolition Projects

This section of the Municipal Code establishes requirements to prepare project level waste management plans and implement measures to reduce construction and demolition wastes and to divert such wastes from landfills.

DISCUSSION OF IMPACTS

a) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board (RWQCB)?

No Impact

Wastewater generated by the proposed project would be conveyed to IEUA's CCWRF Treatment Plant for treatment and disposal. IEUA's regional wastewater treatment and reclamation facilities operate in accordance with the Waste Discharge Requirements established by the SARWQCB. As described below in the response to checklist item b, project generated wastewater could be accommodated within the permitted capacity of the existing treatment and reclamation system without the need for expansion of new facilities. Therefore, the project would not cause an exceedance of wastewater treatment requirements and no impact is anticipated.

b) Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact

Project occupancy would increase the amount of wastewater requiring treatment within the City. **Table 3.17-2** shows the estimated amount of wastewater that would be generated by the proposed project at full occupancy.

Table 3.17-2
ESTIMATED WASTEWATER GENERATION

Type of Use	Quantity	Generation factor	Amount (gpd)
Residential			
1 Bedroom Apartment	156 units	120 gallons/unit/day	18,720
2 Bedroom Apartment	172 units	160 gallons/unit/day	27,520
3 Bedroom Apartment	18 units	200 gallons/unit/day	3,600
Commercial/Industrial			
Warehouse	295,641 square feet	20/1000 square feet	5,913
Office	31,000 square feet	150/1000 square feet	4,650
Total			60,403

Source: City of Los Angeles CEQA Thresholds Guideline, 2006
gpd- gallons per day

As shown, the project is estimated to generate 60,403 gpd in wastewater while CCWRF's average annual flow is 9.5 million gpd and its current plant capacity is 11.4 MGD[3]. Wastewater generated by the project would be conveyed by an on-site sewer system and into the existing IEUA sewer system line which traverses through the site. IEUA has indicated that this existing line possesses the capacity to accommodate effluent produced by the project. As shown in **Table 3.17-2**, the net increase in wastewater expected to be generated by the proposed project per day is only a fraction (0.06% approximately) of the CCWRF's current daily flow (9.5 million gallons) and is within the total treatment capacity of 11.4 MGD. Therefore, the proposed project would have minimal affect on the City's existing wastewater conveyance system and is not expected to result in the construction of new wastewater treatment facilities or expansion of existing facilities.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less than Significant Impact

As discussed in Section 4.9, Hydrology and Water Quality, the proposed project would construct a drainage system that is designed to accommodate 100 year flood events. The City's storm drainage system operates in accordance with the San Bernardino County's countywide NPDES Municipal Separate Storm Sewer System Discharge (MS-4) Permit issued by the SARWQCB and the project would be required to comply with the requirements of this Municipal Stormwater Permit. With the implementation of the proposed drainage improvements on site and best management practices for managing stormwater, construction of new storm water drainage facilities or expansion of existing facilities would not be required and impacts would be less than significant.

[3] http://www.ieua.org/ Accessed August 2014.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Less than Significant Impact

Implementation of the proposed project would lead to the development of 346 new residential units and will result in an increase of an estimated 1,142 new residents within the project area. Using the City of Chino Hills 2010 Urban Water Management Plan's baseline water demand rate of 218 gallons per capita per day for the proposed multifamily residential use, it is estimated that water demand generated by the proposed residential development would be approximately 248,956 gallons per day (gpd) or 279 acre-feet per year (AFY). The proposed project also includes development of light industrial/commercial use buildings. Assuming that water demand generated by the commercial development would be approximately 120% of wastewater generation, the proposed project would require approximately 12,676 gpd, or 14.2 acre-feet per year (AFY) (based on the estimated 10,563 gpd of wastewater generated by warehouse/office uses as shown in **Table 3.17-2**). **Table 3.17-3** shows actual and projected water supply and demand in the City through 2035.

Table 3.17-3
NORMAL YEAR WATER SUPPLY AND DEMAND CITYWIDE

	Current* (AFY)	**Projected** (AFY)		
		2014-2015	**2024-2025**	**2034-2035**
Water Supply	17,693	27,250	27,250	27,250
Water Demand	17,692	17,950	19,280	20,950
Remaining Supply	1	9,300	7,970	6,300

Source: City of Chino Hills, 2010 Urban Water Management Plan (UWMP), Table 5.3
*Current water supply and demand represent averages from Fiscal Year (FY) 2005-06 to FY 2010-2011

Increased water demand estimated to be generated with the implementation of the proposed project is approximately 293 AFY. Based on the data for projected remaining supply of water in the City of Chino Hills provided in **Table 3.17-3** above, it is anticipated that sufficient water supply is available to serve. Therefore, impacts related to water supply would be less than significant.

e) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?

Less than Significant Impact

As described in the analysis for Section 3.17 b) above, the net increase in wastewater expected to be generated by the proposed project per day is only a fraction (0.06% approximately) of the CCWRF's current daily flow (9.5 Million gallons). Therefore, the proposed project is anticipated to be within the existing capacity of the wastewater treatment provider and have a less than significant impact.

f) Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less than Significant Impact

Per estimated solid waste generation factors provided by Cal Recycle, the solid waste generation factor for multi-family residential use is 12.23 pounds per household per day and the solid waste generation factor for light industrial (including warehouse) use is 1.42 pounds per 100 square feet per day. Based on these solid waste generation factors, the proposed project is estimated to generate a total of approximately 8,857 pounds of solid waste per day.

Pursuant to an Importation Agreement, Republic Services, the City's franchised hauler would transport waste generated by the proposed project to material recovery facilities in Anaheim, with the remaining waste taken to the Olinda Alpha Landfill (Mark McGee, Municipal Manager, Republic Services, Correspondence Letter, July 2014; City of Chino Hills, 2014 General Plan Update Program EIR). The landfill has a maximum permitted capacity of 74,900,000 Cubic Yards and has a remaining capacity of 38,578,383 cubic yards[4]. The daily maximum solid waste accepted is 8,000 tons, while the project would potentially generate 8,857 pounds of solid waste per day. Therefore, since the project would not exceed the landfill's maximum daily permitted capacity and overall remaining capacity, impacts would be less than significant.

g) Would the project comply with federal, state, and local statutes and regulations related to solid waste?

No Impact

All requirements established by the California Integrated Solid Waste Management Act (AB 939) are implemented through the County of San Bernardino Countywide Integrated Waste Management Plan (CIWMP). Primary objectives for the reduction of solid waste in accordance with the requirements of AB 939, identified in the CIWMP include reduction in the production of waste at its source, recycling, and composting. According to the City of Chino Hills, 2014 General Plan Update Program EIR, the City has consistently met its goals for solid waste diversion, and achieved a diversion rate of 64% in 2011.

Sixty two percent (62%) of the City's trash is diverted from landfill disposal through materials recovery and recycling efforts. The proposed project would generate solid waste that would be stored in refuse containers until picked-up by Republic Services and transported offsite for recycling and/or disposal. The project would benefit from the City's existing policies, procedures and programs for solid waste diversion including Chino Hills Recycles automated waste collection and recycling program, provision of waste sorting and collection bins to collect solid waste, green waste, and recyclables, restrictions on disposal of Household Hazardous Electronic (E-waste) or Universal Waste in trash and provision of a Household Hazardous Waste Collection Center for disposal of household hazardous waste.

The CIWMP, Five Year Review Report prepared in the year 2011-2012 indicates that the County of San Bernardino continues to have disposal capacity available for solid waste generated, but not diverted, in excess of 15 years as required under Public Resources Code Section 41701. The proposed project would comply with the requirements mandated by the CIWMP and the City of Chino Hills Municipal Code for reduction and disposal of solid waste, thereby complying with the requirements of AB 939. Therefore, the proposed project would result in no impact regarding compliance with regulations related to solid waste.

---

4 http://www.calrecycle.ca.gov/SWFacilities/Directory/30-AB-0035/Detail/ Accessed August 14, 2014.

3.18 MANDATORY FINDINGS OF SIGNIFICANCE				
	Potentially Significant Impact	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		**X**		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		**X**		
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		**X**		

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

Less than Significant with Mitigation Incorporated

The project site represents vacant land located along major transportation corridors including State Route 71 and Chino Hills Parkway[1]. The project site itself is characterized by disturbed land that has been historically subject to cultivation with row crops since the 1930s. Field investigations undertaken by qualified wildlife biologist and archeologist uncovered no sensitive resources on-site during a pedestrian survey. However, the project footprint is located near and adjacent to Chino Creek, which drains into the Prado Basin. The project site is located approximately seven miles north of the Prado Dam. Upstream of the Prado Dam lays the single largest stand of forested,

[1] Chino Hills Municipal Code, Chapter 16.08, Section 16.08.030

riparian habitat remaining in Southern California; it is rich in plant and animal life, including rare, threatened and endangered species.[2] Chino Creek, located east of the project site, flows approximately 3.5 miles into the Prado Basin created by Prado Dam.

UltraSystems' biologists conducted a literature review, a habitat assessment, a plant survey, a wildlife survey, a jurisdictional assessment, and a wildlife movement evaluation within the project site and a 500-foot zone referred to as the biological study area (BSA) to (1) assess the potential presence of special-status plant and wildlife species; (2) identify plant communities, jurisdictional waters, critical habitat, and potential wildlife corridors; and (3) identify potential impacts to these biological resources within 500 feet of the proposed project (Section 3.4, Biological Resources). Focused protocol surveys for plants or wildlife, such as fish, were not conducted for this initial study. No listed or sensitive plants were observed within the BSA during the survey. No listed wildlife was observed within the BSA during the general biological survey and two sensitive wildlife species, the Cooper's hawk (*Accipiter cooperii*) and the California horned lark (*Eremophila alpestris actia*), were observed within the BSA during the general biological survey. In addition, the literature review and field survey concluded that habitat conditions within the BSA create a moderate to high potential for two listed and six sensitive wildlife species to occur. The project is not anticipated to have significant impacts on biological resources. For those resources that may potentially be impacted by this project, mitigation measures **BR-1** through **BR-7** (see Section 3.4 for Biological Resources) would be implemented to reduce potential impacts below the level of significance.

Section 3.5, Cultural Resources, concluded that it is very unlikely for cultural resources to be adversely affected by this project since the site has been continuously used as farmland since the early 20th Century. Additionally, with highly disturbed soils on-site, the potential for affecting cultural resources is highly unlikely. However, due to the areas proximity to other identified cultural resources within the APE, there may be potential for discovering unknown buried cultural resources during ground disturbance activities. Hence, in the unlikely event that buried cultural resources are discovered, incorporation of mitigation measures **CR-1** and **CR-2** (see Section 3.5 for Cultural Resources) would reduce potential impacts to less than significant levels. Therefore, with implementation of the recommended mitigation measures, the project is not anticipated to eliminate important examples of major periods in California history or prehistory.

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

Less than Significant with Mitigation Incorporated

As previously mentioned in Section 3.18 (a), the project site is located along major transportation corridors that include State Route 71 and Chino Hills Parkway. The traffic analysis contained in checklist response 3.17 identified 26 cumulative projects within the study area. In the year 2035, plus project condition, seven study intersections would be significantly impacted. Therefore, implementation of mitigation measure **TR-4** through **TR-17** (see Section 3.17 for Transportation/Traffic) would mitigate cumulative impacts to less than significant levels.

[2] Orange County Water District website on Prado Dam, http://www.ocwd.com/Environment/PradoBasin.aspx Accessed August 2014.

Additionally, concurrent and future projects within the jurisdiction of Chino Hills would be under the City's discretionary review and be subject to standard procedures of approval. These projects would be examined on a project-by-project basis to determine the appropriate type of CEQA review process and would be required to provide mitigation measures for their impacts. All projects must also comply with the development and design standards stipulated in the City's Municipal Code. Therefore, with mitigation measures incorporated into the project, impacts that are individually limited but cumulatively considerable would be reduced to less than significant levels.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant with Mitigation Incorporated

The analysis contained in the responses to checklist thresholds 3.1 through 3.17 indicate that all direct and indirect project impacts associated with Air Quality, Biological Resources, Cultural Resources, Geology/Soils, Greenhouse Gas Emissions, and Transportation/Traffic would be mitigated to less than significant levels. Construction and operation of the project would not result in a substantial adverse effect to human health and welfare. Therefore, with mitigation measures incorporated, all impacts previously mentioned would be reduced to less than significant levels.

4.0 REFERENCES

CDFG, 2012. Staff Report on Burrowing Owl Mitigation: California, Natural Resources Agency, Department of Fish and Game. March 7.

Chino Hills, 2008. City of Chino Hills General Plan Parks, Recreation, and Open Space Element: City of Chino Hills, CA.

Chino Hills, 2013. Initial Study for City Chino Hills General Plan Update 13GPA02: City of Chino Hills, Chino Hills, CA. May 22.

Chino Hills, 2014. Draft Program Environmental Impact Study General Plan Update: City of Chino Hills, Chino Hills, CA. July 23.

Cotton/Beland, 1994. City of Chino Hills General Plan: Cotton/Beland/Associates, Inc., Encinitas and Pasadena, CA. September 13.

DOC, 1997. California Agricultural Land Evaluation and Site Assessment (LESA) Model Instruction Manual: California Department of Conservation, Sacramento, CA.

IEUA, 2011. 2010 Urban Water Management Plan: Inland Empire Utilities Agency, Chino, CA. June 1.

Linscott, Law, & Greenspan, 2014. Traffic Study Scope of Work: Linscott, Law & Greenspan Engineers, Irvine, CA. September 29.

NorCal Engineering, 2013. Geotechnical Engineering Investigation for Proposed Fairfield Ranch Development, Chino Hills, California: NorCal Engineering, Los Alamitos, CA. June 24.

PIC Environmental Services, 2014. Phase I Environmental Site Assessment Report Concerning Commercial Property at East of Monte Vista Avenue, East of Fairfield Ranch Road, Southwest of San Antonio Channel: PIC Environmental Services, LA Verne, CA. January 28.

Webb & Associates, 2014. Preliminary Hydrology Study for Fairfield Ranch Commons, City of Chino Hills, San Bernardino County: Albert A. Webb & Associates, Riverside, CA. April 28.

SANBAG, 2007. Congestion Management Program (CMP) for San Bernardino County: San Bernardino Associated Government, San Bernardino, CA. December.

SCAG, 2012. Regional Transportation Plan (2012-2035) Growth Forecast Appendix: Southern California Association of Governments, Los Angeles, CA. April.

SCAG, 2013. Profile of the City of Chino Hills: Southern California Association of Governments, Los Angeles, CA. May.

SCAQMD, 2010. Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15: South Coast Air Quality Management District, Diamond Bar, CA. September 28.

UltraSystems, 2014a. Air Quality Report for Fairfield Ranch Commons Project: UltraSystems Environmnetal, Inc., Irvine, CA. September.

UltraSystems, 2014b. Biological Assessment for Fairfield Ranch Commons Project: UltraSystems Environmnetal, Inc., Irvine, CA. September.

UltraSystems, 2014c. Negative Phase I Pedestrian Cultural Resources Survey Report for Fairfield Ranch Commons Project: UltraSystems Environmental, Inc., Irvine, CA. August 20.

UltraSystems, 2014d. Greenhouse Gas Emissions Report for Fairfield Ranch Commons Project: UltraSystems Environmental, Inc., Irvine, CA. September.

UltraSystems, 2014e. Noise Report for Fairfield Ranch Commons Project: UltraSystems Environmnetal, Inc., Irvine, CA. September.

5.0 LIST OF PREPARERS

5.1 Lead Agency

City of Chino Hills
14000 City Center Drive
Chino Hills, CA 91709

Contact

Jerrod Walters
Senior Planner, Community Development Department

5.2 UltraSystems Environmental, Inc.

Environmental Planning Team

Ken Koch, MS
Associate Principal

Jolee Hui, MCP
Environmental Planner

Lindsey Hashimoto, MURP
Environmental Planner

Jon Rodriguez, MURP
Environmental Analyst

Technical Team

Michael Rogozen, D. Env.
Senior Principal Engineer
Air Quality/GHG/Noise Technical Analysis

Jack Emerson, EIT
Staff Engineer

Amanda Beck
Senior Biologist

Gregory Ziolkowski
GIS Technician

Steve O'Neil
Cultural Resources Manager

Megan Black
Archeological Technician

Subconsultants

Joshua Dunn
Phase I Cultural Resources Survey

LL&G Engineers, Inc.
Traffic Study
Richard Barretto

6.0 MITIGATION MONITORING & REPORTING PROGRAM

The Mitigation Monitoring and Reporting Program (MMRP) has been prepared in conformance with Section 21081.6 of the Public Resources Code and Section 15097 of the California Environmental Quality Act (CEQA) Guidelines, which requires all state and local agencies to establish monitoring or reporting programs whenever approval of a project relies upon a Mitigated Negative Declaration (MND) or an Environmental Impact Report (EIR). The MMRP ensures implementation of the measures being imposed to mitigate or avoid the significant adverse environmental impacts identified through the use of monitoring and reporting. Monitoring is generally an ongoing or periodic process of project oversight; reporting generally consists of a written compliance review that is presented to the decision making body or authorized staff person.

It is the intent of the MMRP to: (1) provide a framework for document implementation of the required mitigation; (2) identify monitoring/reporting responsibility; (3) provide a record of the monitoring/reporting; and (4) ensure compliance with those mitigation measures that are within the responsibility of the City of Chino Hills to implement.

As discussed in the analysis of the Initial Study/MND, impact areas requiring mitigation are:

- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Noise
- Transportation and Traffic

The following table lists impacts, mitigation measures adopted by the City of Chino Hills in connection with approval of the proposed project, responsible and monitoring parties, and the project phase in which the measures are to be implemented.

MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure	Responsible/ Monitoring Party	Monitoring Action/ Implementation Stage
AIR QUALITY			
Threshold 3.3 (b): Earth-moving or ground disturbing activities may produce dust emissions during construction.	**AQ-1**: **Watering of Exposed Areas** Water exposed areas at least twice per day.	Construction Contractor City of Chino Hills - Community Development Department SCAQMD	Field verification/ Grading and construction
Threshold 3.3 (b): Construction activities may produce criteria pollutant emissions above SCAQMD significance thresholds	**AQ-2: EPA-Approved Construction Equipment** All equipment of the following types that are used in project construction will have engines that meet the U.S. Environmental Protection Agency's "Tier 4" emission standards for new off-road, in-use equipment: • Cranes • Generator Sets • Graders • Pavers • Paving Equipment • Rollers • Rubber Tired Dozers • Scrapers • Tractors/Loaders/Backhoes	Construction Contractor City of Chino Hills - Community Development Department SCAQMD	Field verification/ Grading and construction
Threshold 3.3 (b): Increasing housing density and placement of high density	**AQ-3: Use of Project Landscape Equipment** For project landscaping, use electric lawnmowers, leaf blowers and chainsaws at least 50% of the time.	Project Applicant City of Chino	Submittal and review of landscape contract/During

Impact	Mitigation Measure	Responsible/ Monitoring Party	Monitoring Action/ Implementation Stage
residential near existing transit routes would exceed thresholds for project operational emissions.		Hills – Community Services Department – Code Enforcement Division	operational phase
Threshold 3.3 (b): Increasing housing density and placement of high density residential near to existing transit routes would exceed thresholds for project operational emissions.	**AQ-4: No Fireplaces or Hearths** Apartment units will not have fireplaces or hearths.	Project Applicant City of Chino Hills – Community Development Department	Final Plan Check
Threshold 3.3 (b): Increasing housing density and placement of high density residential near to existing transit routes would exceed thresholds for project operational emissions.	**AQ-5: 100% Reclaimed Water for Irrigation** Use 100% reclaimed water for all irrigation.	Project Applicant City of Chino Hills – Community Development Department Inland Empire Utilities Agency	Final Plan Check
Threshold 3.3 (e): The light industrial portion of the project could have odor-	**AQ-6: Odor Disclosure Relating to Business Park** The owner and/or manager of the apartment units will provide full disclosure to prospective tenants that the project is adjacent to light industrial land uses and that tenants may perceive unpleasant odors on	Project Applicant City of Chino	Preparation of disclosure documents/ Prior to issuance

Impact	Mitigation Measure	Responsible/ Monitoring Party	Monitoring Action/ Implementation Stage
producing diesel truck traffic and manufacturing processes.	certain days. The disclosure will be both oral and written. The form and content of the disclosure will be submitted to the City for approval prior to Certificate of Occupancy. The disclosure will contain the current phone number and web address for the SCAQMD odor complaint system. The disclosure, at the owner and/or manager's option, may contain data on historical wind patterns and descriptions of manufacturing processes occurring at the light industrial properties.	Hills Community Development Department	of Certificate of Occupancy
Threshold 3.3 (e): The wastewater treatment plant is within 500 feet of the locations of future apartment buildings.	**AQ-7: Odor Disclosure Relating to Wastewater Treatment Plant** The owner and/or manager of the apartment units will provide full disclosure to prospective tenants that the project is within 500 feet of a wastewater treatment plant and that tenants may perceive unpleasant odors on certain days. The disclosure will be both oral and written. The form and content of the disclosure will be submitted to the City for approval prior to Certificate of Occupancy. The disclosure will contain the current phone number and web address for the SCAQMD odor complaint system. The disclosure, at the owner and/or manager's option, may contain data on historical wind patterns.	Project Applicant City of Chino Hills - Community Development Department	Preparation of disclosure documents/ Prior to issuance of Certificate of Occupancy
BIOLOGICAL RESOURCES			
Threshold 3.4 (a): Construction activities may impact breeding birds and active nests protected by Migratory Bird Treaty Act (MBTA) and California Fish and Game Code	**BR-1: Pre-Construction Breeding Bird Survey** To be in compliance with the MBTA and the California Fish and Game Code, and to avoid impacts or take of migratory non-game breeding birds, their nests, young, and eggs, the following measures will be implemented. These measures will help to reduce direct and indirect impacts caused by construction on migratory non-game breeding birds to less than significant levels. • Project activities that will remove or disturb potential nest sites will be scheduled outside the breeding bird season to avoid potential direct impacts on migratory non-game breeding birds protected by the MBTA and Fish and Game Code. The raptor and breeding bird	Construction Contractor City of Chino Hills - Community Development Department CDFW/USFWS	Receipt and review of survey results/ Prior to grading or construction

Impact	Mitigation Measure	Responsible/ Monitoring Party	Monitoring Action/ Implementation Stage
	nesting season is typically from January 31 through September 15, but can vary slightly from year to year, usually depending on weather conditions. Removing all physical features that could potentially serve as nest sites will also help to prevent birds from nesting within the project site during the breeding season and during construction activities. • If project activities cannot be avoided during January 31 through September 15, a qualified biologist will conduct a pre-construction breeding bird survey for breeding birds and active nests or potential nesting sites within the limits of project disturbance. The survey(s) will be conducted at least seven days prior to the onset of scheduled activities, such as mobilization and staging. It will end no more than three days prior to vegetation, substrate, and structure removal and/or disturbance. • If no breeding birds or active nests are observed during the pre-construction survey(s) or they are observed and will not be impacted, project activities may begin and no further mitigation will be required. • If a breeding bird territory or an active bird nest is located during the pre-construction survey(s) and will potentially be impacted, the site will be mapped with a Global Positioning System (GPS) unit and on engineering drawings and a no-activity buffer zone will be marked (fencing, stakes, flagging, orange snow fencing, etc.) a minimum of 100 feet in all directions or 500 feet in all directions for listed bird species and all raptors. The biologist will determine the appropriate buffer size based on the type of activities planned near the nest and the type of bird that created the nest. Some bird species are more tolerant than others of noise and activities occurring near their nest. This no-activity buffer zone will not be disturbed until a qualified		

Impact	Mitigation Measure	Responsible/ Monitoring Party	Monitoring Action/ Implementation Stage
	biologist has determined that the nest is inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young will no longer be impacted by project activities. Periodic monitoring by a biologist will be performed to determine when nesting is complete. Once the nesting cycle has finished, project activities may begin within the buffer zone. • If listed bird species, such as the least Bell's vireo, are observed within the project site during the pre-construction surveys, the biologist will immediately map the area and notify the appropriate resource agency to determine suitable protection measures and/or mitigation measures and to determine if additional surveys or focused protocol surveys are necessary. Project activities may begin within the area only when concurrence is received from the appropriate resource agency. • Birds or their active nests will not be disturbed, captured, handled or moved. Active nests cannot be removed or disturbed; however nests can be removed or disturbed if determined inactive by a qualified biologist.		
Threshold 3.4 (a): The project site has moderate potential for burrowing owl to occur. Construction activities may impact burrowing owls, their nests, young, and eggs.	**BR-2: Pre-Construction Burrowing Owl Surveys** To be in compliance with the MBTA and Fish and Game Codes, and to avoid impacts or take of burrowing owls, their nests, young, and eggs, a qualified biologist will conduct a pre-construction burrowing owl survey (Take Avoidance Surveys, page 29) within the project site in accordance with the *Staff Report on Burrowing Owl Mitigation* (*Staff Report*) (CDFG, 2012) no less than 14 days prior to initiating ground disturbance activities. Following the completion of the pre-construction burrowing owl survey, the biologist will prepare a letter report in accordance with the Survey Report Guidelines described in the *Staff Report* (page 30) summarizing the results of the survey. The report will be submitted to CDFW prior to initiating any ground disturbance activities.	Construction Contractor City of Chino Hills - Community Development Department CDFW	Receipt and review of survey results / Prior to grading or construction.

Impact	Mitigation Measure	Responsible/ Monitoring Party	Monitoring Action/ Implementation Stage
	If no burrowing owls or active burrow(s) (signs of which may include: molted feathers, cast pellets, prey remains, eggshell fragments, or excrement at or near a burrow entrance or perch site) are observed during the pre-construction survey and concurrence is received from CDFW, project activities may begin and no further mitigation will be required. If burrowing owls or active burrow(s) are observed during the pre-construction survey, the biologist will contact CDFW and conduct an impact assessment in accordance with the *Staff Report* to assist in the development of avoidance, minimization, and mitigation measures, prior to commencing project activities. If burrowing owls are present then the ultimate disposition is a negotiation with CDFW to determine the locations for active relocation.		
Threshold 3.4 (a) – (d): Construction activities such as grading, vegetation removal, other ground disturbing activities and habitat alternating activities may impact on-site and nearby sensitive wildlife, habitats, and jurisdictional waters.	**BR-3: Project Limits and Designated Areas** To avoid impacts on nearby sensitive biological resources, the applicant will implement the following measures prior to project construction and commencement of any ground-disturbing activities or vegetation removal. • Specifications for the project boundary, limits of grading, project related parking, storage areas, laydown sites, and equipment storage areas will be mapped and clearly marked in the field with temporary fencing, signs, stakes, flags, rope, cord, or other appropriate markers. All markers will be maintained until the completion of activities in that area. • To minimize the amount of disturbance, the construction/laydown areas, parking areas, staging areas, storage areas, spoil areas, and equipment access areas will be restricted to designated areas.	Construction Contractor City of Chino Hills - Community Development Department CDFW	Mark limits of disturbance/ Prior to ground disturbing activities or vegetation removal Construction Phase

Impact	Mitigation Measure	Responsible/ Monitoring Party	Monitoring Action/ Implementation Stage
	Designated areas will comprise existing disturbed areas (parking lots, access roads, graded areas, etc.) to the extent possible. • Project related work limits will be defined and work crews will be restricted to designated work areas. Disturbance beyond the actual construction zone is prohibited without site-specific surveys. If sensitive biological resources are detected in the area to be impacted, then appropriate measures will be implemented to avoid impacts (i.e., flag and avoid, erect orange snow fencing, biological monitor present during work, etc.). However, if avoidance is not possible and the sensitive biological resources will be directly impacted by project activities, the biologist will mark and/or stake the site(s) and map the individuals on an aerial map and with a GPS unit. The biologist will then contact the appropriate resource agencies to develop additional avoidance, minimization and/or mitigation measures prior to commencing project activities. • A 50-foot setback will be maintained from the edge of all jurisdictional areas. The setback zone will be clearly marked in the field. • Existing roads and trails will be utilized wherever possible to avoid unnecessary impacts. Project-related vehicle traffic will be restricted to established roads, staging areas, and parking areas. Travel outside construction zones is prohibited.		
Threshold 3.4 (a): Construction workers or personnel may inadvertently impact sensitive and protected biological	**BR-4: Worker Environmental Awareness Program (WEAP)** If special-status wildlife species are observed and determined present within the project site during the pre-construction breeding bird or burrowing owl surveys, then a qualified biologist will prepare and conduct a Worker Environmental Awareness Program (WEAP) that will describe the biological constraints of the project prior to project	Construction Contractor City of Chino Hills - Community	Prepare and submit WEAP/Prior to construction activities if sensitive species

Impact	Mitigation Measure	Responsible/ Monitoring Party	Monitoring Action/ Implementation Stage
resources.	implementation and construction activities. All on-site personnel who will work within the project site will attend the WEAP prior to performing any work. The WEAP will be administered to all on-site personnel regarding the results of the pre-construction surveys, sensitive biological resources potentially present on the site, restrictions, avoidance, and protection measures, mitigation measures (if any), and individual responsibilities associated with the project. Training materials will be language-appropriate for all construction personnel. Upon completion of the WEAP, workers will sign a form stating they attended the program, understand all protection measures, and will abide all the rules of the WEAP. A record of all trained personnel will be kept with the construction foreman on-site. If new construction personnel are added to the project later, the construction foreman will ensure that new personnel receive training before they start working. The biologist will prepare and provide written hard copies of the WEAP and photos of the sensitive biological resources to the construction foreman.	Development Department CDFW	identified.
Threshold 3.4 (a): Two listed bird species, least Bell's vireo (*Vireo bellii pusillus*) and southwestern willow flycatcher (*Empidonax traillii extimus*), have no potential to occur within the project site boundary and a moderate to high potential to occur within the black willow thicket located	**BR-5: Biological Monitor** If special-status wildlife species are observed and determined present within the project site during the pre-construction breeding bird or burrowing owl surveys, then a biological monitor will be on site to monitor activities that result in the clearing or grading of areas known to contain sensitive biological resources to ensure that impacts do not exceed the limits of grading and to minimize the likelihood of inadvertent impacts on listed species and other wildlife species. The biological monitor will ensure that all biological mitigation measures, best management practices (BMPs), avoidance, and protection measures and mitigation measures described in the relevant project permits and reports are in place and are adhered to. Monitoring will cease when the sensitive habitats have been cleared or impacted. The biological monitor will have the authority to halt all construction	Construction Contractor City of Chino Hills - Community Development Department CDFW/USFWS	Submittal of monitoring reports if needed/ During construction phase

Impact	Mitigation Measure	Responsible/ Monitoring Party	Monitoring Action/ Implementation Stage
in Chino Creek outside of the project footprint, but within the Biological Study Area.	activities and all non-emergency actions if listed species are identified and will be directly impacted. The monitor will notify the appropriate resource agency and consult if needed. If needed and possible, the monitoring biologist will relocate the individual outside of the work area where it will not be harmed. Work can continue at the location if he applicant and the consulted resource agency determine that the activity will not result in impacts on the species. The appropriate agencies will be notified if a dead or injured protected species is located within the project site. Written notification must be made within 15 days of the date and time of the finding or incident (if known) and must include: location of the carcass, a photograph, cause of death (if known), and other pertinent information.		
Threshold 3.4 (a): The Biological Study Area has moderate to high occurrence potential for sensitive and listed species. Construction-related activities may cause direct and indirect impacts to breeding birds, listed wildlife species, and introduce non-native invasive vegetation.	**BR-6: General Vegetation and Wildlife Avoidance and Protection** The project site contains habitats which can support wildlife species. The applicant will implement the following measures to protect vegetation and wildlife, to the extent practical. • Vegetation will only be disturbed and/or removed immediately before grading or trimming activities in order to reduce erosion, sedimentation, and/or siltation into biologically sensitive areas. Cleared or trimmed vegetation and woody debris will be disposed of in a legal manner at an approved disposal site. Cleared or trimmed non-native, invasive vegetation will be disposed of in a legal manner at an approved disposal site as soon as possible to prevent regrowth and the spread of weeds. • Vehicles and equipment will be free of caked mud or debris prior to entering the project site to avoid the introduction of new invasive weedy plant species.	Construction Contractor City of Chino Hills - Community Development Department CDFW	Field Verification/ During construction phase

Impact	Mitigation Measure	Responsible/ Monitoring Party	Monitoring Action/ Implementation Stage
	• To minimize construction-related mortalities of nocturnally active species such as mammals and snakes, it is recommended that all work be conducted during daylight hours. Night-time work (and use of artificial lighting) will not be permitted unless specifically authorized. If required, night lighting will be directed away from the preserved open space areas to protect species from direct night lighting. All unnecessary lights will be turned off at night to avoid attracting wildlife such as insects, migratory birds, and bats. • If any wildlife is encountered during the course of project activities, said wildlife will be allowed to freely leave the area unharmed. • Wildlife will not be disturbed, captured, harassed, or handled. Fishing will be prohibited at the project site. Animal nests, burrows and dens will not be disturbed without prior survey and authorization from a qualified biologist. • Active nests cannot be removed or disturbed. Nests can be removed or disturbed if determined inactive by a qualified biologist. • To avoid impacts on wildlife, the applicant will comply with all litter and pollution laws and will institute a litter control program throughout project construction. All contractors, subcontractors, and employees will also obey these laws. Trash and food items will be disposed of promptly in predator-proof containers with resealing lids. These covered trash receptacles will be placed at each designated work site and the contents will be properly disposed at least once a week. Trash removal will reduce the attractiveness of the area to opportunistic predators such as common ravens (*Corvus corax*), coyotes (*Canis latrans*), northern raccoons (*Procyon lotor*), and Virginia opossums (*Didelphis virginiana*).		

Impact	Mitigation Measure	Responsible/ Monitoring Party	Monitoring Action/ Implementation Stage
	• Contractors, subcontractors, employees, and site visitors will be prohibited from feeding wildlife and collecting plants and wildlife. • Disturbance near ponded water will be limited during the rainy season. It could serve as potential habitat for amphibians and sensitive invertebrates.		
Threshold 3.4 (c): Impacts to plant and animal species may occur due to the creation of fugitive dust and quality of stormwater leaving the project site during construction.	**BR-7: Construction BMPs** Project work crews will be directed to use construction BMPs where applicable. These measures will address the potential for fugitive dust and quality of stormwater runoff leaving the project site. The BMPs to be used must be identified prior to construction and incorporated into the construction operations.	Construction Contractor City of Chino Hills - Community Development Department	Field verification/ Prior to and during construction
Threshold 3.4 (d): The project site is adjacent to the Chino Creek, which could potentially serve as a wildlife corridor.	**BR-8: Wildlife Corridors and Native Open Space Mitigation** The following measures are recommended, to the extent feasible, to help minimize the potential degradation of native open space habitats and areas utilized as wildlife corridors due to project development. • Perimeter fencing/walls constructed of solid material will be installed along the back of the residential portion of the project that is located adjacent to the Chino Creek to help serve as an effective barrier to keep out domestic animals. • Street and residential lighting will be designed to shield light spillage into the creek to protect wildlife species within the area. The overall landscaping will ensure	Designer Construction Contractor City of Chino Hills - Community Development Department	Submittal and review of site plan/ Project design review
CULTURAL RESOURCES			

Impact	Mitigation Measure	Responsible/ Monitoring Party	Monitoring Action/ Implementation Stage
Threshold 3.5 (b) – (d): Although there are no known archeological or Native American resources on the project site, the proposed project has the potential to uncover resources during ground-disturbing activity.	**CR-1: Cultural Monitoring** A qualified archaeologist or Native American cultural monitor, whose credentials are reviewed and found acceptable by the City, shall be present to observe rough grading for site development. If a buried cultural resource is discovered during grading activities, all work in that area will be immediately halted within 50 feet of the discovery and/or diverted until a qualified archaeologist can evaluate the nature and significance of the find. Recommendations on the proper course of action will be made to the City Community Development Director or his/her designee and archaeological monitor. These recommendations may include test excavations to determine the extent and significance of the find; additional documentation of the find; or data recovery excavation if not other options are feasible. If the find is determined to be a historical resource or a unique archeological resource, the applicant shall implement the recommendations of the archeologist in order to mitigate impacts to the find. The mitigation measures shall be designed and implemented in accordance with applicable provisions of Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4	Construction Contractor City of Chino Hills - Community Development Department	Field verification/ During construction phase
Threshold 3.5 (d): Although there are no known human remains on the project site, the proposed project has the potential to uncover human remains during ground-disturbing activity.	**CR-2: Discovery of Human Remains** If human remains are encountered during excavations associated with this project, work will halt and the County Coroner will be notified (Section 5097.98 of the Public Resources Code). The Coroner will determine whether the remains are of forensic interest. If the coroner, with the aid of the supervising archaeologist, determines that the remains are prehistoric, they will contact the NAHC. The NAHC will be responsible for designating the most likely descendant (MLD), who will be responsible for the ultimate disposition of the remains, as required by Section 7050.5 of the California Health and Safety Code. The MLD will make recommendations within 24 hours of their notification by the NAHC. These recommendations may include scientific removal and	Construction Contractor City of Chino Hills – Community Development Department County of San Bernardino Sheriff's	Field Verification/ During construction phase

Impact	Mitigation Measure	Responsible/ Monitoring Party	Monitoring Action/ Implementation Stage
	nondestructive analysis of human remains and items associated with Native American burials (Section 7050.5 of the Health and Safety Code).	Department/ Coroner Division	
GEOLOGY AND SOILS			
Threshold 3.6 (c) & (d): Existing fill soils, up to 1.5 feet, primarily consist of silty, clayey, and poorly graded sands with occasional sand clay layers that are susceptible to differential settlement. On-site fill compaction does not meet the minimum 90 percent of the maximum dry density commonly used for slope stability and structures. The project site contains expansive soil; therefore, structures may be subject to movement and	**GS-1: Site Preparation and Grading** Site preparation, grading, and construction of the proposed project shall adhere to the recommendations set forth in the Geotechnical Engineering Investigation prepared by NorCal Engineering, as applicable. **GS-2: Certified Soils Engineer** A certified soils engineer shall be retained for consultation during design and construction phases. The certified soils engineer shall also provide construction monitoring for necessary soil testing during construction to ensure compliance with the Geotechnical Engineering Investigation and to provide site specific guidance as subsurface materials are encountered.	Construction Contractor City of Chino Hills – Community Development Department City of Chino Hills – Engineering Department	Field Verification/ During grading, and construction phase

Impact	Mitigation Measure	Responsible/ Monitoring Party	Monitoring Action/ Implementation Stage
hairline cracking of walls and slabs.			
GREENHOUSE GAS EMISSIONS			
Threshold 3.7 (b): Greenhouse gas emissions during operation	**GG-1: Use of Project Landscape Equipment** *(Same as AQ-3)* For project landscaping, use electric lawnmowers, leaf blowers and chainsaws at least 50% of the time.	Project Applicant City of Chino Hills – Community Services Department - Code Enforcement Division	Submittal and review of landscape contract/ During operational phase
Threshold 3.7 (b): Greenhouse gas emissions during operation	**GG-2: No Fireplaces or Hearths** *(Same as AQ-4)* Apartment units will not have fireplaces or hearths.	Project Applicant City of Chino Hills – Community Development Department	Final Plan Check
Threshold 3.7 (b): Greenhouse gas emissions during operation	**GG-3: 100% Reclaimed Water for Irrigation** *(Same as AQ-5)* Use 100% reclaimed water for all irrigation.	Project Applicant City of Chino Hills – Community Development Department Inland Empire	Final Plan Check/ During operational phase

Impact	Mitigation Measure	Responsible/ Monitoring Party	Monitoring Action/ Implementation Stage
		Utilities Agency	
NOISE			
Threshold 3.12 (a) & (d): Construction activities may produce novel levels that exceed established standards.	**NO-1**: **Construction Hours** All construction activities are to be limited to between the hours of 7:00 AM to 7:00 PM on weekdays and 8:00 AM to 6:00 PM on Saturdays. No construction activities will take place at any time on Sunday or a Federal holiday.	Construction Contractor City of Chino Hills – Community Development Department	Field verification/ During construction phase
Threshold 3.12 (a) & (d): Construction activities may produce novel levels that exceed established standards.	**NO-2: Operating Construction Equipment** The construction contractor will ensure that all construction equipment, fixed or mobile, is properly operating (tuned-up) and that mufflers are working adequately.	Construction Contractor City of Chino Hills – Community Development Department	Field verification/ During construction phase
Threshold 3.12 (a) & (d): Construction activities may produce novel levels that exceed established standards.	**NO-3: Local Resident Complaints** If the City of Chino Hills receives complaints from local residents about any construction noise that will at that point be scheduled to continue for five or more days, the City will conduct ambient sampling at the exterior of residence(s) to determine the increase in exposure during construction.	Construction Contractor City of Chino Hills – Community Development Department	Field verification/ During construction phase
Threshold 3.12 (a) & (d): Construction activities may produce novel levels that	**NO-4: Temporary Shields and Noise Barriers** If the increase in residential exposure is 10 dBA L_{eq} or more, then the construction contractor will provide temporary shields and noise barriers, including sound blankets, between the areas of active	Construction Contractor City of Chino	Field verification/ During construction

Impact	Mitigation Measure	Responsible/ Monitoring Party	Monitoring Action/ Implementation Stage
exceed established standards.	construction and sensitive receivers. Noise barriers typically reduce noise levels by up to 10 dBA.	Hills - Community Development Department	phase
Threshold 3.12 (a) & (d): Construction activities may produce novel levels that exceed established standards.	**NO-5: Short-term Noise Exposure Measuring** If mitigation measure NO-4 is implemented, the construction contractor will measure short-term noise exposures outside the barrier and at the exterior of the residence(s) at least twice daily to determine whether the barrier should remain in place.	Construction Contractor City of Chino Hills - Community Development Department	Field verification/ During construction phase
Threshold 3.12 (a): Noise modeling indicates that the project operation would result in exposure to noise levels exceeding the General Plan guidelines.	**NO-6**: **Residential Windows** All residential windows with a direct line of sight to Monte Vista Avenue or Fairfield Ranch Road will be rated for a sound transmission class (STC) of 30 or higher.	City of Chino Hills – Community Development Department	Site plan review and field verification/ During construction phase
TRANSPORTATION AND TRAFFIC			
Threshold 3.16 (a) & (b): Traffic associated with the proposed Project would affect two key study intersections (i.e., Monte Vista Ave./Chino Hills Pkwy and Central	**TR-1: Monte Vista Avenue (S) at Chino Hills Parkway** Install a traffic signal and design for three-phase operation with protected westbound left-turn phasing on Chino Hills Parkway. Provide crosswalks on the south and west legs. Widen Monte Vista Avenue and restripe the westbound approach to provide a separate right-turn lane. Modify existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Hills Standard Design Guidelines and/or California Manual on Uniform Traffic Control Devices (CA MUTCD). Implementation of this improvement will require the	Construction Contractor City of Chino Hills - Engineering Department	Submittal of receipt for payment of fair share or submit improvement plans for review/ Prior to issuance of building permit.

Impact	Mitigation Measure	Responsible/ Monitoring Party	Monitoring Action/ Implementation Stage
Ave./Fairfield Ranch Rd.) and contribute to the adverse service level at another location (i.e., Central Avenue/El Prado Rd.) that is currently operating at an unacceptable LOS.	approval of the City of Chino Hills. **TR-2: Central Avenue at El Prado Road** Modify existing traffic signal and install a northbound right-turn overlap phase on Central Avenue. Install "No U-turn" signs for westbound traffic on El Prado Road. Implementation of this improvement will require the approval of the City of Chino. **TR-3: Central Avenue at Fairfield Ranch Road** Remove the existing crosswalk across the south leg of intersection on Central Avenue and install a crosswalk across the west leg of the intersection on Fairfield Ranch Road. Modify the existing traffic signal and existing striping accordingly and install all necessary striping, pavement markings, and signs per the City of Chino Hills Standard Design Guidelines and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino Hills.		
Threshold 3.16 (a) & (b): The results of the traffic impact analysis under the Year 2016 plus Project condition indicates that the proposed project will have a cumulative impact at the seven (7) key study locations and operate at a level of service that conflict with performance targets outlined in Circulation	**TR-4: Pipeline Avenue at Chino Hills Parkway** Widen and/or restripe the southbound approach on Pipeline Avenue to provide a second left-turn lane. A preliminary assessment of existing conditions indicates that this improvement could be accomplished via the restriping of Pipeline Avenue, but could require widening within the existing right-of-way to provide additional pavement (via narrowing of the existing sidewalks) to meet the City of Chino Hills design criteria. Modify existing traffic signal and existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Hills Standard Design Guidelines and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino Hills and/or Caltrans. **TR-5: Monte Vista Avenue (S) at Chino Hills Parkway** (*Same as recommended TR-1 for Existing Plus Project Recommended*	Construction Contractor City of Chino Hills – Engineering Department Caltrans-District 8	Submittal of receipt for payment of fair share or submit improvement plans for review/ Prior to issuance of building permit.

Impact	Mitigation Measure	Responsible/ Monitoring Party	Monitoring Action/ Implementation Stage
Element of General Plan and San Bernardino CMP.	*Improvements*) Install a traffic signal and design for three-phase operation with protected westbound left-turn phasing on Chino Hills Parkway. Provide crosswalks on the south and west legs. Widen Monte Vista Avenue and restripe the westbound approach to provide a separate right-turn lane. Modify existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Hills Standard Design Guidelines and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino Hills. **TR-6: Central Avenue at Chino Hills Parkway** Remove the existing crosswalk across the north leg of intersection on Central Avenue and install a crosswalk across the south leg of the intersection on Central Avenue. Modify the existing traffic signal and existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Hills Standard Design Guidelines and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino Hills. **TR-7: Central Avenue at El Prado Road** *(Same as recommended TR-2 for Existing Plus Project Recommended Improvements)* Modify existing traffic signal and install a northbound right turn overlap phase on Central Avenue. Install "No U-turn" signs for westbound traffic on El Prado Road. Implementation of this improvement will require the approval of the City of Chino. **TR-8: Central Avenue at Fairfield Ranch Road** Restripe the northbound approach on Central Avenue to provide a second left-turn lane. A preliminary assessment of existing conditions indicates that this improvement could be accomplished via the restriping of Central Avenue. Remove the existing crosswalk across the south leg of		

Impact	Mitigation Measure	Responsible/ Monitoring Party	Monitoring Action/ Implementation Stage
	intersection on Central Avenue and install a crosswalk across the west leg of the intersection on Fairfield Ranch Road. Modify the existing traffic signal and existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Hills Standard Design Guidelines and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino Hills. **TR-9: SR-71 Northbound Ramps at Central Avenue** Widen the northbound off-ramp to provide an exclusive northbound right-turn lane and maintain the existing northbound left-turn lane and northbound shared left-turn/right-turn lane. Modify existing traffic signal and existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Hills Standard Design Guidelines, Caltrans requirements and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino Hills and/or Caltrans. **TR-10: SR-71 Southbound Ramps at Soquel Canyon Parkway** Widen the southbound off-ramp to provide an exclusive southbound right-turn lane and maintain the existing southbound left-turn lane and southbound shared left-turn/right-turn lane. Modify existing traffic signal and existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Hills Standard Design Guidelines, Caltrans requirements and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino Hills and/or Caltrans.		
Threshold 3.16 (a) & (b): The results of the traffic impact analysis under the Year 2035 plus Project condition	**TR-11: Pipeline Avenue at Chino Hills Parkway** Widen and/or restripe the southbound approach on Pipeline Avenue to provide a second left-turn lane. A preliminary assessment of existing conditions indicates that this improvement could be accomplished via the restriping of Pipeline Avenue, but could require widening within the	Construction Contractor City of Chino – Engineering	Submittal of receipt for payment of fair share or submit improvement

Impact	Mitigation Measure	Responsible/ Monitoring Party	Monitoring Action/ Implementation Stage
indicates that the proposed project will have a cumulative impact at seven (7) of the seventeen (17) key study locations and operate at a level of service that conflict with performance targets outlined in Circulation Element of General Plan and San Bernardino CMP.	existing right of way to provide additional pavement (via narrowing of the existing sidewalks) to meet the City of Chino Hills design criteria. Restripe the westbound approach on Chino Hills Parkway Avenue to provide a second left-turn lane. A preliminary assessment of existing conditions indicates that this improvement could be accomplished via the restriping of Chino Hills Parkway. Modify existing traffic signal and existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Hills Standard Design Guidelines and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino Hills and/or Caltrans. **TR-12: Monte Vista Avenue (S) at Chino Hills Parkway** *(Same as recommended TR-1 for Existing Plus Project Recommended Improvements)* Install a traffic signal and design for three-phase operation with protected westbound left-turn phasing on Chino Hills Parkway. Provide crosswalks on the south and west legs. Widen Monte Vista Avenue and restripe the northbound approach to provide a separate right-turn lane. Modify existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Hills Standard Design Guidelines and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino Hills. **TR-13: Central Avenue at Chino Hills Parkway** *(Same as recommended TR-6 for Year 2016 Recommended Improvements)* Remove the existing crosswalk across the north leg of intersection on Central Avenue and install a crosswalk across the south leg of the intersection on Central Avenue. Modify the existing traffic signal and existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Hills Standard Design Guidelines and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino Hills.	Department Caltrans – District 8	plans for review/ Prior to issuance of building permit.

Impact	Mitigation Measure	Responsible/ Monitoring Party	Monitoring Action/ Implementation Stage
	TR-14: Central Avenue at El Prado Road Restripe the southbound approach on Central Avenue to provide a second left-turn lane. A preliminary assessment of existing conditions indicates that this improvement could be accomplished via the restriping of Central Avenue. Modify existing traffic signal and install a northbound right-turn overlap phase on Central Avenue. Install "No U-turn" signs for westbound traffic on El Prado Road. Implementation of this improvement will require the approval of the City of Chino. **TR-15: Central Avenue at Fairfield Ranch Road** *(Same as recommended TR-8 for Year 2016 Recommended Improvements)* Widen and/or restripe the northbound approach on Central Avenue to provide a second left-turn lane. A preliminary assessment of existing conditions indicates that this improvement could be accomplished via the restriping of Central Avenue. Remove the existing crosswalk across the south leg of intersection on Central Avenue and install a crosswalk across the west leg of the intersection on Fairfield Ranch Road. Modify the existing traffic signal and existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Hills Standard Design Guidelines and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino Hills. **TR-16: SR-71 Northbound Ramps at Central Avenue** *(Same as recommended TR-9 for Year 2016 Recommended Improvements)* Widen the northbound off-ramp to provide an exclusive northbound right-turn lane and maintain the existing northbound left-turn lane and northbound shared left-turn/right-turn lane. Modify existing traffic signal and existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Hills Standard Design Guidelines, Caltrans requirements and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino Hills		

Impact	Mitigation Measure	Responsible/ Monitoring Party	Monitoring Action/ Implementation Stage
	and/or Caltrans. **TR-17: Central Avenue at Eucalyptus Avenue** Restripe Central Avenue to provide a third northbound through (approach) lane and a third northbound receiving (departure) lane. A preliminary assessment of existing conditions indicates that this improvement could be accomplished via the restriping of Central Avenue. Modify existing traffic signal and existing striping accordingly and install all necessary striping, pavement markings and signs per the City of Chino Design Guidelines, and/or CA MUTCD. Implementation of this improvement will require the approval of the City of Chino.		

COPIES OF THE APPENDICES ARE AVAILABLE FOR REVIEW AT THE LAFCO OFFICE:

Appendix A – Air Quality

Appendix B – Biological Assessment Report

Appendix C – Cultural Resources Survey

Appendix D – Geotechnical Engineering Investigation

Appendix E – Greenhouse Gas Analysis

Appendix F – Phase I ESA Report

Appendix G – Preliminary Hydrology Study

Appendix H – Noise Technical Study

Appendix I – Traffic Impact Analysis