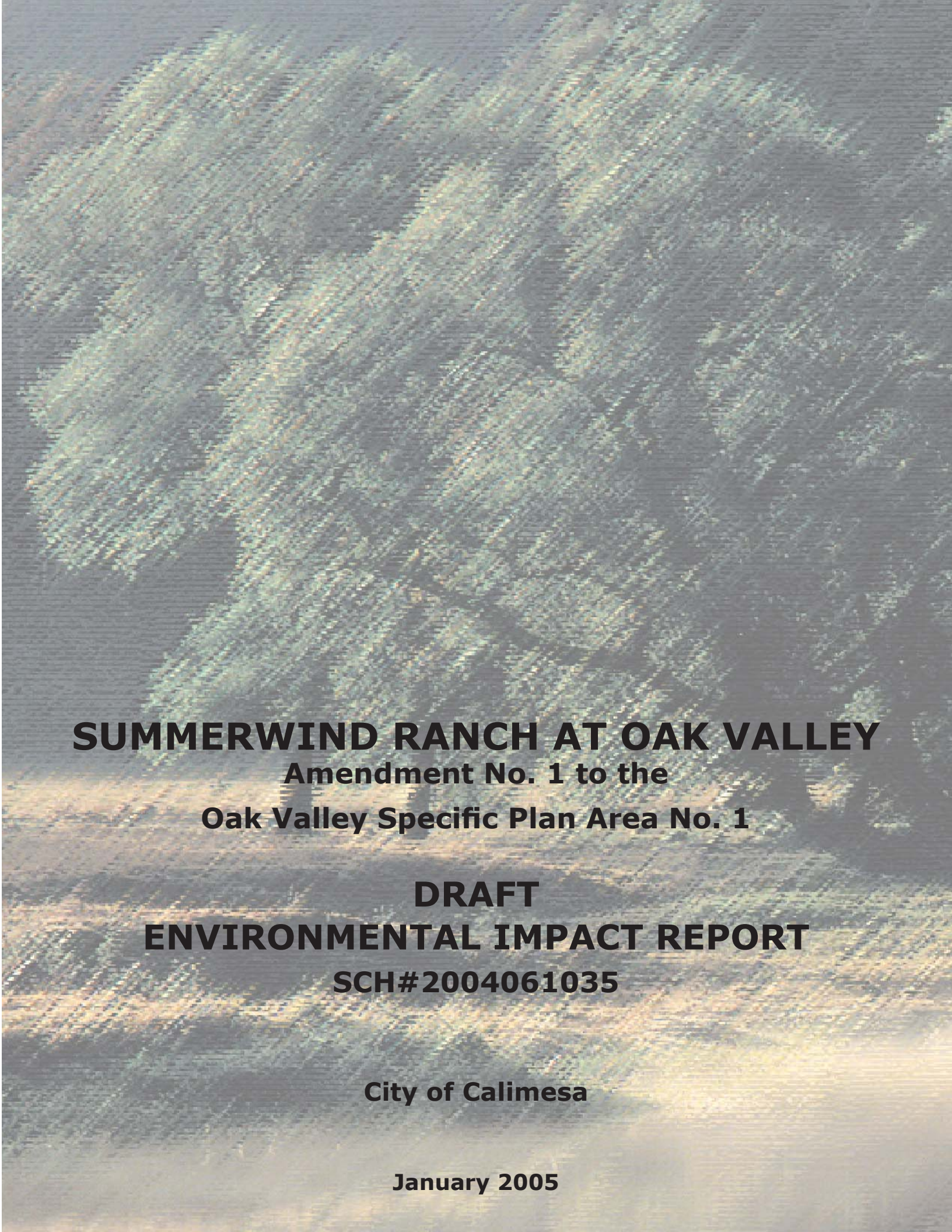

SUMMERWIND RANCH AT OAK VALLEY

Amendment No. 1 to the

Oak Valley Specific Plan Area No. 1

DRAFT
ENVIRONMENTAL IMPACT REPORT

SCH#2004061035

City of Calimesa

January 2005

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ENVIRONMENTAL IMPACT REPORT

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SUMMERWIND RANCH AT OAK VALLEY
Amendment No. 1 to the
Oak Valley Specific Plan Area No. 1

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January 2005

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EXECUTIVE SUMMARY

This Draft Environmental Impact Report (EIR) has been prepared by the City of Calimesa to identify and evaluate potential environmental impacts associated with the Summerwind Ranch at Oak Valley Specific Plan Area No. 1, Amendment No. 1 (i.e., the proposed project). The proposed project is located within a portion of the already approved specific plan area, known as the Oak Valley Specific Plan (SP1). The Specific Plan Area No. 1, Amendment No. 1 (Summerwind Ranch at Oak Valley) contains 2,590.7 acres of land and is located in the western portion of the City of Calimesa (Figures ES-1 and ES-2). With the exception of scattered ranch houses and agricultural/ranching-related structures, the project site is generally undeveloped (Figure ES-3).

ES.1 INTRODUCTION

The Summerwind Ranch at Oak Valley is located in the western portion of the City of Calimesa, west of Interstate 10 (I-10) and south of the Riverside-San Bernardino County line. The site is located northwest of the junction of I-10 and Highway 60, approximately 70 miles east of downtown Los Angeles. The cities of Baumont and Banning are located southeast of the project site, and the cities of Redlands and Yucaipa are located to the north. The proposed project site is surrounded by the San Bernardino Mountains and Crafton Hills to the north and west, and San Jacinto Mountains and San Timoteo Badlands to the east and south.

The site for the proposed Summerwind Ranch at Oak Valley Specific Plan (i.e., Specific Plan Area No. 1) is part of the larger area originally covered by the Oak Valley Specific Plan 216/216A, which consisted of 6,405.5 acres of land along the west side of I-10 to the San Timoteo Wash stretching from what is now the northerly boundary of the City of Calimesa to areas now in the City of Beaumont. The Oak Valley Specific Plan No. 216 was approved, along with an Environmental Impact Report (EIR), on October 6, 1988 by the Riverside County Board of Supervisors, since the City of Calimesa had not incorporated yet. Subsequently, Oak Valley Specific Plan Amendment 216A was approved by the Riverside County Board of Supervisors on May 22, 1990, for Phases 2-5 of the original Oak Valley Specific Plan 216. The proposed development included a planned golf/recreation-oriented master planned community including single-family and multi-family residential dwelling units, commercial, recreational, and community uses; and related infrastructure to be implemented over a 30-year period.

Upon incorporation in December 1990, the City of Calimesa City Council adopted those portions of the Specific Plan 216 and 216A and its accompanying EIR that were situated within the newly incorporated city limits and renamed the Specific Plan as “Oak Valley SP 1”. On August 14, 2001, the County of Riverside Board of Supervisors approved Oak Valley Specific Plan 318 and certified EIR 418 on approximately 1,747.9 acres of the Oak Valley Specific Plan 216 and 216A located between the cities of Beaumont and Calimesa.

This Specific Plan Amendment No. 1 is being proposed in recognition of the environmental sensitivity of the site including the Garden Air Wash. The Specific Plan Amendment is also being proposed to reflect the change in land uses resulting from the purchase of the 358 acres by the Riverside Land Conservancy and future changes that could result should the option be exercised to convert the additional lands for open space purposes.

ES.1.1 PROJECT OBJECTIVES

The City of Calimesa Planning vision and process is sensitive to environmental protection needs, engineering feasibility, market acceptance, economic viability, development phasing, surrounding land uses, and local community goals. In light of these attributes, development and planning goals were established for the proposed amendment, which were supported by an extensive analysis process. The following objectives were created consistent with the project goals.

The City of Calimesa objectives for the proposed development include:

1. Maintain the integrity of the natural environment through the preservation and conservation of open space allowing for connectivity through preservation of viable wildlife corridors and systematic, sensitive planning.

2. Create a well-connected walkable community with an integrated multi-purpose trail system that will allow residents access to a range of recreational uses.

3. Establish an interconnected open space system which provides for diverse trail systems, recreational opportunities, and preservation of open space, sensitive habitat areas, and drainage systems.

4. Promote a jobs-housing balance.

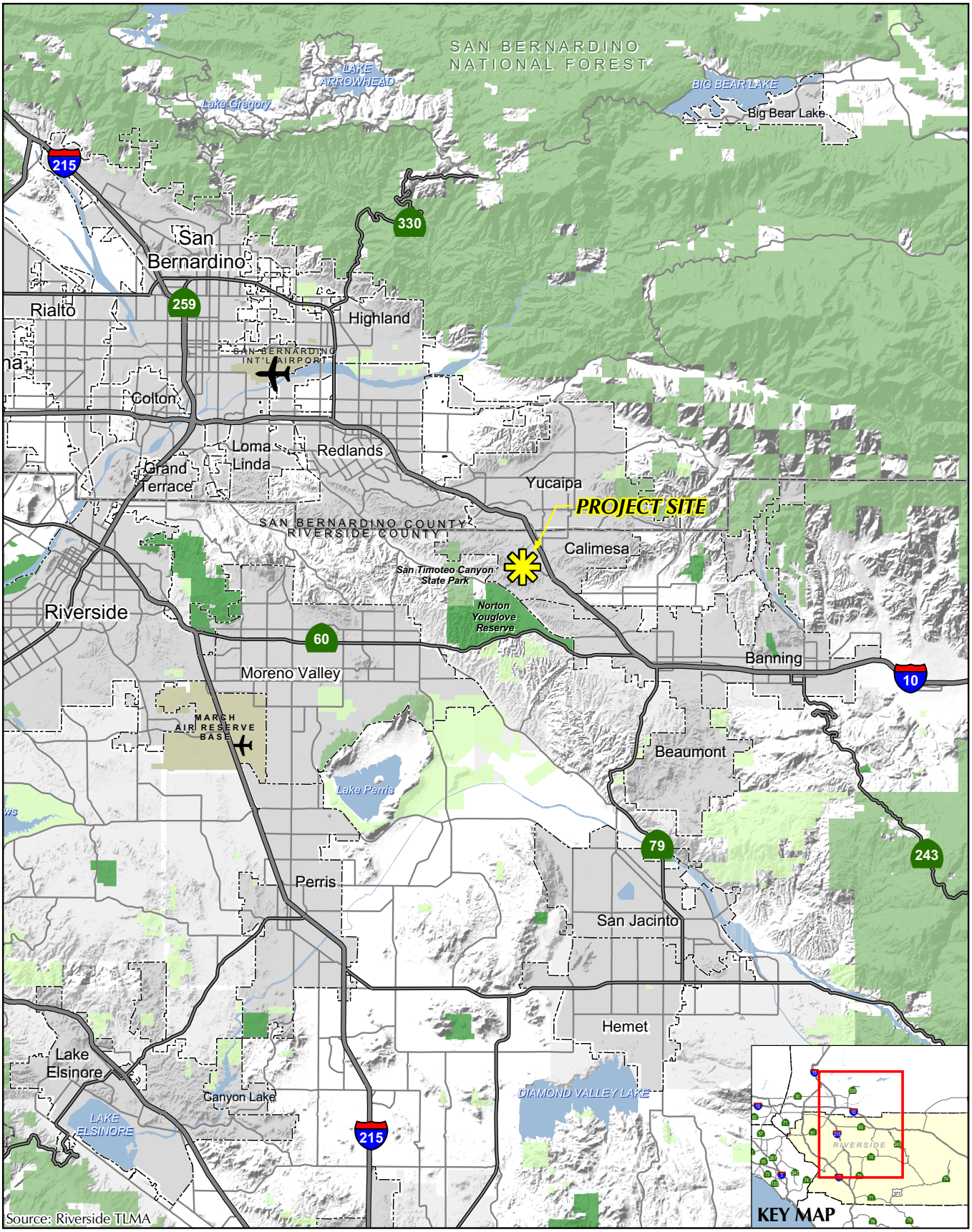
5. Develop land use patterns that generally conserve energy.

6. Create a strong sense of place.

7. Provide adequate utility, drainage, fire protection, and school facilities to serve the needs of all uses within the Specific Plan area.

8. Provide for safe and efficient vehicular, pedestrian, and bicycle movement within and through the Specific Plan area, while protecting the integrity of the Planned Community.

9. Anticipate marketing needs and public demand by providing varying housing types, styles, and sizes that will be marketable within the economic profile of the City and surrounding communities.



EDAW | N.T.S.

Figure ES-1
Regional Location

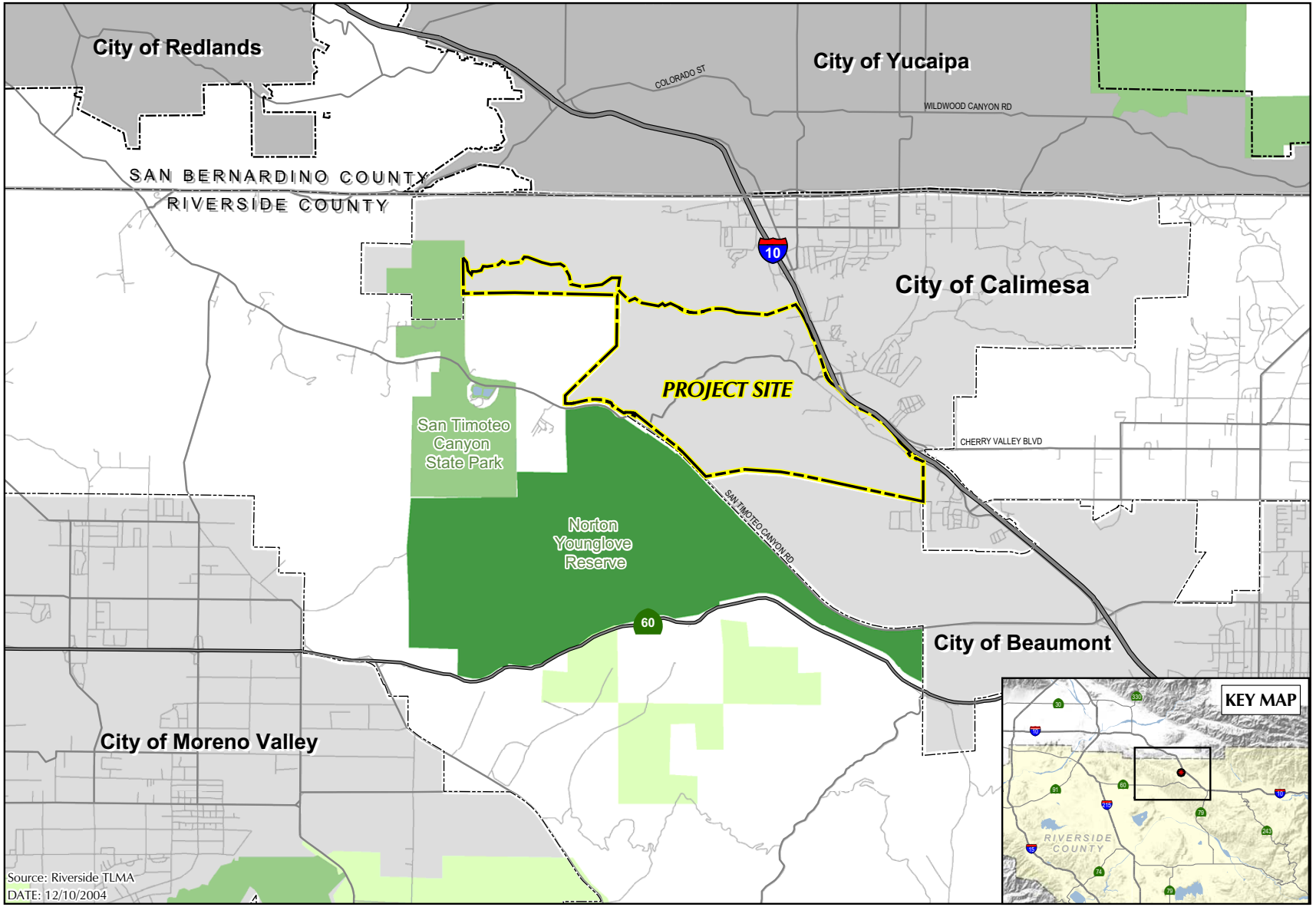


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Figure ES-2
Local Vicinity

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Figure ES-3
Site Plan

10. Attract commercial opportunities by designating commercial and business park land use categories that are conveniently located to minimize commuting distances and serve the need of project residents and residents of the surrounding area.

The Applicant's objectives for the development include:

1. Cluster neighborhoods and utilize compact building designs within residential and recreational land use mixes in an effort to preserve natural open space.

2. Identify and preserve sensitive environmental resources, including ridgelines, drainage courses, and wildlife corridors.

3. Reduce development impacts on hillside areas and ensure that Summerwind Ranch at Oak Valley is developed in an environmentally sensitive manner. Hillside development standards shall minimize the alteration, reduction, and removal of the natural setting, thereby creating a more desirable living environment.

4. Create a diverse community with integrated land uses that will result in a balanced, full service, land use plan for a community where people can live, work, shop, secure services, and recreate.

5. Locate commercial, retail service, and employment opportunities in response to market conditions and in harmony with the uses of surrounding neighborhoods in an effort to promote a jobs-housing balance.

6. Develop land use patterns that shorten travel distances for essential services, limit air and noise pollution, allow for alternative modes of transportation, and generally conserve energy.

7. Foster a distinctive, attractive and cohesive community with a strong sense of place by responding to community values and natural features of the site.

8. Create a range of housing opportunities and choices by diversifying the residential product mix within all villages.

9. Phase development so as to ensure adequate levels of services in a manner which does not create a financial burden to the citizens of the City of Calimesa.

ES.1.2 PROPOSED PROJECT SUMMARY

Summerwind Ranch at Oak Valley is a master planned community that preserves environmentally sensitive areas of the project site, yet accommodates a variety of integrated land uses, such as residential, commercial, business park, schools, parks, and natural open space (Table ES-1).

Table ES-1
General Land Use Statistical Summary

LAND USE	ACRES	DENSITY	DU'S
Residential			
Manors, 7,200 sf minimum	125.4	3.0	376
Villas, 6,000 sf minimum	193.6	3.7	719
Cottages, 5,000 sf minimum	152.9	4.9	744
Bungalows, 4,200 sf minimum	94.5	5.5	517
Garden Courts	67.8	10.1	684
Townhomes	42.8	15.0	643
Residential Subtotals	***677.0***	***5.4***	***3,683***
Non-Residential			
Business Park	130.1	--	--
Commercial	129.5	--	--
Schools	45.4	3.4	158[1]
Water Reclamation Facility	10.5	--	--
Non-Residential Subtotals	***315.5***	**--**	***170***
Open Space			
Parks and Community Recreation	89.9	--	--
Open Space	645.2[2]	--	--
Garden Air Wash	179.6		
RLC Option Lands	578.7		
Open Space Subtotals	***1,493.1***	**--**	**--**
Major Roads	105.0	--	--
Project Totals	**2,590.7**	**1.5**	**3,841**

DU's = Dwelling Units

sf = square foot

1 Maximum number of dwelling units that could be built on-site, if school district does not obtain site for school within project.

2 Consists of 642.4 acres of project open space, 179.6 acres of Garden Air Wash and 578.7 acres of Riverside Land Conservancy Option Land.

The proposed development includes a total of 3,683 dwelling units on approximately 677.0 acres. The residential uses will be located within five distinct villages (Villages A through E), each interspersed with parks, natural open space, and multi-purpose trails. The residential villages will be comprised of a mix of low, low medium, medium, and high density land uses. If the School District does not locate schools within the Summerwind Ranch at Oak Valley community, an additional 158 dwelling units may be built on the 45.4 acres not used by the School District.

The residential population generated by the development will be served by commercial centers and business parks, generally located adjacent to the I-10 and throughout the proposed Town Center. The

Town Center will include approximately 260 acres of commercial and business park uses as well as some public and semi-public uses.

A total of 1,403.5 acres of the project area will remain in natural open space, and 89.6 acres will be used for parks and community recreation. The recreation and open space uses will include both active and passive uses. The parks will have such amenities as picnic areas, tot lots, athletic fields, basketball and tennis courts, and trails. Hiking and equestrian trails will also be included within the development. Additionally, the Summerwind Ranch at Oak Valley development will include a community recreation center planned on 6.0 acres. The recreation center will consist of uses such as an aquatic center, gym, tot lot, and sport courts.

The circulation plan within the development is designed based on the City of Calimesa General Plan Circulation Element standards. The circulation plan includes construction of two urban arterials (134-foot ROW) at project entrances from I-10, two arterials (110-foot ROW), two majors (100-foot ROW), two secondaries (88-foot ROW), one secondary frontage (76-foot ROW), and five divided collector (78-foot ROW) roadways.

Other public and semi-public uses proposed within the development include three schools and a water reclamation facility. Yucaipa Valley Water District (YVWD) and Beaumont-Cherry Valley Water District (BCVWD) will provide potable water, and the Live Oak Canyon Treatment Facility will provide sewage treatment. Discharge from the proposed water reclamation facility within the project area will connect into a proposed reclaimed water line to be built by Eastern Municipal Water District (EMWD).

The Summerwind Ranch development will be built in phases in response to market demands. A total of five residential development phases are proposed. Commercial facilities and public facilities (including parks and trails) will occur concurrently with residential development.

ES.2 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

Several issues relative to the proposed project were identified in the Initial Study, completed by the City of Calimesa (refer to Appendix A-1). In addition, other environmental issues were identified by other agencies through response to the Notice of Preparation (NOP). A total of four letters were received that raised specific issues to be addressed in the EIR (refer to Appendix A-2). The primary areas of expressed interest are summarized below according to the NOP comment letters received. These issues are discussed in more detail within Section 1.6 of this document. Section 1.6 includes a summary table (refer to Table 1-2) that identifies the EIR sections and/or technical appendix addressing the particular issue raised in the letter.

State of California Governor's Office of Planning and Research, State Clearinghouse and Planning Unit, June 8, 2004

- Courtesy notice provided by the State Clearinghouse with a reminder to comment on the NOP/IS.

Native American Heritage Commission, June 16, 2004

- Absence of Native American cultural resources in the immediate project area.
- Contacting other sources of cultural resources for information regarding known and recorded site.
- List of Native Americans individuals/organizations.
- Provisions for accidentally discovered archaeological resources during construction.

California Regional Water Quality Control Board, June 29, 2004

- Regional Board's approval authority through granting of a Clean Water Act Section 401 Water Quality Standards Certification and through its authority under the Porter-Cologne Water Quality Control Act.
- Incorporation of appropriate mitigation measures prior to the adoption of the CEQA document.
- The project as a tributary to the Santa Ana River Reach 4.
- Incorporation of structural best management practices into the EIR.
- Conversion of ephemeral streams into perennial streams as the result of discharges of nuisance flows from excessive irrigation.

Riverside County Flood Control and Water Conservation District, July 1, 2004

- City of Calimesa's Master Drainage Plan.
- Potential to alter existing drainage pattern and increase storm runoff, erosion, and groundwater recharge – need to discuss in EIR.
- Compliance with stormwater permit requirements.
- Incorporation of Best Management Practices.
- Section 401 and NPDES General Permit requirements.

The comment letters received on the NOP are contained in Appendix A-2 of this EIR. No other areas of controversy were identified through the NOP process. A public scoping meeting was held on November 18, 2004 to solicit input from the community/residents on the proposed project and to address those concerns in the EIR. A total of 13 people attended.

ES.3 EXISTING CONDITIONS

TOPOGRAPHY

Located within the Beaumont Plains, the project site's topography consists of gently to moderately rolling hills and ridgelines, separated by broad valleys and narrow ravines, all scattered with oak trees and scrub vegetation. These valleys and ravines act as natural drainage courses and contain several streambeds. Elevations range from approximately 1,950 feet to 2,425 feet. The project site generally slopes gently to the southwest toward San Timoteo Creek. The majority of the slopes vary from flat to gently sloping in the canyon bottoms, and from 3:1 to 2:1 slope ratios along the ascending natural slopes. Near vertical slopes of up to 20 feet high exist within the northern portion of the project site. Some slope areas within the site are as steep as approximately 1:1 ratio.

DRAINAGE

The project site is located within the watershed of the Santa Ana River and its tributaries, defined as the Santa Ana Region. The project area is within the largest underground water basin in the region, the Upper Santa Ana River Basin.

The site is within the San Timoteo Sub-basin of the Upper Santa Ana Region. The proposed project site contains several natural streambeds. The broad flat alluvial plateaus are divided by steep sides and wide bottom ravines that serve as regional and sub-regional drainage courses.

The overall drainage plan has been designed to perpetuate the natural drainage boundaries of the site. The proposed plan for the drainage system seeks to utilize and incorporate existing channels as much as possible into the ultimate storm drain system. The existing channels came about as a result of construction of I-10 Freeway, which channelized the previous natural sheet flow.

The Garden Air Wash, a 20 to 40 feet wide intermittent wetland, is the most prominent surface drainage feature in the northern portion of the project site. The northern portion of the site also contains two small one to two feet wide ephemeral non-wetlands. Two non-wetlands waters originate near the eastern boundary of the site and include intermittent non-wetlands and ephemeral non-wetlands. These non-wetlands range from 2 to 20 feet wide and flow west towards a wet meadow located along the southwestern boundary of the site. An additional non-ephemeral wetland originates near the center of the site and flows south towards a riparian woodland.

BIOLOGICAL RESOURCES

As part of the proposed project, approximately 1,403.5 acres (54%) have been set aside in permanent natural open space excluding parks or community recreation centers. Eight vegetation communities and cover types have been identified within the project site. Native vegetation includes chaparral, coastal

sage scrub, meadow, oak woodland, and riparian woodland. Disturbed, non-native cover types such as agricultural land, ornamental trees, and non-native grasses also occur within the site.

SOILS AND GEOLOGY

Topsoil is present throughout the majority of the site and it has been disturbed by previous agricultural activities. Also, existing artificial fill associated with small earthen dams has been observed at the site in many areas. Recent alluvium and colluvium exists within the streambeds and tributary drainages of the site. Alluvium deposits within the subject site were observed to extend to depths exceeding 48 feet. Older alluvium at the site represents the dissected remnants of the former flood plan/stream bed that was produced during the latest Pleistocene time. This unit was observed to be up to 30 feet in thickness.

The San Timoteo Formation was encountered at the site during geologic testings; it appears to be predominantly a thickly interbedded to interlensed light yellow-brown to light gray, and light red brown conglomerate, and fine to medium grained clayey sandstone. In addition, some light yellow brown to red brown sandy siltstone beds, up to eight feet thick have also been identified.

HISTORIC AND CULTURAL LAND USE

The earliest direct evidence of prehistoric occupation of the project vicinity dates back to approximately 5,000 BC to 400 BC, a period characterized in the west by materials of the Encinitas tradition.

The recorded history of the area that includes San Timoteo Canyon began in 1769 with the establishment of the Spanish missions in Alta, California. The need for a land route to these missions inspired Captain Juan Batista de Anza to lead a small party through the study area in 1774. During the subsequent Mexican period, major land grants encompassing the project area included the San Timoteo Rancho and the tract between San Jacinto and San Gorgonio. The project site occupies the area once covered by the northern one-third of Rancho San Timoteo.

San Timoteo Canyon emerged as a significant travel corridor (i.e., Bradshaw Road and the Southern Pacific Railroad) during the American period. Butterfield Overland mail operations crossed the study area and the discovery of gold in Arizona led to the establishment of the Bradshaw Road through areas in San Timoteo Canyon. The Southern Pacific Railroad completed its line from Los Angeles through San Gorgonio Pass in 1876 which resulted in land development and agricultural opportunities.

ON-SITE AND SURROUND LAND USES

The site is generally undeveloped with the exception of a small portion of the site used for farming, agricultural, and rural residential land uses.

The site is surrounded by undeveloped natural open space area to the north, west, and southwest. The Norton Younglove Reserve is located to the southwest, and San Timoteo Canyon State Park is located to the west of the project site. Future development is planned within the City of Calimesa adjacent to the northerly boundary of the Specific Plan Amendment area. Varying densities of mobile homes and single family residences are located adjacent to the eastern edge of the proposed project site and east of I-10. The Oak Valley Champions project within the City of Beaumont is located to the south and southeast of the project site. Oak Valley Champions project is a master planned golf course community that will ultimately consist of a mix of open space, residential, golf course, and commercial uses.

ES.4 ENVIRONMENTAL ANALYSIS / SUMMARY OF IMPACTS

Both project-specific and cumulative significant impacts, the level of significance, and the mitigation measures recommended in this EIR are summarized in the Project Impact Summary (Table ES-2), beginning on page 1-16. The complete impact analysis is provided in Section 3.0 of this document.

ES.5 ALTERNATIVES TO THE PROPOSED PROJECT

Alternatives to the proposed project under consideration and evaluated in this EIR are listed below. The Alternatives Section 4.0 provides a descriptive analysis and environmental impact evaluation of each alternative. In addition, Table 4-1, Alternative Project Comparison Matrix also located in Section 4.0, displays information/criteria for evaluating the alternatives.

- No Project, No Development Alternative
- Development Under Existing General Plan (adopted Specific Plan) Alternative
- Reduced Footprint/Increased Open Space Alternative
- Revised Project Components/Reduced Environmental Impact Alternative
  - More Commercial, Less Residential
  - Less Hillside Grading
  - Preserving More Oak Trees
  - Noise Site Design Alternatives
  - Avoiding Wetlands

Table ES-2
Project Impact Summary

Impact	Mitigation Measures		Scope
3.1 Aesthetics			
Impact A1 The project has the potential to significantly impact the visual resources of the site. *Less than significant with mitigation.*	**MM- A1**	All proposed development shall comply with development standards and design guidelines (i.e., building siting, height, setbacks, architecture, landscaping, perimeter walls, fences, lighting, etc.), established in the Specific Plan document.	Project specific
Impact A2 The project has the potential to degrade the visual quality of the site. *Less than significant with mitigation.*	**MM-A2**	Mitigation Measure MM-A1 is applicable to the impact on visual quality of the site.	Project specific
Impact A3 The project has the potential to result in significant light and glare impacts. *Less than significant with mitigation.*	**MM-A3**	Mitigation Measure MM-A1 is applicable to the light and glare impact.	Project specific
Impact A4 The proposed project has the potential to create cumulative aesthetic and light and glare impacts, in conjunction with other cumulative developments in the area. *Less Than Significant with mitigation.*	**MM-A4**	Mitigation Measure MM-A1 is applicable to the cumulative impacts.	Cumulative

Impact	Mitigation Measures	Scope
3.2 Air Quality		
Impact AQ1 Construction activity would result in significant short-term impacts on local and regional air quality due to generation of fugitive dust. *Significant and unavoidable. Remains significant with mitigation.*	**MM-AQ1** The project proponent will implement Rule 403 as applicable, which would include but not be limited to the following: ▪ Portions of the site under active construction shall be watered as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction (locations where grading is to occur will be thoroughly watered prior to earthmoving). ▪ Soils shall be watered/stabilized prior to, during, and following cut and fill activities. ▪ A minimum soil moisture content of 12% shall be maintained during earth-moving activities using the ASTM method D-2216. ▪ All trucks hauling dirt, sand, soil, or other loose materials shall be covered, or maintain at least two feet of freeboard in accordance with the requirements of Section 23114 of the California Vehicle Code (CVC). ▪ Construction access roads shall be paved at least 100 feet onto the site from main roads. ▪ Traffic speeds on all unpaved roads shall be reduced to 15 mph or less. Roads shall be watered every two hours during active construction operations, and/or a chemical stabilizer shall be applied to all unpaved surfaces.	Project specific

Impact	Mitigation Measures	Scope
	▪ Disturbed areas shall be revegetated as quickly as possible consistent with approved erosion control plans. ▪ A Traffic Control Plan shall be provided for each major phase of construction by the Applicant and approved by the City Engineer addressing construction site access and egress, temporary road detours, construction traffic parking and staging, and haul routes. ▪ All streets used for construction site access or egress shall be swept once daily during active construction if visible soil materials are carried to adjacent streets.	
Impact AQ2 Construction activities would result in significant short-term impacts on local and regional air quality due to generation of NOx, ROG, and CO. *Less than significant with mitigation.*	**MM AQ2-1** Construction equipment with low emission factors and high energy efficiency shall be used where possible and when available. **MM AQ2-2** To minimize equipment emissions, engine maintenance shall be performed regularly. **MM AQ2-3** Alternative fuels such as ultra-low sulfur diesel for off-road construction vehicles/equipment shall be used where possible.	Project specific
Impact AQ3 Construction activities would potentially exceed the SCAQMD threshold for VOCs. *Less than significant with mitigation.*	**MM AQ3** Application of architectural coatings (i.e., paint, etc.) shall be limited to an average of no more than 225 gallons per week and/or "Zero-VOC" paint shall be used.	Project specific

Impact	Mitigation Measures	Scope
Impact AQ4 Project operation would result in significant long-term operational impacts on regional air quality by exceeding SCAQMD thresholds. *Significant and unavoidable. Remains significant with mitigation.*	The following mitigation measures are recommended to help reduce operational air quality impacts for mobile and stationary sources: **MM AQ4-1** On-site bicycle trails linking the facility to designated bicycle commuting routes shall be provided. **MM AQ4-2** Site improvements such as street lighting, street furniture, route signs, bus turnouts, and sidewalks or pedestrian paths shall be provided. **MM AQ4-3** The proposed dwelling units shall exceed minimum statewide energy construction requirements, as follows: ▪ Use of low emission water heaters ▪ Use of energy efficient appliances ▪ Use of light colored/earth tone roof tiles ▪ Increase insulation in excess of Title 24 requirements **MM AQ4-4** Park and ride lots shall be provided near freeway access, as follows: ▪ Development of approximately 50-60 parking spaces within the residential component of the project. ▪ Development of approximately 100 parking spaces within the commercial component of the project.	Project specific

Impact	Mitigation Measures	Scope
	MM AQ4-5 According to Ride Guide provided by the RTA (Riverside Transit Agency), bus route 36 shall serve the proposed project site. The project will provide bus turnout facilities to serve this route as recommended by RTA.	
Impact AQ5 The project's significant operational impacts could lead to inconsistency with the SCAQMD's AQMP. *Less than significant.*	No mitigation required.	Project specific
Impact AQ6 The project would potentially expose a substantial number of people to substantial concentrations of air pollutants. *Less than significant.*	No mitigation required.	Project specific
Impact AQ7 The proposed wastewater treatment plant could potentially expose a substantial number of people to objectionable odors. *Less than significant.*	No mitigation required.	Project specific
Impact AQ8 The project would potentially expose a substantial number of people to	No mitigation required.	Project Specific

Impact	Mitigation Measures		Scope
adverse concentrations of carbon monoxide. *Less than significant.*			
Impact AQ9 The proposed project would result in significant cumulative impacts. *Significant and unavoidable. Remains significant with mitigation.*	**MM AQ9**	Cumulative impacts are reduced by implementation of mitigation measures for construction and operations. But the impacts remain significant.	Cumulative
3.3 Biological Resources			
Impact BR1 Construction of the proposed project would directly and permanently impact approximately 99.3 acres of native coastal sage scrub considered sensitive by California Department of Fish and Game (CDFG). *Less than significant with mitigation.*	**MM-BR1**	Permanent direct impacts to 99.3 acres of coastal sage scrub will be offset by compliance with the mitigation requirements listed under the Multiple Species Habitat Conservation Plan (MSHCP). These requirements include on-site preservation of coastal sage scrub habitat. The proposed plan preserves all of the coastal sage scrub habitat on the project site that is within Criteria Cells, which includes approximately 135.4 acres of costal sage scrub habitat.	Project specific
Impact BR2 Construction of the proposed project would directly and permanently impact approximately 20.8 acres of native oak woodland considered sensitive by CDFG. The impact would include direct and permanent impacts on approximately 198 individual trees	**MM-BR2**	Mitigation requirements to minimize permanent direct impacts to 20.8 acres of oak woodlands would include on-site preservation in compliance with MSHCP standards for Criteria Area Cells and implementation of an oak tree planting and restoration plan. Approximately 129.6 acres of oak woodland habitat would be preserved on site. Additionally, oak trees would be planted from container stock as well as from acorns collected on the site to ensure that the regenerated oak seedlings will have the best genetic	Project specific

Impact		Mitigation Measures	Scope
with potential impacts to an additional 38 individual trees. Thus, 236 oak trees are impacted or potentially impacted by the proposed project. *Less than significant with mitigation.*		adaptation for the Summerwind Ranch development. The Applicant will plant 976 oak trees using a combination of 50 percent acorns and 50 percent deep one-gallon containers as mitigation for the removal of up to 236 oak trees, as shown in Table 3.3-5. The planting program reduces the impact of loss of oak woodland and oak trees to less than significant.	
Impact BR3 Construction of the proposed project would directly and permanently impact approximately 0.3 acres of native riparian woodland considered sensitive by CDFG. (Of the total, approximately 0.2 acres is delineated as jurisdictional wetlands). *Less than significant with mitigation.*	**MM-BR3**	Mitigation requirements to offset permanent direct impacts to 0.3 acres of riparian woodlands would include on-site or off-site habitat creation or enhancement. Regulatory agencies will establish appropriate mitigation ratios in accordance with their policy of no net loss of riparian and wetland values.	Project specific
Impact BR4 Permanent indirect impacts could occur to coastal sage scrub, oak woodland, and riparian woodland in the future if graded areas are left bare after project construction, thus encouraging exotic species introduction and invasion. *Less than significant with mitigation.*	**MM-BR4**	Mitigation recommendations for potential permanent indirect impacts to vegetation communities could be satisfied by applying an approved native seed mix in the bare areas after construction is complete to minimize the potential for exotic species introductions. The native seed mix should be approved by the CDFG and should be dispersed in the fall, prior to winter rains.	Project specific

Impact	Mitigation Measures		Scope
Impact BR5 Construction of the proposed project would directly and permanently impact approximately 0.2 acres of jurisdictional wetland riparian woodland habitat. *Less than significant with mitigation.*	**MM-BR5**	Mitigation requirements to offset permanent direct impacts to jurisdictional wetlands will be met by a combination of wetland creation, restoration, or enhancement. The mitigation site should be preserved at a suitable area near the impact area. Mitigation requirements for permanent impacts to jurisdictional wetlands resulting from project-related construction would be determined during the regulatory agency permit process at mitigation ratios consistent with the policy of no net loss of wetland values.	Project specific
Impact BR6 Construction of the proposed project would directly and permanently impact approximately 1.4 acres of jurisdictional wetland meadow habitat. *Less than significant with mitigation.*	**MM-BR6**	Mitigation Measure MM-BR5 is applicable to the wetlands impacts.	Project specific
Impact BR7 Construction of the proposed project would directly and permanently impact approximately 2.0 acres of non-wetland waters of the U.S., also considered waters of the state. *Less than significant with mitigation.*	**MM-BR7**	Mitigation requirements for permanent direct impacts to ephemeral and intermittent drainages would require habitat creation, enhancement or restoration, and preservation at a location approved by the resource agencies through the permitting process.	Project specific
Impact BR8 Permanent indirect impacts could occur to jurisdictional wetlands and waters in the future if the graded areas	**MM-BR8**	Mitigation recommendations for potential permanent indirect impacts to wetland habitats could be satisfied by applying an approved native seed mix in the bare areas after construction is complete to minimize the potential for exotic species introductions.	Project specific

Impact	Mitigation Measures	Scope
are left bare after project construction, thus encouraging exotic species introduction and invasion. *Less than significant with mitigation.*	The native seed mix should be approved by the CDFG and MSHCP and should be dispersed in the fall, prior to winter rains.	
Impact BR9 Construction of the proposed project would directly and permanently impact approximately 0.3 acres of suitable habitat for the least Bell's vireo and southwestern willow flycatcher, which is coincident with the riparian woodland habitat discussed above. *Less than significant with mitigation.*	**MM-BR9-1** Mitigation requirements for permanent direct impacts to the least Bell's vireo and southwestern willow flycatcher habitat will be met through on-site preservation in Criteria Area Cells (Quadrant 479) outlined in Table 3.3-4. This habitat preservation is coincident to the riparian habitat preservation listed in MM-BR3. **MM-BR9-2** Preconstruction surveys for least Bell's vireo and southwestern willow flycatcher will be conducted prior to construction in or adjacent to habitat areas in accordance with the applicable protocol. Based on the protocol survey results, appropriate avoidance measures would be determined through consultation with regulatory agencies.	
Impact BR10 Permanent and temporary direct impacts to birds listed under the MBTA or BEPA would potentially occur during vegetation clearing and grading, and could occur incidentally during other project phases. These impacts are considered by the U. S. Fish and Wildlife Service and MSHCP to be a violation of these federal and	**MM-BR10** To avoid or minimize impacts to birds covered under the Migratory Bird Treaty Act (MBTA) and/or Bald Eagle Protection Act (BEPA) the following will be implemented: ▪ Clearing and grubbing of vegetation within areas identified as habitat should be conducted outside the March 15 through August 15 nesting season. ▪ In the event that least Bell's vireo or southwestern willow flycatcher is found on-site during future surveys, ensure that	Project specific

Impact	Mitigation Measures	Scope
regional acts. However, because significant impacts associated with project construction or operation would be an unintended or incidental occurrence, it is unlikely that this would be considered a "take" under either the MBTA or BEPA. *Less than significant with mitigation.*	noise from construction activities does not exceed 60 dBA L_{eq} within the habitat of the species during the nesting season. ▪ Position, direct, and shield lights (streetlights, parking lot lighting, and other project-related illumination sources) so as to avoid "light spill" into the proposed on-site conservation areas or into habitat adjacent to the proposed project site. Night lighting will not be used during the course of construction. ▪ Provide contractor education and erect fencing or barriers to ensure that contractors do no enter areas of open space or conserved habitat for any purpose. ▪ If construction must occur within or adjacent to these habitats during the breeding season, preconstruction nest surveys no more than 1 week prior to construction initiation should be conducted by a qualified biologist. During the breeding season, additional nest surveys would be required in areas where a week or more has elapsed between the nest survey and the initiation of construction activities. ▪ Preconstruction surveys shall be performed in appropriate habitat areas consistent with requirements of the MSHCP, for the western yellow-billed cuckoo and burrowing owl. Mitigation consistent with MSHCP requirements will be implemented if warranted by survey results.	

Impact	Mitigation Measures		Scope
Impact BR11 Permanent indirect impacts to the least Bell's vireo and southwestern willow flycatcher could occur from habitat fragmentation resulting from the proposed project within the riparian areas. *Less than significant with mitigation.*	**MM-BR11**	Indirect impacts to least Bell's vireo and southwestern willow flycatcher habitat will be addressed through on-site preservation coincident to the riparian habitat preservation listed in MM-BR3. This measure will decrease the level of habitat fragmentation and reduce the impact to less than significant.	Project specific
Impact BR12 Permanent indirect impacts to the 16 sensitive species detected on site could occur from alteration of habitat within the upland and riparian areas. *Less than significant with mitigation.*	**MM-BR12**	Mitigation measures for indirect impacts to the 16 sensitive and covered species present on-site will be met through the extensive in-kind preservation outlined in Table 3.3-4 and through compliance with other requirements of the MSHCP. For instance, Yucaipa onion and many-stemmed dudleya are not expected to occur on the site; however, focused surveys will be conducted in appropriate habitat during proper time of year. If these species are found on-site, appropriate mitigation will be implemented upon concurrence by regulatory agencies.	Project specific
Impact BR13 Permanent direct impacts to MSHCP-designated wildlife corridor areas, Proposed Linkage 12 and Proposed Constrained Linkage 23 in MSHCP Cell 411, could occur as a result of project construction or operations and maintenance activities. *Less than significant with mitigation.*	**MM-BR13**	Mitigation requirements to offset project impacts to wildlife corridors, listed under the MSHCP, includes the proposed habitat preservation of open space along Proposed Linkage 12 and Proposed Constrained Linkage 23 within the project Criteria Area Cells. The dedication of land for wildlife conservation, including the Garden Air Wash and other lands, partially achieves this objective. Further enhancement of the corridors and habitat linkages will require installing properly-sized passageways under new on-site roads.	Project specific

Impact	Mitigation Measures	Scope
Impact BR14 Permanent indirect impacts to MSHCP-designated wildlife corridor areas could occur as a result of exotic species introductions, noise, and nighttime lighting impacts to the adjacent linkage areas. *Less than significant with mitigation.*	**MM-BR14** Indirect impacts are mitigated with implementation of MM-BR13.	Project specific
3.4 Cultural Resources		
Impact CR1 The project would impact four cultural resources sites within the project area. *Less than significant with mitigation.*	Please refer to Table 3.4-2 and the following discussion regarding the impacts to cultural resources within the site.	Project specific
Impact CR2 The project would impact the paelontological resources within the project site. *Less than significant with mitigation.*	**MM-CR2-1** Preconstruction salvage of known exposed paleontological resources shall be conducted. **MM-CR2-2** Preconstruction field examination of fossil soil horizons with high potential for paleontological resources, and salvage of fossils as necessary shall be conducted. **MM-CR2-3** A project specific sampling plan that will recover standard samples of fossiliferous paleosols in stratigraphic succession within the affected areas shall be developed. The sampling program will include 12 samples from the San Timoteo Formation and three from younger sediments. These samples will be prepared by water-washing through 20 and 30 mesh screens.	Project specific

Impact	Mitigation Measures		Scope
	MM-CR2-4	Excavation in sediments with undetermined potential shall be monitored 50 percent of the time; and if paleontological resources are identified, monitoring shall be changed to full time. Monitors shall be empowered to temporarily redirect earthmoving equipment while fossils are examined and removed. If multiple pieces of earthmoving equipment are working simultaneously or if excavation is conducted in widely separated areas, additional monitors shall be provided as necessary.	
	MM-CR2-5	Fossils collected during the project shall be prepared to a reasonable point of identification. The samples shall be cleaned of excess sediment or matrix and housed in an accredited museum repository. A written fossil specimen repository agreement shall be arranged in advance of excavation monitoring.	
	MM-CR2-6	A report documenting the results of the monitoring and salvage shall be prepared.	
3.5 Geology and Soils			
Impact GS1 Potential impacts related to faulting and seismicity (including liquefaction) could occur with project implementation. *Less than significant with mitigation.*	**MM-GS1-1**	The removal of all topsoil, partially saturated alluvium, colluvium, and highly weathered older alluvium and San Timoteo Formation shall be required under all structural fill areas from an estimated range of 1 to 40 feet.	Project specific
	MM-GS1-2	Unsuitable soils shall be excavated and compacted using conventional grading techniques.	

Impact	Mitigation Measures		Scope
	MM-GS1-3	Post-Tensioned slab/foundation systems shall be used for all structures to be constructed over areas of shallow groundwater and left-in-place alluvium.	
Impact GS2 Potential impacts related to soils and stability (i.e., seismically induced landslides) could occur with project implementation. *Less than significant with mitigation.*	**MM-GS2-1**	Proper grading in accordance with the State of California Special Publication 117 shall be required of all sloped terrain.	Project specific
	MM-GS2-2	Conventional shallow foundations and slab-on-grade or post-tensioned slab/foundations shall be utilized for single-family residential structures.	
	MM-GS2-3	Project mass grading and rough grading for individual development projects shall be done in conformance with a detailed Geotechnical and Soils Engineering Study. The study shall be approved by the City Engineer prior to issuance of grading permits and shall address potential hazards associated with groundshaking, secondary seismic hazards, slope stability, and public safety. Such studies shall: ▪ Conform to code requirements, standards and guidelines of the City of Calimesa; ▪ Fully and accurately reflect site conditions and hazards; and ▪ Include all mitigation measures necessary for reducing risks posed by geologic hazards on the project site.	
	MM-GS2-4	All site grading shall be accomplished under the supervision of certified engineering geologist.	

Impact	Mitigation Measures	Scope
Impact GS3 Potential impacts to unique geologic or topographic features could occur with project implementation. *Less than significant.*	No mitigation required.	Project specific
Impact GS4 Potential cumulative impacts could result with project implementation. *Less than significant.*	No mitigation required.	Cumulative
3.6 Hydrology and Water Quality		
Impact HW1 The project could potentially result in impacts to surface drainage. *Less than significant with mitigation.*	**MM HW1-1** Construction and development of all phases shall comply with the National Pollutant Discharge Elimination System (NPDES) regulations. Prior to the issuance of a grading permit, applicants shall demonstrate compliance with NPDES Storm water Permit requirements to the satisfaction of the City of Calimesa. Applicable BMP provisions as developed through the specific plan drainage concept and City requirements shall be incorporated into the NPDES Permit. **MM HW1-2** Individual projects within the specific plan area shall be reviewed by the City of Calimesa for the inclusion of appropriate structural and non-structural Best Management Practices (BMPs) to control storm water discharges and protect water quality. Structural controls may include, but are not limited to filtration, common area efficient irrigation, common area runoff-minimizing landscape design, velocity dissipation devices, oil/grease separators, inlet	Project specific

Impact	Mitigation Measures	Scope
	trash racks, and catch basin stenciling. Non-structural BMPs can include education for property owners, tenants and occupants, activity restrictions, common area landscape management, litter control, and catch basin inspection, BMP maintenance; and street sweeping. The following are examples of BMPs that may be included within NPDES permit requirements for individual projects: ▪ Use of sand bags and temporary desilting basins during project grading and construction during the rainy season (October through April) to prevent discharge of sediment-laden runoff into storm water facilities. ▪ Installation of landscaping as soon as practicable after completion of grading to reduce sediment transport during storms. Or application of approved soil binders on graded building pads if they are not built upon before the onset of the rainy season. ▪ Incorporation of structural BMPs (e.g., grease traps, debris screens, continuous deflection separators, oil/water separators, drain inlet inserts) into the project design to provide detention and filtering of contaminants in urban runoff from the developed site prior to discharge to storm water facilities.	

Impact	Mitigation Measures	Scope
	The City shall review subsequent development projects within the specific plan area for the application of BMPs to reduce water pollution from urban runoff. The specific measures to be applied shall be determined in conjunction with review of required project hydrology and hydraulic studies, and shall conform to City standards and any Drainage Area Management Plan under the NPDES program.	
Impact HW2 The project could potentially result in impacts to water quality. *Less than significant.*	No mitigation required.	Project specific
Impact HW3 The project could potentially result in impacts to groundwater. *Less than significant.*	No mitigation required.	Project specific
Impact HW4 The project could potentially result in impacts from flooding. *Less than significant.*	No mitigation required.	Project specific

Impact	Mitigation Measures	Scope
3.7 Land Use and Planning		
Impact LU1 Implementation of the proposed project has the potential to affect the surrounding land uses during construction and operations. *Less than significant.*	No mitigation required.	Project specific
Impact LU2 The proposed project would require amendment of the City's General Plan. *Less than significant.*	No mitigation required.	Project specific
Impact LU3 The proposed project would require amendment of the adopted specific plan for the project site, SP1. *Less than significant.*	No mitigation required.	Project specific
Impact LU4 The proposed project would substantially add to the City's dedicated open space inventory but would provide land use development within the area covered by the Western Riverside MSHCP. *Less than significant.*	No mitigation required.	Project specific
Impact LU5 The proposed project has the potential to result in cumulative land use impacts. *Less than significant.*	No mitigation required.	Cumulative

Impact	Mitigation Measures		Scope
3.8 Noise			
Impact N1 The proposed project would create a significant short-term construction noise impact. *Less than significant with mitigation.*	**MM-N1-1**	During all project site excavation and grading, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site.	Project specific
	MM-N1-2	The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction related noise sources and noise sensitive receptors nearest the project site during all project construction.	
	MM-N1-3	The construction contractor shall limit all construction related activities that would result in high noise levels according to the construction hours to be determined by City staff.	
	MM-N1-4	The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment. To the extent feasible, haul routes shall not pass sensitive land uses or residential dwellings.	
Impact N2 The project has the potential to create a significant increase in traffic noise at build-out (cumulative conditions). *Less than significant.*	No mitigation required.		Project specific

Impact	Mitigation Measures	Scope
Impact N3 The project has the potential to create noise impacts to multi-family homes, adjacent to the I-10 Freeway. *Less than significant.*	No mitigation required.	Project specific
Impact N4 Train noise has the potential to significantly affect the project site. However, the noise level at the boundary of the residential area was measured at 55.4 dBA CNEL, which is significantly less than the City of Calimesa's 65 dBA CNEL exterior noise standard. *Less than significant.*	No mitigation required.	Project specific
Impact N5 The project has the potential impact to create significant exterior noise, exceeding the City of Calimesa standards for exterior residential areas. *Less than significant with mitigation.*	With the construction of a minimum six-foot high sound attenuation wall, the exterior noise levels at the residential lots adjacent to these roads will remain below the City of Calimesa 65 dBA CNEL exterior noise level standards.	Project specific
3.9 Public Services		
Impact PS1 The proposed project would increase demand for fire protection services.	**MM-PS1-1** Developer impact fees shall be paid to contribute to the cost of new fire facilities, and equipment to offset the increase in fire services demand.	Project specific

Impact	Mitigation Measures		Scope
Less than significant with mitigation.	**MM-PS1-2**	The City shall coordinate with the Fire District to evaluate potential new station sites within the area of the proposed project to provide adequate response times for emergency services.	
	MM-PS1-3	Prior to construction, the developer shall contact the Fire District for verification of current fire protection development requirements. All new construction shall comply with all applicable statutes, codes, ordinances, and/or Fire District standards.	
	MM-PS1-4	Water lines within the project site shall be designed to meet the fire requirements.	
	MM-PS1-5	Fire hydrants shall be designed and placement specified by the Fire District at the time water lines to the project area are built or as a condition of development project approval.	
Impact PS2 The proposed project would increase demand for police protection services. *Less than significant with mitigation.*	**MM-PS2**	Police impact fees shall be paid to cover capital costs associated with the creation of additional facilities and improvements to service at the Summerwind at Oak Valley project site.	Project specific
Impact PS3 The proposed project would result in an increase of students attending local schools. *Less than significant with mitigation.*	**MM-PS3-1**	Developers/builders within the plan area shall work with Beaumont Unified School District (BUSD) to plan school service for the proposed development.	Project specific
	MM-PS3-2	Prior to issuance of a building permit, project developers shall pay statutory developer fees to the BUSD and/or provide land and	

Impact	Mitigation Measures	Scope
	improvements pursuant to the requirements established in SB 50. The amount of fees or special taxes to be paid or land and improvements to be provided will be determined based on the established state formula for determining construction costs.	
Impact PS4 The proposed project would increase demand for local and regional parkland. *Less than significant.*	No mitigation required.	Project specific
Impact PS5 The proposed project would increase demand for library services. *Less than significant with mitigation.*	**MM-PS5** Project developers should contribute impact fees either toward expansion of existing library facilities or construction of new facilities.	Project specific
Impact PS6 The proposed project has the potential to result in cumulative fire protection impacts. *Less than significant.*	No mitigation required.	Cumulative
Impact PS7 The proposed project has the potential to result in cumulative police protection impacts. *Less than significant.*	No mitigation required.	Cumulative

Impact	Mitigation Measures	Scope
Impact PS8 The proposed project has the potential to result in cumulative impacts to nearby schools. *Less than significant.*	No mitigation required.	Cumulative
3.10 Transportation and Traffic		
Impact T1 The proposed project would potentially impact the LOS in Phase 1 for the intersections listed in Table 3.10-5. *Less than significant with mitigation.*	**PHASE 1 – RESIDENTIAL DEVELOPMENT (FIGURE 3.10-29)** **MM-T1-1** Traffic signals and left turn lane striping at the I-10 Freeway/Cherry Valley Interchange ramp intersections shall be installed. **MM-T1-2** Traffic signals and turn lane improvements shall be installed at the following intersections (Figure 3.10-33): ▪ Roberts Roads at Cherry Valley Boulevard ▪ Realigned Desert Lawn Drive ("G" Street) at Cherry Valley Boulevard **MM-T1-3** The extension of "J" Street (Cherry Valley Boulevard) shall be constructed from the I-10 Southbound Ramps to Roberts Road as an interim two-lane 32-foot pavement section. **MM-T1-4** "J" Street shall be constructed from Roberts Road to the realigned Desert Lawn Drive ("G" Street) at its ultimate half-section width as an Urban Arterial roadway (134-foot ROW) adjacent to the project. **MM-T1-5** "J" Street shall be constructed from the realigned Desert Lawn Drive	Project Specific

Impact	Mitigation Measures	Scope
	("G" Street) to the TAZ "G" south boundary at its ultimate full-section width as a Secondary roadway (88-foot ROW).	
	MM-T1-6 "J" Street shall be constructed from the TAZ "G" south boundary to Champions Drive as an interim two-lane 32-foot pavement section.	
	MM-T1-7 Champions Drive shall be constructed from its terminus to "J" Street as an interim two-lane 32-foot pavement section.	
	MM-T1-8 The realignment of Desert Lawn Drive shall be constructed from "J" Street to the TAZ "G" east boundary at its ultimate half-section width as a Secondary roadway (88-foot ROW) adjacent to the project.	
	MM-T1-9 The realignment of Desert Lawn Drive shall be constructed from the TAZ "G" east boundary to its existing alignment adjacent to I-10 Freeway as an interim two-lane 32-foot pavement section.	
	MM-T1-10 "G" Street shall be constructed from "J" Street to the TAZ "A" south boundary at its ultimate full-section width as a Secondary roadway (88-foot ROW).	
	MM-T1-11 Roberts Road shall be constructed from "J" Street to the TAZ "D" west boundary at its ultimate half-section width as an Arterial roadway (110-foot ROW) adjacent to the project.	
	MM-T1-12 Roberts Road shall be constructed from the TAZ "D" west boundary to the TAZ "H" south boundary as an interim two-lane 32-foot pavement section.	

Impact	Mitigation Measures	Scope
	MM-T1-13 Roberts Road shall be constructed from the TAZ "H" south boundary to the existing Roberts Road/Woodhouse Road alignment at its ultimate half-section width as an Arterial roadway (110-foot ROW) adjacent to the project.	
Impact T2 The proposed project would potentially impact the LOS in Phase 2 for the intersections listed in Table 3.10-5, above. *Less than significant with mitigation.*	**PHASE 2 - RESIDENTIAL DEVELOPMENT (FIGURE 3.10-30)** The Developer shall participate in the I-10 Freeway/Cherry Valley Interchange improvement project. **MM-T2-1** The Developer shall participate in the installation of a traffic signal and turn lane improvements at the intersection of Calimesa Boulevard and Singleton Road. **MM-T2-2** A traffic signal and turn lane improvements shall be installed at the intersection of Roberts Road/Woodhouse Road and Singleton Road. **MM-T2-3** The extension of Singleton Road from Roberts Road/Woodhouse Road to the TAZ "T" west boundary shall be constructed as an interim two-lane 32-foot pavement section. **MM-T2-4** Singleton Road from the TAZ "T" west boundary to TAZ "N" Access Driveway shall be constructed at its ultimate half-section width as a Secondary roadway (88-foot ROW). **MM-T2-5** "A" Street from Singleton Road to the TAZ "O" north boundary shall be constructed at its ultimate full-section width as a Divided Collector roadway (78-foot ROW).	Project Specific

Impact	Mitigation Measures	Scope
	MM-T2-6 "A" Street from the TAZ "O" north boundary to "B" Street shall be constructed at its ultimate half-section width as a Divided Collector roadway (78-foot ROW). **MM-T2-7** "B" Street from the TAZ "M" north boundary to "A" Street shall be constructed at its ultimate half-section width as a Divided Collector roadway (78-foot ROW). **MM-T2-8** "B" Street from "A" Street to the TAZ "M" west boundary shall be constructed at its ultimate full-section width as a Divided Collector roadway (78-foot ROW). **MM-T2-9** "B" Street east of the TAZ "M" west boundary along the TAZ "N" north boundary shall be constructed at its ultimate half-section width as a Divided Collector roadway (78-foot ROW). **PHASE 2 - TOWN CENTER (FIGURE 3.10-31)** **MM-T2-10** The Developer shall participate in the I-10 Freeway/Cherry Valley Interchange improvement project. **MM-T2-11** The Developer shall participate in the installation of a traffic signal and turn lane improvements at the intersection of Calimesa Boulevard and Singleton Road. **MM-T2-12** Turn lane improvements shall be provided at the intersection of Roberts Road and "J" Street (Cherry Valley Boulevard).	

Impact	Mitigation Measures	Scope
	MM-T2-13 "J" Street shall be widened from the I-10 Southbound ramps to Roberts Road at its ultimate half-section width as an Urban Arterial roadway (134-foot ROW). **MM-T2-14** Roberts Road from "J" Street to the TAZ "D" west boundary shall be completed at its ultimate full-section width as an Arterial roadway (110-foot ROW). **MM-T2-15** Roberts Road shall be widened from the TAZ "D" west boundary to the TAZ "C" north boundary at its ultimate half-section width as an Arterial roadway (110-foot ROW). **MM-T2-16** Singleton Road from Roberts Road to the TAZ "T" shall be constructed at its ultimate half-section width as an Arterial roadway (110-foot ROW).	
Impact T3 The proposed project would potentially impact the LOS in Phase 3 for the intersections listed in Table 3.10-5, above. *Less than significant with mitigation.*	**PHASE 3 - RESIDENTIAL DEVELOPMENT (FIGURE 3.10-32)** **MM-T3-1** The Developer shall participate in the I-10 Freeway/Singleton Interchange improvement project. **MM-T3-2** The Developer shall participate in providing turn lane improvements at the I-10 Freeway/Cherry Valley Interchange. **MM-T3-3** Traffic signals and turn lane improvements shall be installed at the following intersections:	Project Specific

Impact	Mitigation Measures	Scope
	▪ "C" Street at Singleton Road ▪ "A" Street at Singleton Road **MM-T3-4** Roberts Road from the TAZ "B" south boundary to the TAZ "C" north boundary shall be completed at its ultimate full-section width as an Arterial roadway (110-foot ROW). **MM-T3-5** Roberts Road shall be widened from the TAZ "C" north boundary to the TAZ "B" north boundary at its ultimate half-section width as an Arterial roadway (110-foot ROW). **MM-T3-6** Singleton Road from its Phase 2 terminus (See Exhibit 1-D) to "C" Street shall be constructed at its ultimate half-section width as a Secondary roadway (88-foot ROW). **MM-T3-7** Singleton Road from "C" Street to San Timoteo Canyon Road shall be constructed as an interim two-lane 32-foot pavement section. **MM-T3-8** "C" Street from Singleton Road to the TAZ "I" north boundary shall be constructed at its ultimate full-section width as a Divided Collector roadway (78-foot ROW). **MM-T3-9** "C" Street from the TAZ "I" north boundary to "B" Street shall be constructed at its ultimate half-section width as a Divided Collector roadway (78-foot ROW). **MM-T3-10** "C" Street from "B" Street to Roberts Road shall be constructed at its ultimate full-section width as a Divided Collector roadway (78-foot ROW).	

Impact	Mitigation Measures	Scope
	MM-T3-11 Roberts Road from "C" Street to the TAZ "S" north boundary shall be constructed at its ultimate half-section width as an Arterial roadway (110-foot ROW). **MM-T3-12** Complete "B" Street from "C" Street to the TAZ "I" east boundary at its ultimate full-section width as a Divided Collector roadway (78-foot ROW). **MM-T3-13** "B" Street from "A" Street to "C" Street shall be completed at its ultimate full-section width as a Divided Collector roadway (78-foot ROW). **MM-T3-14** "A" Street from "B" Street to the TAZ "V" south boundary shall be completed at its ultimate full-section width as a Divided Collector roadway (78-foot ROW). **PHASE 3 - TOWN CENTER (FIGURE 3.10-33)** **MM-T3-15** The Developer shall participate in the I-10 Freeway/Singleton Interchange improvement project. **MM-T3-16** The Developer shall participate in providing turn lane improvements at the I-10 Freeway/Cherry Valley Interchange. **MM-T3-17** Traffic signals and turn lane improvements shall be installed at the following intersections:	

Impact	Mitigation Measures	Scope
	▪ "F" Street at Singleton Road ▪ Roberts Road at Singleton Road ▪ Roberts Road at Singleton Road **MM-T3-18** Turn lane improvements shall be provided at the following intersections: ▪ Roberts Road at "J" Street (Cherry Valley Boulevard) ▪ Realigned Desert Lawn Drive ("G" Street) at "J" Street (Cherry Valley Boulevard) **MM-T3-19** "J" Street from the I-10 Southbound Ramps to the realigned Desert Lawn Drive shall be completed at its ultimate full-section width as an Urban Arterial roadway (134-foot ROW). **MM-T3-20** The realigned Desert Lawn Drive from "J" Street to the TAZ "F" east boundary shall be completed at its ultimate full-section width as a Secondary roadway (88-foot ROW). **MM-T3-21** Roberts Road shall be widened from the TAZ "U" south boundary to "F" Street at its ultimate half-section width as an Arterial roadway (110-foot ROW). **MM-T3-22** Singleton Road shall be widened from the I-10 Southbound Ramps to Roberts Road at its ultimate half-section width as an Urban Arterial roadway (134-foot ROW). **MM-T3-23** Roberts Road from Singleton Road to the TAZ "S" north boundary shall be constructed at its ultimate full-section width as an Arterial roadway (110-foot ROW).	

Impact	Mitigation Measures	Scope
	MM-T3-24 Singleton Road from "F" Street to the TAZ "P" west boundary shall be completed at its ultimate full-section width as an Arterial roadway (110-foot ROW). **MM-T3-25** "F" Street from Roberts Road to Singleton Road shall be constructed at its ultimate half-section width as a Major roadway (100-foot ROW). **MM-T3-26** The realignment of Roberts Road south of Singleton Road shall be constructed as an interim 32-foot pavement section.	
Impact T4 The proposed project would potentially impact the LOS in 2030 for the intersections listed in Table 3.10-5, above. *Less than significant with mitigation.*	**2030 - RESIDENTIAL DEVELOPMENT (FIGURE 3.10-34)** **MM-T4-1** The Developer shall participate in the northerly extension of Roberts Road from the northerly Summerwind Ranch project boundary to "D" Street (southerly Fiesta Property boundary) on a fair share basis. **MM-T4-2** The Developer shall participate in providing turn lane improvements at the following locations: ▪ I-10 Freeway/Cherry Valley Interchange ▪ I-10 Freeway/Singleton Interchange **MM-T4-3** Traffic signals and turn lane improvements shall be installed at the following intersections: ▪ "C" Street at Singleton Road ▪ Roberts Road at "C" Street	

Impact	Mitigation Measures	Scope
	MM-T4-4 Turn lane improvements shall be provided at the following intersections: ▪ Singleton Road at San Timoteo Canyon Road ▪ Realigned Desert Lawn Drive ("G" Street) at "J" Street (Cherry Valley Boulevard) **MM-T4-5** Singleton Road from the TAZ "P" west boundary to "A" Street shall be completed at its ultimate full-section width as an Arterial roadway (110-foot ROW). **MM-T4-6** Singleton Road from "A" Street to San Timoteo Canyon Road shall be completed at its ultimate full-section width as a Secondary roadway (88-foot ROW). **MM-T4-7** Roberts Road from the TAZ "S" north boundary to the TAZ "K" north boundary shall be completed at its ultimate full-section width as an Arterial roadway (110-foot ROW). **MM-T4-8** "C" Street from the TAZ "I" north boundary to "B" Street shall be completed at its ultimate full-section width as a Divided Collector roadway (78-foot ROW). **MM-T4-9** San Timoteo Canyon Road from the TAZ "I" north boundary to Singleton Road shall be completed at its ultimate full-section width as a Divided Collector roadway (78-foot ROW).	

Impact	Mitigation Measures	Scope
	MM-T4-10 San Timoteo Canyon Road from the TAZ "6b" north boundary to Singleton Road shall be completed at its ultimate full-section width as a Secondary Frontage roadway (76-foot ROW). **2030 - TOWN CENTER (FIGURE 3.10-35)** **MM-T4-11** The Developer shall participate in the northerly extension of Roberts Road from the northerly Summerwind Ranch project boundary to "D" Street (southerly Fiesta Property boundary) on a fair share basis. **MM-T4-12** The Developer shall participate in providing turn lane improvements at the following locations: ▪ I-10 Freeway/Cherry Valley Interchange ▪ I-10 Freeway/Singleton Interchange **MM-T4-13** A traffic signal and turn lane improvements shall be installed at the intersection of Roberts Road and "F" Street. **MM-T4-14** Turn lane improvements shall be provided at the following intersections: ▪ "F" Street at Singleton Road ▪ Woodhouse Road at Singleton Road **MM-T4-15** Singleton Road from the I-10 Southbound Ramps to Roberts Road shall be completed at its ultimate full-section width as an Urban Arterial roadway (134-foot ROW).	

Impact	Mitigation Measures	Scope
	MM-T4-16 Singleton Road from Roberts Road to "F" Street shall be completed at its ultimate full-section width as an Arterial roadway (110-foot ROW). **MM-T4-17** Roberts Road from Singleton Road to the TAZ "R" south boundary shall be completed at its ultimate full-section width as an Arterial roadway (110-foot ROW). **MM-T4-18** "F" Street from Singleton Road to Roberts Road shall be completed at its ultimate full-section width as a Major roadway (100-foot ROW).	
Impact T5 The proposed project would potentially impact the LOS for General Plan Build-out for the intersections listed in Table 3.10-5, above. *Less than significant with mitigation.*	**GENERAL PLAN BUILD-OUT (FIGURES 3.10-36, 3.10-37, & 3.10-38)** **MM-T5-1** "J" Street shall be increased between Roberts Road and "G" Street, from the Enhanced Secondary (104-foot ROW) designation in the Oak Valley Specific Plan to the recommended Urban Arterial roadway (134-foot ROW). **MM-T5-2** San Timoteo Canyon Road shall be decreased west of Singleton Road, from the Arterial (114-foot ROW) designation in the Oak Valley Specific Plan to the recommended Divided Collector roadway (78-foot ROW). **MM-T5-3** San Timoteo Canyon Road shall be decreased between Singleton Road and "J" Street, from the Major Frontage roadway (90-foot ROW) designation in the Oak Valley Specific Plan to the recommended Secondary Frontage roadway (76-foot ROW).	

Impact	Mitigation Measures		Scope
	MM-T5-4	Singleton Road shall be decreased between San Timoteo Canyon Road and "A" Street, from the Arterial roadway (114-foot ROW) designation in the Oak Valley Specific Plan to the recommended Secondary roadway (88-foot ROW).	
	MM-T5-5	"G" Street shall be decreased between San Timoteo Canyon Road and the TAZ "7b" north boundary, from the Secondary roadway (88-foot ROW) designation in the Oak Valley Specific Plan to the recommended Divided Collector roadway (78-foot ROW).	
	MM-T5-6	F" Street shall be decreased between Singleton Road and Roberts Road, from the Arterial roadway (114-foot ROW) designation in the Oak Valley Specific Plan to the recommended Major roadway (100-foot ROW).	
	MM-T5-7	Roberts Road shall be decreased between Singleton Road and "J" Street, from the Urban Arterial roadway (134-foot ROW) designation in the Oak Valley Specific Plan to the recommended Arterial roadway (110-foot ROW).	
	MM-T5-8	"J" Street shall be decreased between "G" Street and Champions Drive, from the Enhanced Secondary roadway (104-foot ROW) designation in the Oak Valley Specific Plan to the recommended Secondary roadway (88-foot ROW).	
	MM-T5-9	The realigned Desert Lawn Drive shall be decreased between "J" Street and the I-10 Freeway, from the Enhanced Secondary roadway (104-foot ROW) designation in the Oak Valley Specific Plan to the recommended Secondary roadway (88-foot ROW).	

Impact	Mitigation Measures	Scope
Impact T6 The project combined with other growth up through 2030 would have significant cumulative impact. *Less than significant with mitigation.*	**MM-T6-1** Cumulative impacts from traffic growth can be mitigated by implementing the traffic improvements designated herein on a fair-share basis. **MM-T6-2** A traffic study shall be prepared at the initiation of each new phase of the Summerwind Ranch Specific Plan, or other frequency specified by the City Engineer, as a means of monitoring traffic conditions in the study area. The study will be used to determine the effectiveness of constructed improvements, the nature of traffic growth, and whether phased improvements are sufficient. Recommendations for timing of proposed mitigation measures or new measures will be made.	Cumulative
3.11 Utilities and Service Systems		
Impact UT1 The proposed project would increase wastewater generation and require additional wastewater infrastructure and treatment facilities. *Less than significant.*	**WASTEWATER** The Yucaipa Valley Water District (YVWD) stipulates that the following domestic wastewater conditions apply to the proposed project: **MM-UT1-1** The applicant shall be responsible for payment of all wastewater related development impact fees and related charges, as determined by the water supply assessment at the time a building permit is issued for this project. Said fees include, but are not limited to, sewer treatment expansion fees and necessary permit fees. **MM-UT1-2** Wastewater service will be denied if any of the terms and conditions are not satisfied.	Project Specific

Impact	Mitigation Measures	Scope
	MM-UT1-3 The Applicant shall be responsible for complying with the Regional Water Quality Control Board (RWQCB) 2004 Basin Plan and Maximum Benefit demonstration as adopted by the Regional Board. **MM-UT1-4** This project will be required to construct and/or participate in the Oak Valley Regional Water Reclamation Facility. This facility is a wastewater treatment plant that will utilize a membrane bioreactor and denitrification facilities to both comply with the RWQCB 2004 Basin Plan and provide a high quality recycled water source for a significant portion of the irrigation uses within the development.	
Impact UT2 The proposed project would increase water demand and require additional water supply and infrastructure.	The YVWD requires the following conditions for water supply service at Summerwind Ranch. **MM-UT2-1** Adequate source water is available for domestic water supplies and recycled water supplies for both potable use and fire protection. The applicant shall be responsible for the construction or supplemental production, transmission and storage facilities to serve the project in accordance with the water supply assessment. These facilities include, but are not limited to, the construction and/or participation in the construction of reservoirs in Pressure Zones 10, 11 and 12. **MM-UT2-2** The applicant shall be responsible for all costs associated with the preparation, recommendations and decisions resulting from the completion of a water supply assessment, if required for this project.	Project Specific

Impact	Mitigation Measures	Scope
	MM-UT2-3 The applicant shall be responsible for the water related development impact fees and water related charges in effect at the time building permit is issued for this project. **MM-UT2-4** The District reserves the right to deny water service to the project if any of the District's required conditions is not satisfied. **MM-UT2-5** The applicant shall be responsible for installing the necessary infrastructure to achieve fire protection and minimum/maximum water pressure service standards as provided for by the District. **MM-UT2-6** This project will be required to install both potable water and recycled water to each residential and commercial lot within the proposed development in order to provide sufficient water for compliance with SB 221 and SB 610. Connection to the existing recycled (non-potable) water system will be the responsibility of the applicant.	
Impact UT3 The proposed project would result in an alteration to the existing storm water drainage patterns. *Less than significant with mitigation.*	**MM-UT3** An NPDES permit from the RWQCB will be required prior to the commencement of construction and post-development activities.	Project Specific
Impact UT4 The proposed project would increase solid waste disposal. *Less than significant.*	No mitigation required.	Project Specific

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1.0 INTRODUCTION

1.1 PURPOSE OF THE EIR

The Summerwind Ranch at Oak Valley is located within a portion of an approved specific plan area, known as the Oak Valley Specific Plan Area No. 1. The original Oak Valley Specific Plan (Specific Plan No. 216/216A) consisted of approximately 6,405.5 acres in Riverside County. The Specific Plan Area No. 1, Amendment No. 1 (Summerwind Ranch at Oak Valley) site is located in the western portion of the City of Calimesa. This amendment proposes a master planned community designed in light of the environmentally sensitive areas of the project site, and it accommodates a variety of integrated land uses, such as residential, commercial, business park, schools, parks, and natural open space.

The Initial Study (IS) prepared for proposed Specific Plan Amendment No. 1 determined that significant environmental impacts may occur, and therefore, an EIR was warranted. This environmental document is an EIR analyzing the impacts associated with the proposed project.

An EIR is an informational document prepared pursuant to California Environmental Quality Act (CEQA). It provides decision-makers, public agencies, and the public in general with detailed information about the potential significant environmental effects of a proposed project. It also lists the ways in which the significant effects of a project might be minimized and addresses alternatives to the project. CEQA requires that an EIR contain at a minimum, certain specific information including, but not limited to, a clear, concise project description; environmental settings; discussion of environmental impacts; effects found not to be significant, and cumulative impacts. This information is required pursuant to Section 15122 through 15131 of the State CEQA Guidelines.

1.2 PROJECT HISTORY AND PRIOR CEQA DOCUMENTATION

In conjunction with preparation of Oak Valley Specific Plan 216/216A, an EIR was prepared and certified by the Riverside County Board of Supervisors on October 6, 1988, for 6,405.5 acres of land along the west side of I-10 to the San Timoteo Wash stretching from what is now the northerly boundary of the City of Calimesa to areas now located within the city limits of Beaumont. Subsequently, Oak Valley Specific Plan Amendment 216A was approved by the Riverside County Board of Supervisors on May 22, 1990, for Phases 2 – 5 of the original Oak Valley Specific Plan 216. The proposed development included a planned golf/recreation-oriented master planned community including single-family and multi-family residential dwelling units, commercial, recreational, and community uses; and related infrastructure to be implemented over a 30-year period. On August 14, 2001, the County of Riverside Board of Supervisors approved Oak Valley Specific Plan 318 and certified EIR 418 on approximately 1,747.9 acres of the Oak Valley Specific Plan 216 and 216A located between the Cities of Beaumont and Calimesa.

1.3 ENVIRONMENTAL PROCEDURES

The proposed Summerwind Ranch at Oak Valley Specific Plan Amendment EIR has been prepared in accordance with CEQA as amended (Public Resource Code Section 21000 et seq.) and the State Guidelines for Implementation of CEQA (CEQA Guidelines) as amended (California Administrative Code Section 15000 et seq.). This report complies with the rules, regulations, and procedures of CEQA Guidelines Section 15080 to 15097 regarding the EIR process.

This EIR analyzes and assesses the potentially significant environmental impacts of the proposed project. The potential cumulative impacts, that is, the effects of the proposed project in conjunction with past, present, and reasonably foreseeable future projects in the surrounding area, are also analyzed. The EIR identifies alternatives to the proposed project and discusses possible ways to reduce or avoid the potentially significant environmental impacts.

CEQA Statute Section 21081.6 (1) requires that a public agency adopt a reporting or monitoring program for adopted mitigation measures or conditions of the project approval in order to mitigate or avoid significant effects on the environment. This program is being developed as a separate document and will be made available to the City decision-makers at the public hearing stage of the CEQA process.

1.4 INTENDED USES OF THE EIR

Pursuant to the requirements of CEQA, the EIR is intended to provide information regarding the environmental consequences of, mitigation measures for, and alternatives to, the proposed Specific Plan Amendment. It is also meant to facilitate discussions with other agencies regarding implementation of mitigation measures. CEQA is specific about providing disclosure where needed to demonstrate to the public that the lead agency has analyzed and considered the environmental implications of the proposed project. CEQA also requires consideration of the whole or entirety of an action. With these guiding principles in mind, according to the CEQA Guidelines Section 15121:

> *(a) An EIR is an informational document which will inform public agency decision-makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information which may be presented to the agency.*
>
> *(b) While the information in the EIR does not control the agency's ultimate discretion on the project, the agency must respond to each significant effect identified in the EIR by making findings under Section 15091 and if necessary by making a statement of overriding consideration under Section 15093.*

(c) The information in an EIR may constitute substantial evidence in the record to support the agency's action on the project if its decision is later challenged in court.

As stated above, the EIR will provide environmental information to the public and agencies that will be affected by the project or that otherwise are likely to have an interest in the project. These agencies and organizations include, but are not limited to, California Regional Water Quality Control Board (RWQCB), South Coast Air Quality Management District (SCAQMD), Riverside County Flood Control and Water Conservation District, the California Department of Fish and Game, the Fish and Wildlife Service and the Army Corps of Engineers.

1.4.1 PROJECT DISCRETIONARY APPROVALS

Implementation of the proposed project would require the following approvals and permits from the City of Calimesa:

- ***Certification of the Summerwind Ranch at Oak Valley Specific Plan Amendment EIR.*** Preparing an EIR to analyze all potential environmental impacts of the project. The EIR will include mitigation measures, alternatives, and other information required by CEQA.

- ***Approval of a General Plan Amendment.*** Amending the City's General Plan Land Use Element eliminating Oak Valley Specific Plan Area No. 1 and adopting the Summerwind Ranch at Oak Valley Specific Plan Amendment No. 1.

- ***Approval of a General Plan Amendment.*** Amending the City's General Plan Circulation Element for the alignment and/or roadway classifications of Cherry Valley Road, Roberts Road, Woodhouse Drive, and Singleton Road. Streets "A," "B," "C," "F," "G," and "H" will be improved per the alignment in Figure 2-8 (Section 2.0) and the roadway classification.

- ***Approval of the Summerwind Ranch at Oak Valley Specific Plan Amendment No. 1.*** Amendment of SP1 for a maximum of 3,841 dwelling units, 130.1 acres of business park uses, 129.5 acres of commercial uses, 50.4 acres of school uses, 10.5 acres for water reclamation facility, 89.9 acres for park and recreation uses, 1,400.6 acres of natural open space, and 105.0 acres for major roadways.

- ***Approval of Conditional Use Permit.*** Approval of possible Conditional Use Permits as required by the City of Calimesa.

1.4.2 RELATED APPROVALS

The principal or lead agency having jurisdiction over the proposed project is the City of Calimesa because the project site is located within the City limits. Nonetheless, the proposed project includes a series of possible discretionary approvals over which a number of agencies (i.e., responsible or trustee agencies)

may have authority. A "Responsible Agency" means a public agency which proposes to carry out or approve a project for which the lead agency is preparing or has prepared an EIR. For CEQA purposes, the term "Responsible Agency" includes all public agencies that have discretionary approval over one or more actions involved with development of the proposed project (CEQA Guidelines, Section 15382). A "Trustee Agency" means a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California. Generally, trustee agencies include, for example, the California Department of Fish and Game (CEQA Guidelines, Section 15386). This EIR is also intended to provide environmental information to a number of local agencies, which may be involved in providing public services or utilities to the project, or may otherwise have an interest in the development's environmental effect.

Table 1-1 lists potential state, regional, and local approvals that may occur during the course of implementation of the proposed project and identifies the agencies with potential jurisdiction over these permits and/or approvals.

Table 1-1
List of Potential Responsible Agencies and Permit Approval

Agency	Permit/Approval
Local Agencies	
▪ City of Calimesa Planning Department	▪ Conditional Use Permit (CUP); General Plan Amendment; Specific Plan Amendment; Certification of the EIR
▪ City of Calimesa Building and Safety	▪ Building, Land and Permits
▪ Yucaipa Valley Water District	▪ Local Storm Drainage and Flood Control Improvements
▪ Beaumont Unified School District	
Regional Agencies	
▪ South Coast Air Quality Management District	▪ Enforcement of Air Quality Regulations
▪ Riverside County Flood Control and Water Conservation District	▪ Regional Storm Drainage and Flood Control Improvements
State Agencies	
▪ State Water Resources Control Board ▪ California Regional Water Quality Control	▪ Waste Discharge Requirements (WDRs) ▪ National Pollution Discharge Elimination System (NPDES) Construction Storm Water Permit ▪ Section 401 Water Quality Certification
▪ California Department of Fish and Game	▪ Streambed Alteration Agreement (Section 1602) ▪ MSHCP Implementing Agreement

Agency	Permit/Approval
▪ Caltrans	▪ Encroachment Permits – State Highway Right-of-Way
Federal Agencies	
▪ US Fish and Wildlife Services	▪ Implementing Agreement
▪ Army Corps of Engineers	▪ Clean Water Act, Section 404 Permit

1.5 LEAD AGENCY AND CONTACTS

The lead agency for preparation of this EIR is the City of Calimesa, and therefore, the City has the authority to release the Draft EIR to public agencies, organizations, and interested individuals for review and comment. The Draft EIR is available for inspection and copying at the City of Calimesa. The project applicant is SunCal Companies. The environmental consultant is EDAW, Inc. Preparers of and contributors to this report are listed in the Report Preparation Resources section of this EIR. Key contact persons are as follows:

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ENVIRONMENTAL CONSULTANT:

EDAW, Inc.

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Project Manager
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(949) 660-8044

1.6 MAJOR ISSUES

The major issues evaluated in this EIR have been determined through the IS, NOP, comment letters from various agencies, and the general public through a scoping meeting, and through discussions with the City of Calimesa. The comments received during the NOP review period which began on June 4, 2004 and ended on July 5, 2004 are included in Appendix A-2 of this EIR. A scoping meeting was held at the City of Calimesa, on November 18, 2004 to solicit input and comments from the public. The following comment letters were received during the NOP period:

- State of California Governor's Office of Planning and Research, State Clearinghouse and Planning Unit, June 8, 2004
- Native American Heritage Commission, June 16, 2004
- California Regional Water Quality Control Board, Santa Ana Region, June 29, 2004
- Riverside County Flood Control and Water Conservation District, July 1, 2004

The following Table 1-2 presents a list of environmental issues raised by the above comment letters. The sections of the EIR and technical appendices that incorporate or address the issues are also specified.

Table 1-2
NOP Comment Letters and Issues Raised

Comment Letters/Issues Raised	EIR Section& Technical Appendices
State of California Governor's Office of Planning and Research, State Clearinghouse and Planning Unit, June 8, 2004	
▪ Courtesy notice reminding to submit comments on the NOP/IS	N/A
Native American Heritage Commission, June 16, 2004	
▪ Absence of Native American cultural resources in the immediate project area.	Section 4.4
▪ Contacting other sources of cultural resources for information regarding known and recorded site.	Section 4.4
▪ List of Native Americans individuals/organizations.	Section 4.4
▪ Provisions for accidentally discovered archaeological resources during construction.	Section 4.4
California Regional Water Quality Control Board, Santa Ana Region, June 29, 2004	
▪ Regional Board's approval authority through granting of a Clean Water Act Section 401 Water Quality Standards Certification and through its authority under the Porter-Cologne Water Quality Control Act.	Section 4.6
▪ Incorporation of appropriate mitigation measures prior to adoption of the CEQA document.	Section 4.6
▪ The project as a tributary to the Santa Ana River Reach 4.	Section 4.6
▪ Incorporation of structural best management practices into the EIR.	Section 4.6
▪ Conversion of ephemeral streams into perennial streams as the result of discharges of nuisance flows from excessive irrigation.	Section 4.6
Riverside County Flood Control and Water Conservation District, July 1, 2004	
▪ City of Calimesa's Master Drainage Plan.	Section 4.6
▪ Potential to alter existing drainage pattern and increase storm runoff, erosion, and groundwater recharge – need to discuss in EIR.	Section 4.6
▪ Compliance with stormwater permit requirements.	Section 4.6
▪ Incorporation of Best Management Practices.	Section 4.6
▪ Section 401 and NPDES General Permit requirements.	Section 4.6

Source: EDAW, Inc.

1.7 DOCUMENT ORGANIZATION

Table 1-3 identifies the content required by CEQA and the corresponding sections in this EIR.

Table 1-3
Required EIR Sections

Required Description and Analysis	Section of EIR
1. Table of Contents or Index (Section 15122 of Guidelines)	Pages i to vii
2. Summary (Section 15123 of Guidelines)	Executive Summary
3. Description of Project (Section 15124 of Guidelines)	Section 2.0
4. Description of Environmental Setting (Sections 15126, 15126.2, 15126.4, and 15130 of Guidelines) a. Significant Environmental Effects b. Effects which Cannot be Avoided c. Mitigation Measures d. Cumulative Impacts	Section 3.0
5. Alternative to the Proposed Action (Section 15126.6 of Guidelines)	Section 4.0
6. Significant Irreversible Environmental Changes (Section 15126 of Guidelines)	Section 5.0
7. Growth Inducing Impacts (Section 15126 of Guidelines)	Section 6.0
8. Effects Found Not To Be Significant (Section 15128)	Section 7.0
9. Organizations, Agencies, and Persons Consulted (Section 15129)	Section 8.0

Source: EDAW, Inc.

2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION

The Summerwind Ranch at Oak Valley is located in the western portion of the City of Calimesa, west of Interstate 10 (I-10) and south of the Riverside-San Bernardino County line. The site is located northwest of the junction of I-10 and Highway 60, approximately 70 miles east of downtown Los Angeles. The cities of Beaumont and Banning are located southeast of the project site, and the cities of Redlands and Yucaipa are located to the north (Figures ES-1 and ES-2 in Executive Summary). The proposed project site is surrounded by the San Bernardino Mountains and Crafton Hills to the north and west, and the San Jacinto Mountains and San Timoteo Badlands to the east and south.

2.2 BACKGROUND

The Summerwind Ranch at Oak Valley Specific Plan is being developed on a portion of a larger Specific Plan (Oak Valley Specific Plan 216/216A) which was approved, and an Environmental Impact Report certified, by the Riverside County Board of Supervisors on October 6, 1988. The Specific Plan and EIR were prepared and approved for the development of over 6,000 acres of land along the west side of I-10 to the San Timoteo Wash stretching from what is now the northerly boundary of the City of Calimesa to areas now in the City of Beaumont (Figure 2-1). Subsequent to the approval of the Specific Plan 216 for Phase I, Oak Valley Specific Plan Amendment 216A was approved by the Riverside County Board of Supervisors on May 22, 1990, for Phases 2-5 of the original Oak Valley Specific Plan 216. The Specific Plan 216A resulted in an approval to develop 6,045 acres within Calimesa and Beaumont and included single-family and multi-family residential dwelling units, commercial, recreational and community uses, and related infrastructure to be implemented over a 30-year period. Subsequent to approval of Oak Valley Specific Plan 216 and 216A, the City of Beaumont annexed a portion of the specific plan area located east of I-10 into the City.

The City of Calimesa was incorporated in December 1990. At that time, the Calimesa City Council adopted those portions of Specific Plan 216 and 216A and its accompanying Environmental Impact Report (EIR) that were situated within the newly incorporated City and renamed the Specific Plan to "Oak Valley SP1" (Figure 2-2). The current Specific Plan Amendment is being proposed in recognition of the environmental sensitivity of the site including the Garden Air Wash which, under Oak Valley Specific Plan No. 1, would have been permitted to be developed and in response to the changing market conditions. The Specific Plan Amendment is also being proposed to reflect the change in land uses resulting from the purchase of the 358 acres by the Riverside Land Conservancy and future changes that could result should the option be exercised to convert the additional lands for open space purposes. Figure 2-3 depicts the relationship of the previously approved Specific Plans (216 and 216A) with the proposed amendment site.

2.2.1 COMPARISON TO APPROVED PLAN 216/216A

Based on California state law a specific plan may not be adopted or amended unless the proposed plan or amendment is consistent with the general plan. Additionally, the law requires that any specific plan of a city or county that is applicable to the same areas or matters affected by a general plan amendment shall be reviewed and amended as necessary to make the specific plan consistent with the general plan. Upon the City's incorporation and subsequent adoption of the Specific Plan 216/216A, inconsistencies emerged in relationship to the City of Calimesa's General Plan. The purpose of this Specific Plan Amendment is to make the two documents consistent with one another.

2.3 SPECIFIC PLAN AMENDMENT NO. 1

Amendment No. 1 to the Specific Plan Area No. 1 includes guidelines for the orderly development of Summerwind Ranch at Oak Valley according to the master land development plan. This is the first amendment to Specific Plan Area No. 1, and its purpose is to revise:

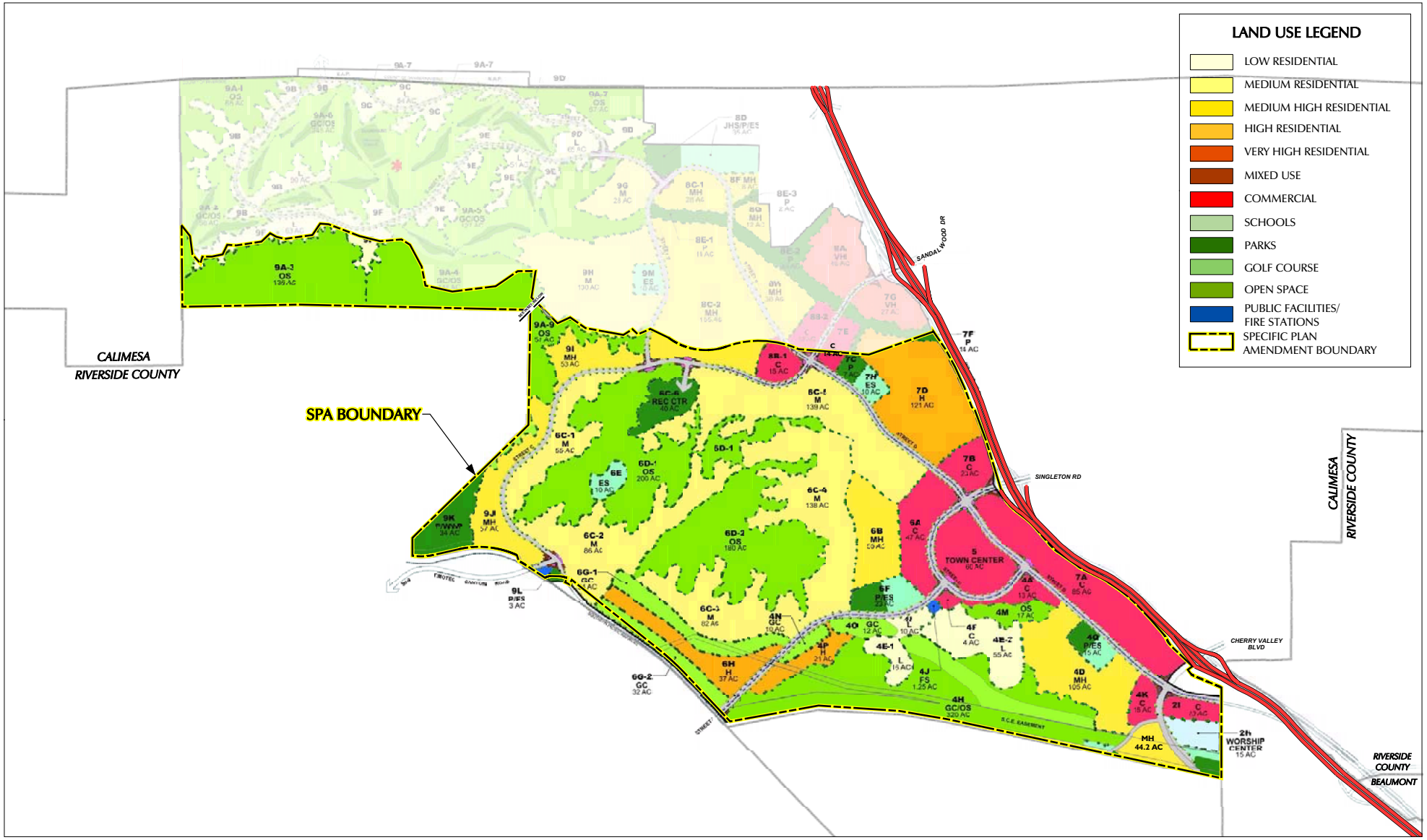
1. The distribution, extent, and/or residential density;
2. Amount, type, and distribution of non-residential land (commercial, business park, schools, and public facilities);
3. The amount and distribution of parks and open space; and
4. The alignment of the internal roadway network within Specific Plan No. 1.

The proposed land use and circulation changes are in response to:

1. Riverside Land Conservancy's property acquisition of portions of Specific Plan No. 1 for open space and conservation;
2. Preservation of the Garden Air Wash wildlife corridor;
3. Preservation of sensitive environmental areas;
4. Maintaining the connectivity of existing trail systems to the proposed trails within the project; and
5. Updated environmental studies.

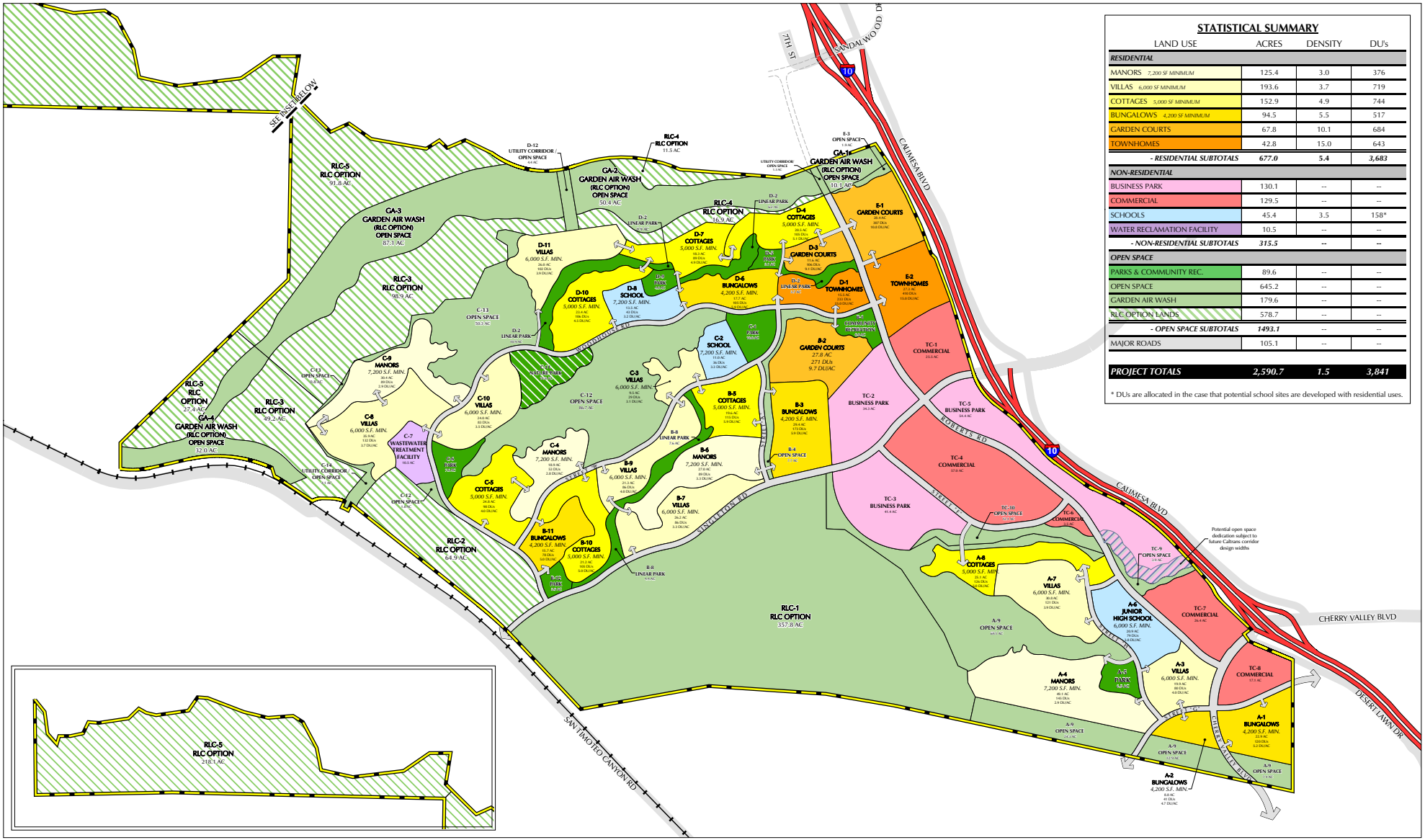
A large portion of the Specific Plan Amendment area has been, or has an option to be, acquired by the Riverside Land Conservancy (RLC). This is an organization of volunteers and donors founded in 1988 that acquires and conserves important open space, wildlife habitat, and prime agricultural lands in Southern California. RLC is a non-profit land trust facilitating the transfer of land from private to public ownership.

The proposed Amendment No. 1 seeks to revise the distribution, extent, and/or residential density of the project. The proposed project decreases the amount of residential land use from 5,992 dwelling units on 1,066.2 acres, at a density of 5.6 du/ac, to 3,683 dwelling units on 677.0 acres, with a density of 5.4 du/ac. Therefore, the amount of land used for residential development is decreased by 389.2 acres or 36.5% of land. The proposed project also reduces the number of planned residential units by 38%. The proposed project introduces six residential density categories compared to four in the approved plan.



EDAW T&B PLANNING CONSULTANTS N.T.S.

Figure 2-1
Oak Valley Specific Plan 216/216A



STATISTICAL SUMMARY

LAND USE	ACRES	DENSITY	DU's
RESIDENTIAL			
MANORS *7,200 SF MINIMUM*	125.4	3.0	376
VILLAS *6,000 SF MINIMUM*	193.6	3.7	719
COTTAGES *5,000 SF MINIMUM*	152.9	4.9	744
BUNGALOWS *4,200 SF MINIMUM*	94.5	5.5	517
GARDEN COURTS	67.8	10.1	684
TOWNHOMES	42.8	15.0	643
- RESIDENTIAL SUBTOTALS	***677.0***	***5.4***	***3,683***
NON-RESIDENTIAL			
BUSINESS PARK	130.1	--	--
COMMERCIAL	129.5	--	--
SCHOOLS	45.4	3.5	158*
WATER RECLAMATION FACILITY	10.5	--	--
- NON-RESIDENTIAL SUBTOTALS	***315.5***	***--***	***--***
OPEN SPACE			
PARKS & COMMUNITY REC.	89.6	--	--
OPEN SPACE	645.2	--	--
GARDEN AIR WASH	179.6	--	--
RLC OPTION LANDS	578.7	--	--
- OPEN SPACE SUBTOTALS	***1493.1***	--	--
MAJOR ROADS	105.1	--	--
PROJECT TOTALS	***2,590.7***	***1.5***	***3,841***

* DUs are allocated in the case that potential school sites are developed with residential uses.

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Figure 2-2
Specific Plan Amendment No. 1 Land Use Plan

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Figure 2-3
Adopted Land Use - Oak Valley Area

The proposed Amendment No. 1 proposes to revise the amount, type, and distribution of non-residential land uses (commercial, business park, schools, and public facilities). The adopted specific plan included 371.2 acres of non-residential land use, comprised of commercial land use; a fire station; four elementary schools; a worship center; and a wastewater treatment plant. The proposed land use decreases the amount of land used for non-residential land use by 55.7 acres. Additionally, the Town Center is planned to accommodate a fire station, police station, civic center, and/or a library, should the City desire to construct such facilities. The project also proposes a separate water reclamation facility, whereas the approved plan's facility is shared with a park site.

The proposed Amendment No. 1 also seeks to revise the amount and distribution of parks and open space. Specific Plan 216/216A proposes a mix of parks, recreation facilities, a potential extension of a 36-hole golf course, a recreation center, and natural open space on approximately 1,046.8 acres. The proposed project provides 1,493.1 acres of open space and recreation, resulting in an increase of 30% or 446.3 acres of total open space uses. The project will include active, passive, and linear parks; a nature park; a community recreation facility; and natural open space all connected with residential neighborhoods, schools, and the Town Center. A majority of the areas set forth as golf course in the approved plan have been re-designed as open space in the proposed Amendment No. 1 due to a substantial reduction in future community residents, as well as changing market conditions. In addition, the proposed project revises the location and acreage of preserved open space by preserving significant environmental resources including, ridgelines, drainages, wildlife corridors, and oak trees. The distribution of land use within Specific Plan 216/216A does not preserve the Garden Air Wash.

The proposed Amendment No. 1 seeks to revise the alignment of the internal roadway network within the specific plan area. Internal roadways were designed in response to the clustering of neighborhoods and the preservation and subsequent sensitivity to environmental areas such as ridgelines, drainage and valleys, oak trees, and wildlife corridors. Singleton Road is re-aligned to serve as a buffer between development and the open space areas provided in the 357.8 acres of open space in RLC-1. Additionally, Specific Plan 216/216A plans for a collector roadway throughout areas in the Garden Air Wash. The proposed project re-aligns the collector road away from the Garden Air Wash.

For a comparison of the Specific Plan 216/216A and the proposed Amendment No. 1 land use distribution, please refer to Figures 2-1 and 2-2. Figure 2-3 shows the Specific Plan 216/216A, and Figure 2-4 compares the Specific Plan 216/216A with the proposed project.

2.3.1 SCOPE OF THE SPECIFIC PLAN

The adoption of a specific plan is a legislative act that may be adopted by either ordinance or resolution and must be consistent with the City's General Plan. The specific plan accommodates development of the proposed project and provides development controls to assure that the specific plan will be built out as planned. The following is a summary of each section contained in the specific plan document.

Section I, **Introduction**, discusses the specific plan's purpose and intent, goals and objectives, project background, planning approach, general plan consistency, and comparison to the approved plan.

Section II, **Project Summary**, includes discussions of regional and local setting, existing site characteristics, existing and surrounding land uses, and project summary.

Section III, **Specific Plan**, discusses development plans and standards (i.e., land use plan, open space and recreation plan, circulation plan, drainage, water and sewer, public facilities, phasing), and village plans and standards.

Section IV, **Design Guidelines**, contains a discussion of the purpose and intent, architectural design guidelines, community elements, street landscaping, and landscape design guidelines.

Section V, **Zoning Ordinance**, includes residential development standards (standards within each planning area).

Section VI, **Hillside Development Regulations**, discusses standards and regulations.

Section VII, **Oak Tree Protection Plan**, discusses purpose, applicability, mitigation, and monitoring.

Section VIII, **General Plan Consistency Analysis**, discusses the conformance of the proposed project to the City of Calimesa General Plan.

2.4 AUTHORITY OF THE SPECIFIC PLAN

The specific plan amendment for the Summerwind Ranch at Oak Valley plan has been prepared pursuant to the provisions of the California Government Code, Title 7, Division 1, Chapter 3, Article 8, Section 65450 through 65457. The California Government Code authorizes cities to adopt specific plans by resolution as policy or by ordinance as regulation. Hearings are required by both the Planning Commission and the City Council after which the specific plan must be adopted by the City Council to be in effect.

This specific plan, adopted by ordinance, is a regulatory plan that serves as the zoning ordinance for the subject property. All other City codes and ordinances shall continue to be applicable. Proposed development plans, agreements, site plans, tentative tract maps or parcel maps, and any other development approval must be consistent with this specific plan. Projects found consistent with the specific plan will be deemed consistent with the City's General Plan.

Further, the Government Code states that a specific plan may be amended as many times as necessary in the same manner as it was adopted. In the case of this specific plan, it is adopted by ordinance and shall be amended by the same.

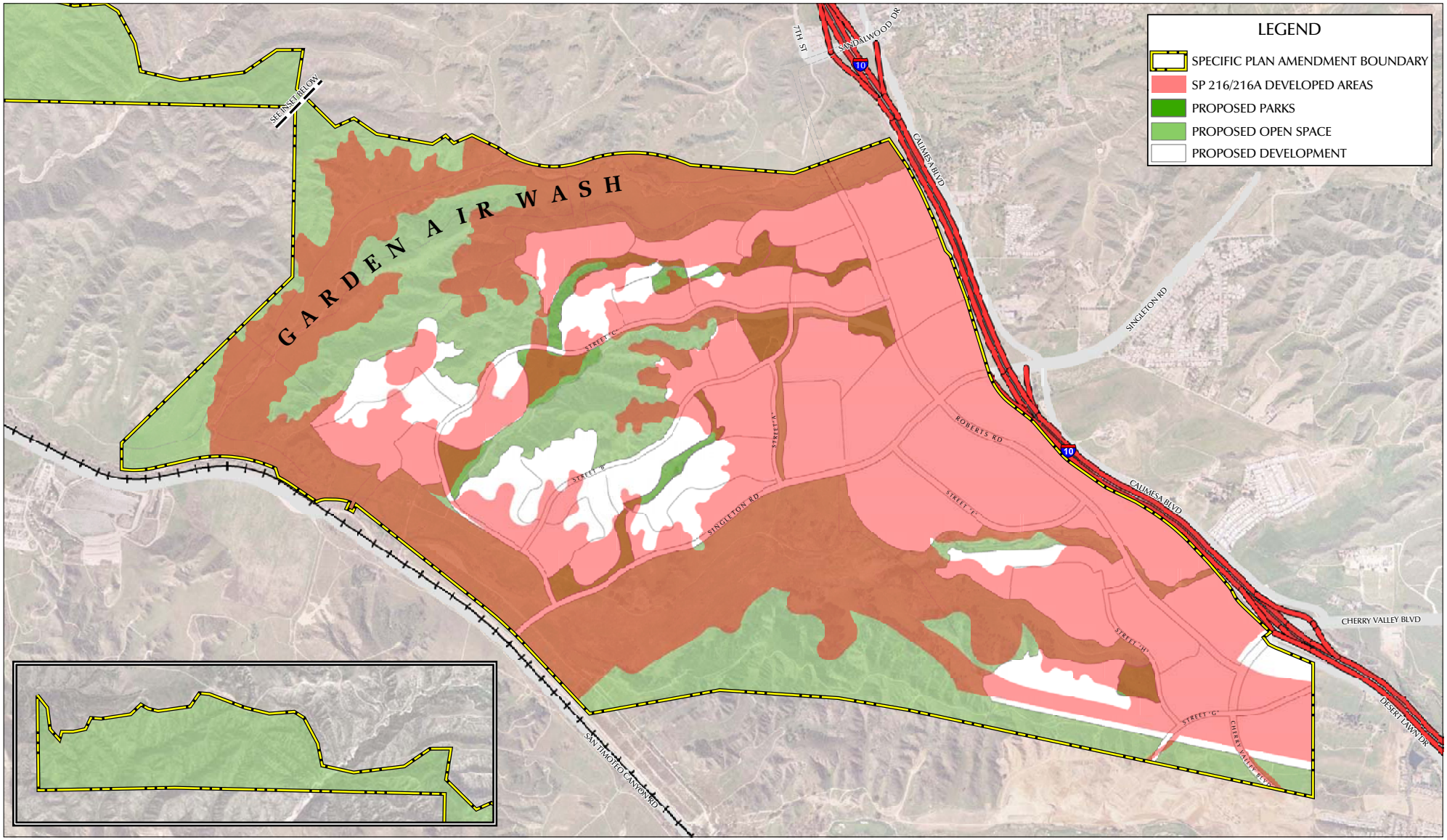

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Figure 2-4
Specific Plan 216/216A vs. Specific Plan Area No.1 Amendment No.1 Overlay Comparison

2.5 EXISTING SITE CHARACTERISTICS

The topography of the site consists of gently to moderately rolling hills and ridgelines, separated by broad valleys and narrow ravines, all scattered with oak trees and scrub vegetation. These valleys and ravines act as natural drainage courses and contain several streambeds. Elevations throughout the site range from valley lows of approximately 1,950 feet to ridgelines of approximately 2,425 feet, and the site generally slopes gently to the southwest toward San Timoteo Creek (Figure 2-5).

The project site lies within the watershed of the Santa Ana River and its tributaries, defined as the Santa Ana Region. The project site is situated within the largest underground water basin in the region, the Upper Santa Ana River Basin. The project site is within the San Timoteo Sub-basin of the Upper Santa Ana Region. The proposed project site contains several natural streambeds. The broad flat alluvial plateaus are divided by steep sides and wide bottom ravines that serve as regional and sub-regional drainage courses. The Garden Air Wash, an intermittent wetland, is the most prominent surface drainage feature in the northern portion of the project site and ranges from 20 to 40 feet wide.

Eight vegetation communities and cover types have been identified within the project site. Native vegetation consists of chaparral, coastal sage scrub, meadow, oak woodland, and riparian woodland. Disturbed, non-native cover types such as agricultural land, ornamental trees, and non-native grasses also occur within the project site due to extensive agricultural and grazing practices over the past century.

Numbers of sensitive environmental resources were identified within the project site including numerous ridgelines, important drainages (as well as their contiguous valleys and ravines) and two potential wildlife corridors. The proposed project is designed to protect these environmentally sensitive areas along with additional areas beyond the General Plan vision. Significant ridgelines, drainages, valleys and ravines, and wildlife corridors will be retained in their natural conditions as much as feasible. The Specific Plan Amendment seeks to conserve and protect important plant communities and wildlife habitats, such as riparian areas, wetlands, and oak woodlands by using buffers, creative site planning, revegetation, and open space dedications.

While the site currently has no viable wildlife corridors, two potential wildlife corridors were identified that could contribute to both local and regional ecological systems. Garden Air Wash is the most significant as it has been identified by the City and County as a potential wildlife corridor of regional significance. Garden Air Wash is the southerly segment of Constrained Linkage 23 in Riverside County's Multiple Species Habitat Conservation Plan (MSHCP). A Constrained Linkage is a constricted connection expected to provide for movement of identified Species between Core Areas, where options for assembly of the connection are limited due to existing patterns of use.

According to the County's MSHCP, proposed Constrained Linkage 23 is an upland Linkage located in the vicinity of Cherry Valley, which provides a connection to Bogart County Park and San Timoteo Creek for certain species. This Linkage is constrained by surrounding existing urban and rural residential development in the City of Calimesa. The habitat within this linkage would be provided for species such as Bell's sage sparrow, Los Angeles pocket mouse, and San Bernardino mountain kingsnake. This linkage likely provides for movement of common mammals such as bobcat.

The second potential wildlife corridor is contiguous with the sensitive drainages that runs through the south central portions of the site. This corridor has been identified by the City as the Cherry Valley Corridor. The potential corridor is constrained at the I-10 Freeway at its easterly terminus and connects to the potential Garden Air Wash corridor to the north. If a connection is eventually established below the I-10 Freeway, the corridor would continue north and terminate in the foothills of the San Bernardino National Forest.

The proposed project, in contrast to the Specific Plan 216/216A, protects and avoids all sensitive environmental areas. The plan proposes a total of 1,493.1 acres (58%) for open space, which includes 645.2 acres of natural open space, 179.6 acres for the Garden Air Wash, 578.7 acres of RLC Option lands, and 89.6 acres of parks and community recreation.

2.6 DESCRIPTION OF THE PROPOSED PROJECT

2.6.1 PROJECT OBJECTIVES

The City of Calimesa Planning vision and process is sensitive to environmental protections needs, engineering feasibility, market acceptance, economic viability, development phasing, surrounding land uses, and local community goals. In light of these attributes, development and planning goals were established for the proposed amendment, which were supported by an extensive analysis process. The following objectives were created consistent with the project goals.

The City of Calimesa objectives for the proposed development include:

1. Maintain the integrity of the natural environment through the preservation and conservation of open space allowing for connectivity through preservation of viable wildlife corridors and systematic, sensitive planning.

2. Create a well-connected walkable community with an integrated multi-purpose trail system that will allow residents access to a range of recreational uses.

3. Establish an interconnected open space system which provides for diverse trail systems, recreational opportunities, and preservation of open space, sensitive habitat areas, and drainage systems.

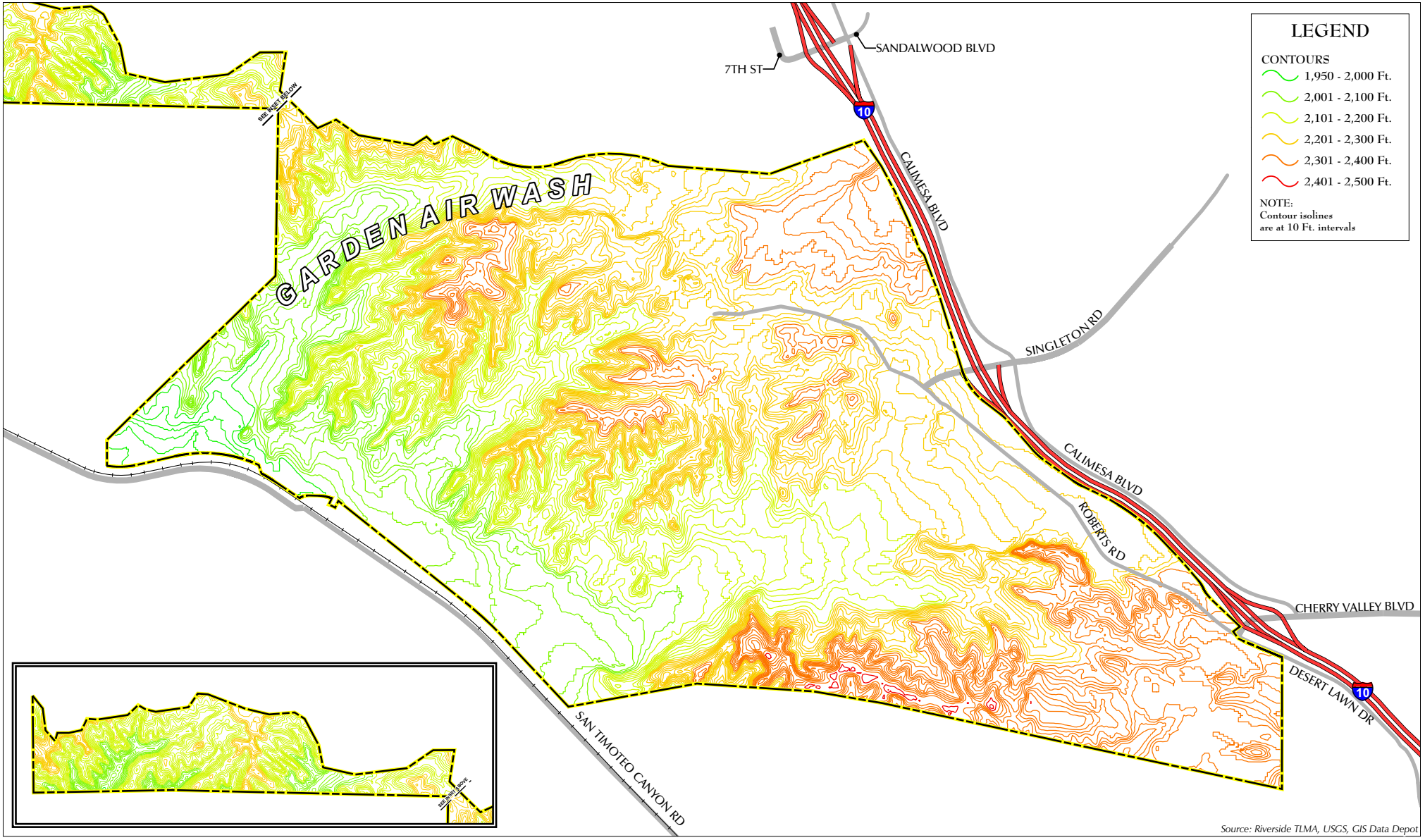

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Figure 2-5
Topographic Map

4. Promote a jobs-housing balance.

5. Develop land use patterns that generally conserve energy.

6. Create a strong sense of place.

7. Provide adequate utility, drainage, fire protection, and school facilities to serve the needs of all uses within the Specific Plan area.

8. Provide for safe and efficient vehicular, pedestrian, and bicycle movement within and through the Specific Plan area, while protecting the integrity of the Planned Community.

9. Anticipate marketing needs and public demand by providing varying housing types, styles, and sizes that will be marketable within the economic profile of the City and surrounding communities.

10. Attract commercial opportunities by designating commercial and business park land use categories that are conveniently located to minimize commuting distances and serve the need of project residents and residents of the surrounding area.

The Applicant's objectives for the development include:

1. Cluster neighborhoods and utilize compact building designs within residential and recreational land use mixes in an effort to preserve natural open space.

2. Identify and preserve sensitive environmental resources, including ridgelines, drainage courses, and wildlife corridors.

3. Reduce development impacts on hillside areas and ensure that Summerwind Ranch at Oak Valley is developed in an environmentally sensitive manner. Hillside development standards shall minimize the alteration, reduction, and removal of the natural setting, thereby creating a more desirable living environment.

4. Create a diverse community with integrated land uses that will result in a balanced, full service, land use plan for a community where people can live, work, shop, secure services, and recreate.

5. Locate commercial, retail service, and employment opportunities in response to market conditions and in harmony with the uses of surrounding neighborhoods in an effort to promote a jobs-housing balance.

6. Develop land use patterns that shorten travel distances for essential services, limit air and noise pollution, allow for alternative modes of transportation, and generally conserve energy.

7. Foster a distinctive, attractive and cohesive community with a strong sense of place by responding to community values and natural features of the site.

8. Create a range of housing opportunities and choices by diversifying the residential product mix within all villages.

9. Phase development so as to ensure adequate levels of services in a manner which does not create a financial burden to the citizens of the City of Calimesa.

2.6.2 PROJECT CHARACTERISTICS

The Summerwind Ranch at Oak Valley project consists of an Amendment to Specific Plan Area 1 which includes revisions to the Specific Plan regarding 1) the distribution, extent and/or residential density; 2) the amount, type and distribution of non-residential land (commercial, business park, schools, and public facilities); 3) the amount and distribution of parks and open space; and 4) the alignment of the internal roadway network with Specific Plan Area 1. The proposed land use and circulation changes are in response to: 1) Riverside Land Conservancy's (RLC) property acquisition of portions of Specific Plan Area No. 1 for open space and conservation; 2) preservation of the Garden Air Wash corridor; 3) preservation of significant drainage corridors; 4) preservation of sensitive environmental areas; 5) creating connectivity with existing trail systems to the proposed trails within the project; 6) changing regulatory requirements; 7) updating environmental studies; and 8) changing market conditions in the area.

As shown in Table 2-1, this Specific Plan Amendment will decrease the number of residential dwelling units from 5,992 dwelling units on 2,590.7 acres to up to 3,683 dwelling units on 677.0 residential acres. The total acreage for non-residential land uses will decrease by approximately 55.7 acres and will now consist of commercial, business park, and public facility land uses. If the school district should decide to not locate facilities within the community, an additional 45.4 acres (158 dwelling units) would become available for residential uses. In response to RLC's property acquisitions, preservation of Garden Air Wash, and additional open space preservation within Summerwind Ranch at Oak Valley, overall open space acreage will increase by over 440 acres from 1,046.8 acres to 1,493.1 acres.

Table 2-1
Specific Plan 216/216A and Proposed Amendment
Land Use Comparison

	Oak Valley SP 1 Adopted Land Uses			Proposed Amendment Land Uses[1]		
Land Use	**Acres**	**Density**	**DU's**	**Acres**	**Density**	**DU's**
Residential[3]						
Low Density	80.2	0.4 – 2.0	123	0.0	0.0	0.0
Medium Density	541.4	2.0 – 5.0	2,135	471.9	3.0-4.9	1,839
Medium High Density	262.9	5.0 – 8.0	1,597	94.5	5.5	517
High Density	181.7	8.0 – 14.0	2,080	67.8	10.1	684
Very High Density	0.0	14.0-20.0	0.0	42.8	15.0	643
Residential Subtotals	*1,066.2*	*5.6*	*5,935*	*677.0*	*5.4*	*3,683*
Non-Residential						
Business Park	–	–	–	130.1	–	–
Commercial	314.4	–	–	129.5	–	–
Fire Station	3.4	–	–	0.0	–	–
Schools	39.2	–	57[2]	46.2	3.4	158[2]
Worship Center	14.2	–	–	0.0	–	–
Water Reclamation Facility	–	–	–	10.5	–	–
Non-Residential Totals	*371.2*	–	*57*[2]	*315.5*	–	*158*[2]
Open Space						
Parks And Recreation	86.4	–	–	89.6	–	–
Golf Course	110.9	–	–	0.0	–	–
Natural Open Space	849.5	–	–	645.2	–	–
Garden Air Wash	0.0			179.6		
RLC Option Lands	0.0			578.7		
Open Space Subtotals	*1,046.8*	–	–	*1,493.1*	–	–
Major Roads	106.5	–	–	105.1	–	–
Project Total	**2,590.7**	**2.3**	**5,992**	**2,590.7**	**1.5**	**3,841**

[1] For comparison purposes, proposed land uses are converted to the equivalent of adopted land uses in SP 216/216A.

[2] Maximum number of dwelling units that can be developed on school sites.

[3] Land use density definitions used in SP 216/216A.

Components of the Specific Plan include: Land Use Plan, Development Standards, Open Space and Recreation Plan, Circulation Plan, Drainage Plan, Water Plan, Sewer Plan, Grading Plan, Public Facilities Plan, Phasing Plan, and Oak Tree Preservation Plan.

LAND USE PLAN (Figure 2-6)

The proposed project includes five basic land uses: residential, business park, commercial, public facilities, and open space and recreation. Each of these categories is further divided to accommodate the variety of needs. Residential, public facilities, and open space and recreation land uses are primarily located within Villages A through E. Business park and commercial land uses are within the Town Center Planning Area.

The Specific Plan Amendment's overall residential component will be sited on 677.0 acres of the 2,590.7 acre site, supporting approximately 3,683 dwelling units. An additional 158 dwelling units may be developed if one or more of the three proposed school sites are not acquired by the school district. Therefore, the Specific Plan Amendment can support a maximum of 3,841 dwelling units in five developed phases. Residential development will be provided at a variety of densities sensitively placed adjacent to large expanses of open space. Accordingly, the project will contribute to meeting the demand for housing in Western Riverside County, while maintaining sensitivity to the project area's biological and topographical resources. Majority of the future residences will be located in the central portion of the specific plan area and away from I-10.

Residential Land Use

Summerwind Ranch at Oak Valley will contain five distinct residential villages (Villages A through E) consisting of residential neighborhoods interspersed with parks, natural open space, and multi-purpose trails. The residential planning areas consist of approximately 3,683 dwelling units on 677.0 acres (5.4 du/ac) or 26% of the specific plan's total acreage. The gross overall average density for the project is 1.5 du/ac. The residential planning areas will vary in density from 3.0 du/acre to 15.0 du/acre and will be located among natural open space varied park uses, and multi-purpose trail systems. The housing mix will range from detached single-family units on 4,200 to 7,200-square foot lots to multi-family units in the form of garden courts and townhomes.

Low Density Land Use (2-4 du/ac) - Manors and Villas

The Manor and Villas residential land use will allow approximately 1,095 dwelling units on 319.0 acres (12.3% of the total project area) at an overall density of 3.4 dwelling units per acre, with lot sizes ranging between 7,200 square feet for the Manors and 6,000 square feet for the Villas. The Manors and Villas will be located in Villages A through D. The Manor and Villa land use is intended to provide areas for single-family, large lot subdivisions and will be located in the hilly and/or steeper sloped terrain of the site. This land use allows for design flexibility and minimizes the disruptions of grading and vegetation removal

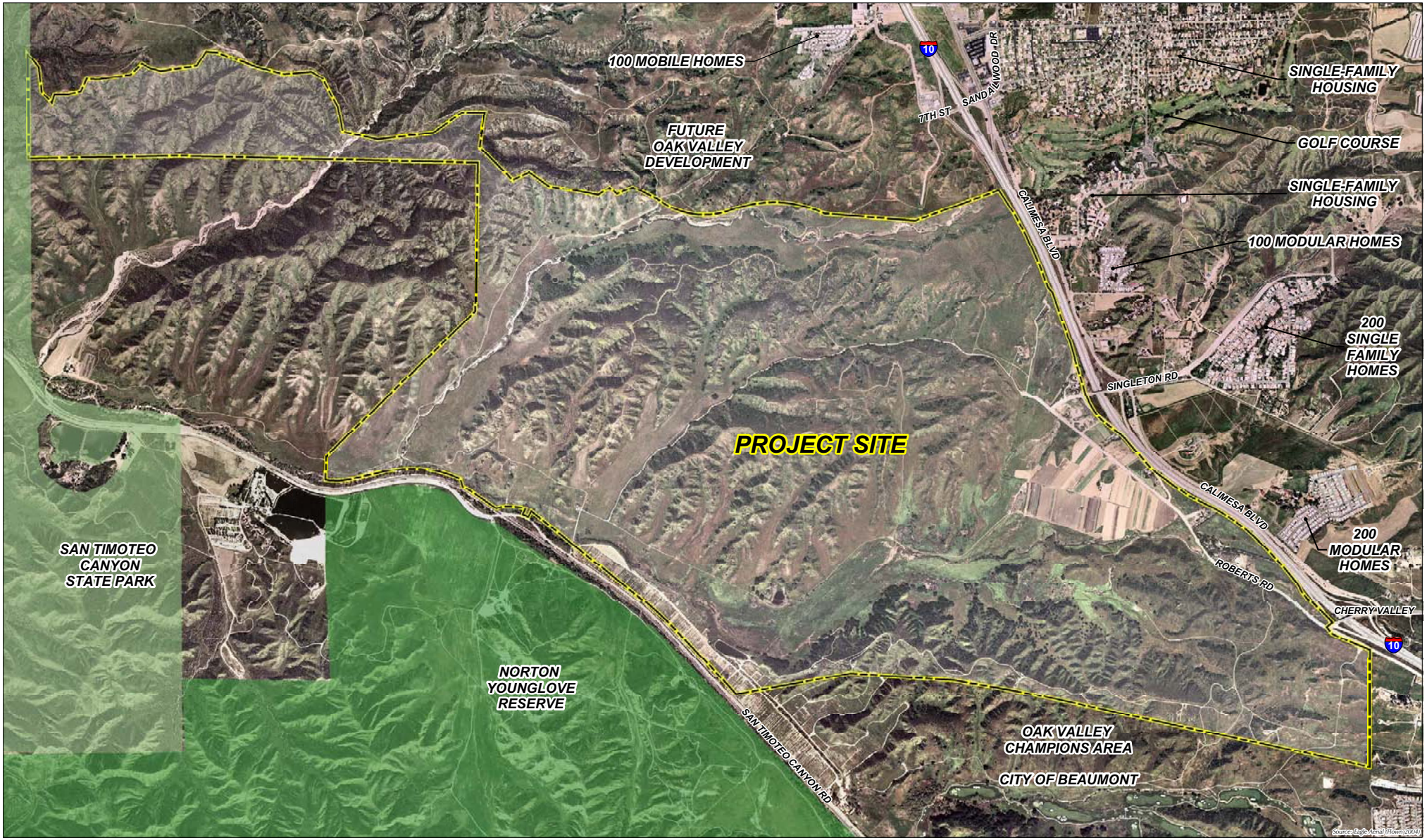

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Figure 2-6
Existing and Surrounding Land Uses

through selective building site location. In this manner, much of the visual and environmental resources of the site will be protected.

Low Medium Density Land Use (4-7 du/ac) - Collages and Bungalows

The Cottages and Bungalow residential land uses will allow approximately 1,261 dwelling units on 247.4 acres (9.5% of the total project area) at an overall density of 5.0 dwelling units per acre, with lots sizes ranging between 5,000 square feet for the Cottages and 4,200 square feet for the Bungalows in Villages A through D. These land uses are intended to provide areas for single-family medium lot subdivisions and will primarily be developed towards the interior portions of the site. This residential land use may incorporate design features such as zero-lot-lines in an effort to create more useable side and back yards.

Medium Density Land Use (7-14 du/ac) - Garden Court

The Garden Court residential land use is intended for the smaller, detached Garden Court homes. Approximately 684 dwelling units will be developed on 67.8 acres (2.6% of the total project area) at a density of 10.1 dwelling units per acre in Villages B, D, and E. Garden Court homes will typically consist of four to six detached units clustered around a common driveway (or court), each with private patios or small yards. Due to the larger concentration of homes within this land use, these residences will be located in proximity to I-10 Freeway and the Town Center.

High Density Land Use (14-20 du/ac) - Townhomes

The Townhome residential land use will consist of approximately 643 dwelling units on 42.8 acres (1.7% of the total project area) at a density of 15.0 dwelling units per acre in Villages D and E. This land use designation allows for a higher residential building intensity to occur adjacent to commercial areas and major transit routes. Therefore, the Townhomes will be located near I-10 Freeway and the Town Center.

Commercial Land Use

Of the 315.5 acres of non-residential land use contained in Summerwind Ranch at Oak Valley, 129.5 acres (5.0% of the total project area) will be designated for commercial land uses. Commercial land uses will be located in the proposed Town Center adjacent to I-10. In order to address aesthetic impacts along I-10, special landscape buffers will be provided in commercial planning areas closest to the freeway. Commercial uses are easily accessible for residents at the neighborhood level, thereby minimizing the amount of travel and distance for daily activities. The Town Center provides space for community-level retail and commercial services, as well as community and government facilities. Commercial retail services that are associated with a regional employment center (such as hotels, restaurants, and ancillary facilities) also will support the residents of Summerwind Ranch at Oak Valley. The commercial uses will contribute to a jobs-housing balance within the community and the City of Calimesa. Residential units may be horizontally or vertically integrated into the commercial land use planning areas, adding to the future possibilities of creating a dynamic, mixed-use Town Center where people can live, work, and shop.

Business Park Land Use

Within the Town Center, three business park planning areas will be developed on 130.1 acres (5.0% of the total project area) adjacent to commercial land uses and I-10. These planning areas are intended to provide areas for business and light industrial uses. These types of land uses will support and be compatible with the commercial uses that will develop within the proposed Town Center. The employment opportunities that these uses create will address demands created by both the residents of Summerwind Ranch at Oak Valley and the region. The business park uses will contribute to a jobs-housing balance within the community and the City of Calimesa. Similar to the commercial uses, residential units may be horizontally or vertically integrated into the business park land use planning areas, adding to the future possibilities of creating a dynamic, mixed-use Town Center.

Public Facility Land Use

Schools

The project proposes three school sites within the project area on a total of 45.4 acres (1.8% of project). A 20.9 acre middle school may be developed within residential neighborhoods centrally located in Village A. Additional potential school sites are located on 11.0 acres in Village C and 13.5 acres in Village D in the central portion of project area. Schools and parks will be located strategically to allow sharing of recreational and open space amenities. If the School District chooses not to acquire a school site, the site will be developed with single-family residential uses with a maximum of 158 units.

Water Reclamation Facility

The Yucaipa Valley Water District (YVWD) proposes to construct a 12 Million Gallons Per Day (MGD) Wastewater Treatment Facility on a 10.5 acre site located within Village C. The facility will be constructed in four separate units of three MGD each to a build-out capacity of 12 MGD designed to receive wastewater from this and other proposed projects. To reduce dependency on the potable water supply, provide an economical source of landscape irrigation water, and reduce the size and cost of potable water system infrastructure, it is proposed that water from the District's proposed Water Reclamation Facility be utilized for landscape areas. A system of tanks and pumps will be designed to receive treated water from the on-site facility and distribute it throughout the project. This water source will be used by parks, parkways, and other public permanently irrigated landscaped areas.

Land Use Development Standards

Development Standards have been created for each village to ensure the orderly development of land uses. In addition to these specific standards, project-wide standards are prepared that complement the diverse conditions within each village. The standards will address signage, lighting, landscaping, parking, and other design-related issues as well as establishing requirements for setbacks, building

heights, and lot coverage. The Development Standards are intended to become the zoning standards for the Summerwind Ranch at Oak Valley and will regulate development on the site.

Open Space and Recreation

Approximately 57.6% (1,493.1 acres) of the project site will be set aside for open space and recreational uses (Figure 2-7). The majority of the open space is located in the rolling terrain found adjacent to the southern, eastern, and northern boundaries of the project site. Of the 1,493.1 acres, approximately 645.2 acres (or 24.9% of project area) are devoted to project open space throughout the development; 179.6 acres (or 6.9 of project area) located within the Garden Air Wash; 578.7 acres (or 22.3% of project area) designated as RLC option lands (lands available for future purchase by the RLC); and 89.6 acres (or 3.5% of project area) for parks and community recreation. The overall project design is responsive to major natural and scenic features, retaining them within open space areas and incorporating them wherever feasible into parks, trails, and other recreational opportunities.

Open Space

Due to the sensitive biological resources contained in the designated open space areas, access to these areas will be restricted to well-marked trail systems that traverse the community and connect with the regional trails. In many areas of the project site, natural open space and ridgelines will act as a buffer between the proposed urban land uses and the more sensitive biological resources contained in the RLC acquired property and those areas that are under consideration for purchase and conservation by the RLC.

RLC Optional Lands

RLC Option Lands comprise a total of 758.3 acres, consisting of 578.7 acres located on the outer boundaries of the villages and 179.6 acres of RLC Option Land in the Garden Air Wash to the north of the villages. Option lands that are not ultimately obtained by the RLC will be made available to the City of Calimesa under a MSHCP fee credit agreement. If the City of Calimesa chooses not to acquire the property, 179.6 acres of the Garden Air Wash will be designated as open space and the balance of the acreage will be available for development.

Garden Air Wash

Regional wildlife movement will be accommodated through on-site preservation of the Garden Air Wash corridors. The corridor will help link the Badlands with the foothills of the San Bernardino Mountains. If the RLC or the City of Calimesa decides not to acquire the parcels in this area, Garden Air Wash will be set aside as open space.

Parks and Community Recreation

The proposed project will provide 89.6 acres of parks and community recreation land uses for the residents. The project provides for a variety of parks consisting of active, passive, linear, and a nature park. In addition, a community recreation center will be developed on 6.0 acres in Village B. Park areas will be dispersed on a total of 83.6 acres throughout the project site.

Active and Passive Parks

The active parks may contain the following features: basketball courts, baseball/softball diamonds, tot lots, parking areas, comfort stations, picnic areas, and preserved oak groves. The passive parks may contain open play lawn areas, par station (exercise stations), shade structures, and picnic areas.

Linear Parks

Linear parks will provide a convenient and aesthetically pleasing linkage for residents to walk and bike to activity areas throughout the community. The linear parks located within Villages B and D will link to active and passive parks and will contain pocket parks, par courses (exercise stations), passive use areas, and paseo trails. The 12.0 acre linear park located in Village B will provide a direct link between the villages, open space, and the school located in Village C. The 21.7-acre linear park located in Village D will provide a link between pocket parks, the natural park, the school site located in this village as well as the open space in Village C.

Nature Park

A nature park will be located centrally on approximately 14.8 acres in Village C, which will allow the residents within the Summerwind Ranch at Oak Valley an opportunity to walk though and observe natural areas such as a native plant garden, scenic overlooks, non-irrigated meadows, and oak groves. Amenities within the nature park may also include picnic areas, a parking area, information kiosk, and pedestrian trails. The trails within the nature park will provide access to adjacent open space, ridgelines, and trail overlooks, providing residents a scenic view of the community and natural open space areas.

Community Recreation Center

The private community recreation center consisting of approximately 6.0 acres will be located in Village B. Vehicular access will be provided via Street “C” and parking will be provided on-site. Residents may also access the community recreation area via paseos located adjacent to the recreation center. The community recreation center will allow for a wide array of active and passive uses provided for the enjoyment of community residents. Such amenities may include an indoor gym, lounge area, fire pits, swimming pool, spa, cabanas, water play area, basketball courts, tot lot, and a lawn and garden area.

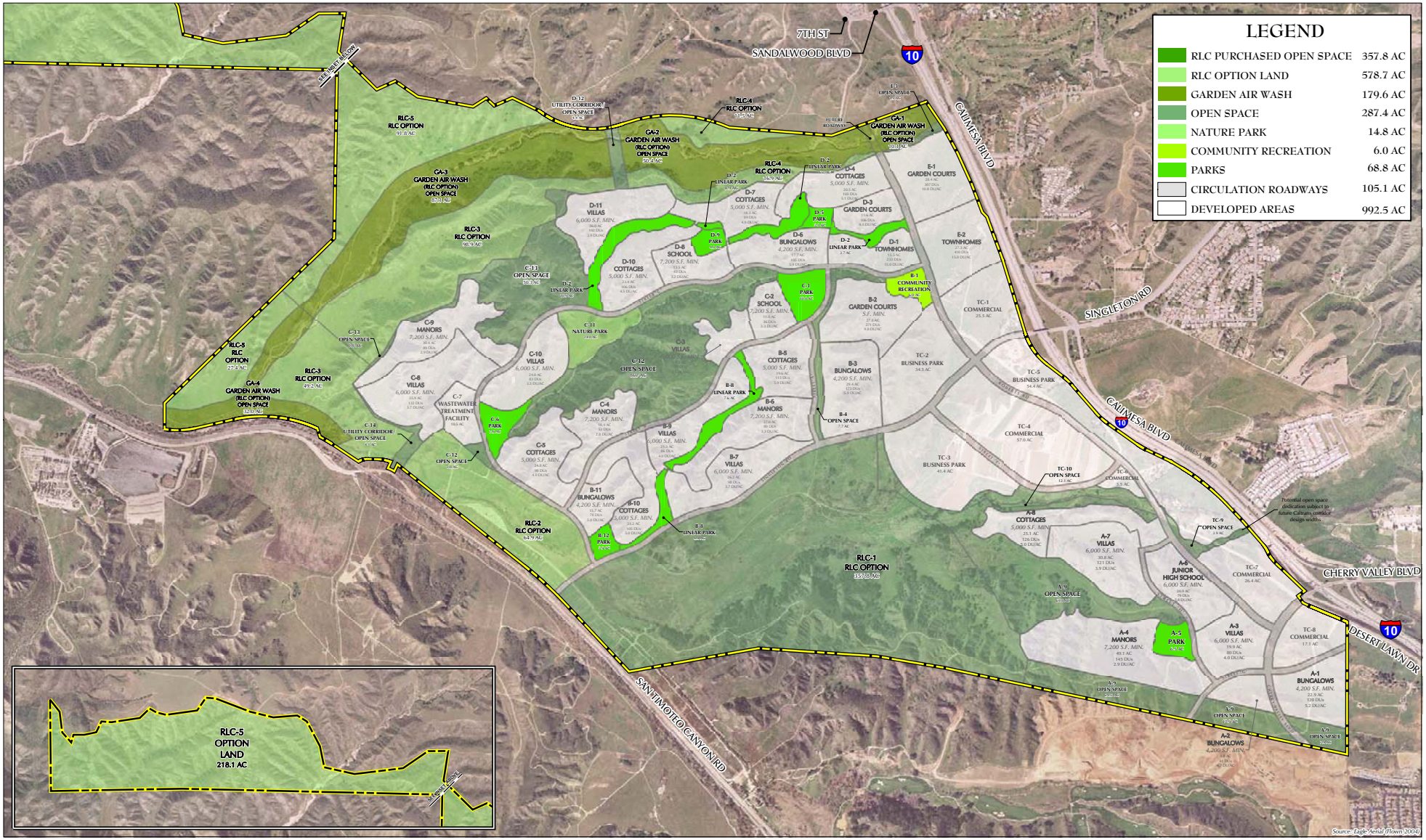

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Figure 2-7
Parks and Recreation Plan

Recreation Development Standards

Development Standards have been created to ensure the orderly development of recreational uses. All recreation facilities will be landscaped and irrigated in a manner that is conductive to the type of plant material and landscape setting. The parking standards at the activity parks will be in accordance with the City of Calimesa Standards. The Development Standards will also be in accordance with the City of Calimesa's implementation of the State's Quimby Act (Section 10.35 of Ordinance No. 460), and therefore, the project is subject to fees for or dedication and improvement of neighborhood and community park facilities. The Development Standards are intended to become the zoning standards for the Summerwind Ranch at Oak Valley and will regulate development on the site.

Open Space Development Standards

Landscaping within open space areas will be further governed by the development plans and standards in the Landscaping Plan.

Circulation Plan

Vehicular

The Circulation Plan as proposed will result in an effective roadway network that enhances quality of life and improves access to community services (Figure 2-8). The Circulation Plan is influenced by the topography of the site and the I-10 Freeway and two interchanges adjacent to the site (Cherry Valley Road and Singleton Road). The developers of Summerwind Ranch at Oak Valley will ensure that improvements to the two freeway interchanges adjacent to the project are provided. Singleton Road will be developed as an Urban Arterial (134-foot right-of-way) from the freeway to Roberts Road and then as it traverses the development from Roberts Road it will be developed as an Arterial Roadway (110-foot right-of-way) and ultimately a Secondary Roadway (88-foot right-of-way) as it nears San Timoteo Canyon Road. Other roadways which provide access for the project will be constructed so as to allow local and regional traffic to move within the development without having to use the I-10 Freeway for local trips. All the arterial roadways to be constructed within the development are designed to operate at a Level of Service C. Streets providing access for the project will be improved per the alignment in Figure 2-9 and the roadway classification shown in the Amendment to the Specific Plan. Therefore, they will require approval of a General Plan Amendment at the same time as the Specific Plan Amendment.

Circulation Plan Development Standards

Development Standards have been created to ensure the orderly development of the circulation plan. The standards will address roadway segments, fair share contribution requirement, arterial construction, vehicular access, landscape requirements, road construction, on-site and off-site street improvement recommendations, cul-de-sac streets, corner cutbacks and curb return radius, and street gradients. The

Development Standards are intended to become the zoning standards for the Summerwind Ranch at Oak Valley and will regulate development on the site.

Non-vehicular Trails

In addition to the typical road system, the development will include a comprehensive trail system to connect residential neighborhoods to parks, schools, open space, and the Town Center. Trails throughout the community will be provided for pedestrians, equestrians, and bicyclists (Figure 2-9). The various trails will provide connectivity throughout the Summerwind Ranch at Oak Valley development as shown in Figure 2-9. In addition, many of the trails will provide the opportunity to connect to several off-site trails of regional significance.

Equestrian Trails

The proposed project will provide 9.09 miles of equestrian trails. Existing dirt trails traversing the natural open space areas within the project site will provide a rugged terrain for horse-back riding, hiking and mountain biking. Equestrian trails intended primarily for equestrian riders will either be composed of decomposed granite or compacted soil. Not including the equestrian/mountain bike trail, the remaining equestrian trails will be located in such a manner so as not to conflict with pedestrians and bicyclists. The equestrian trails will provide a link to the trail either in or adjacent to Singleton Road, Roberts Road, and adjacent arterial and roadways, or a link to the trail over Singleton Road.

Paseo

The 9.03 miles of paseo trails will provide convenient access to pedestrians and bicyclist to residential neighborhoods, parks, schools, and open space in the central portions of the community, and in the Town Center, while also traversing linear parks in Villages B and D. Additionally, the paseo will connect more centrally located neighborhoods and amenities within Village A in the southern portion of the development. Passive amenities such as picnic tables, tot lots, and sitting benches will be located along the trail in Village A as it traverses the natural open space areas.

Hiking Trails

A total of 0.61 acres of hiking trails will provide recreation to hikers and to mountain bikers and will be composed of compacted soil, utilizing existing trails where feasible.

Bike Lanes

A total of 4.04 miles of on-street bike lanes will provide convenient connections to the surrounding regional network of trails and designated bike lanes and will provide residents with an alternative mode of transportation for both leisure and work commutes to and from the project area.

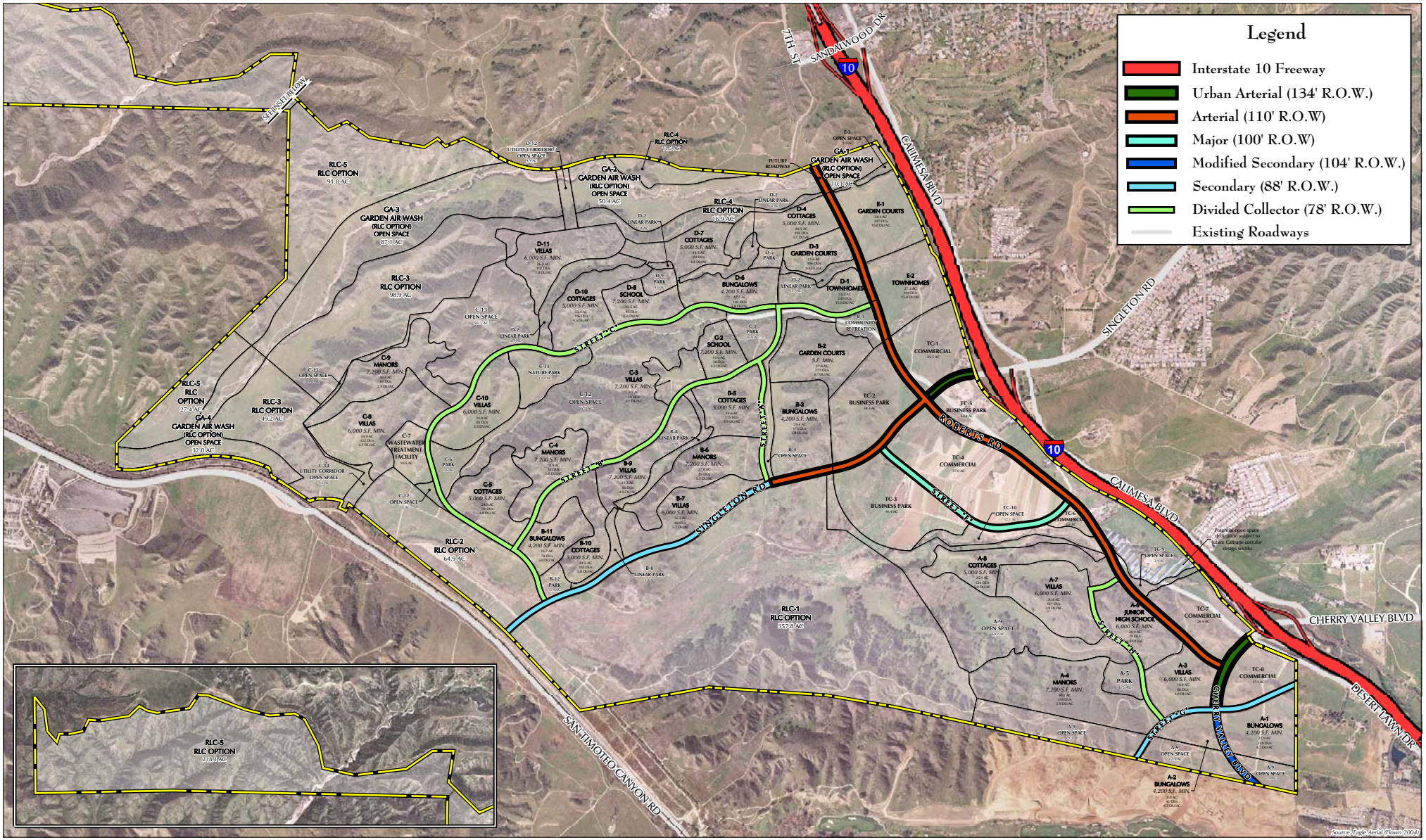

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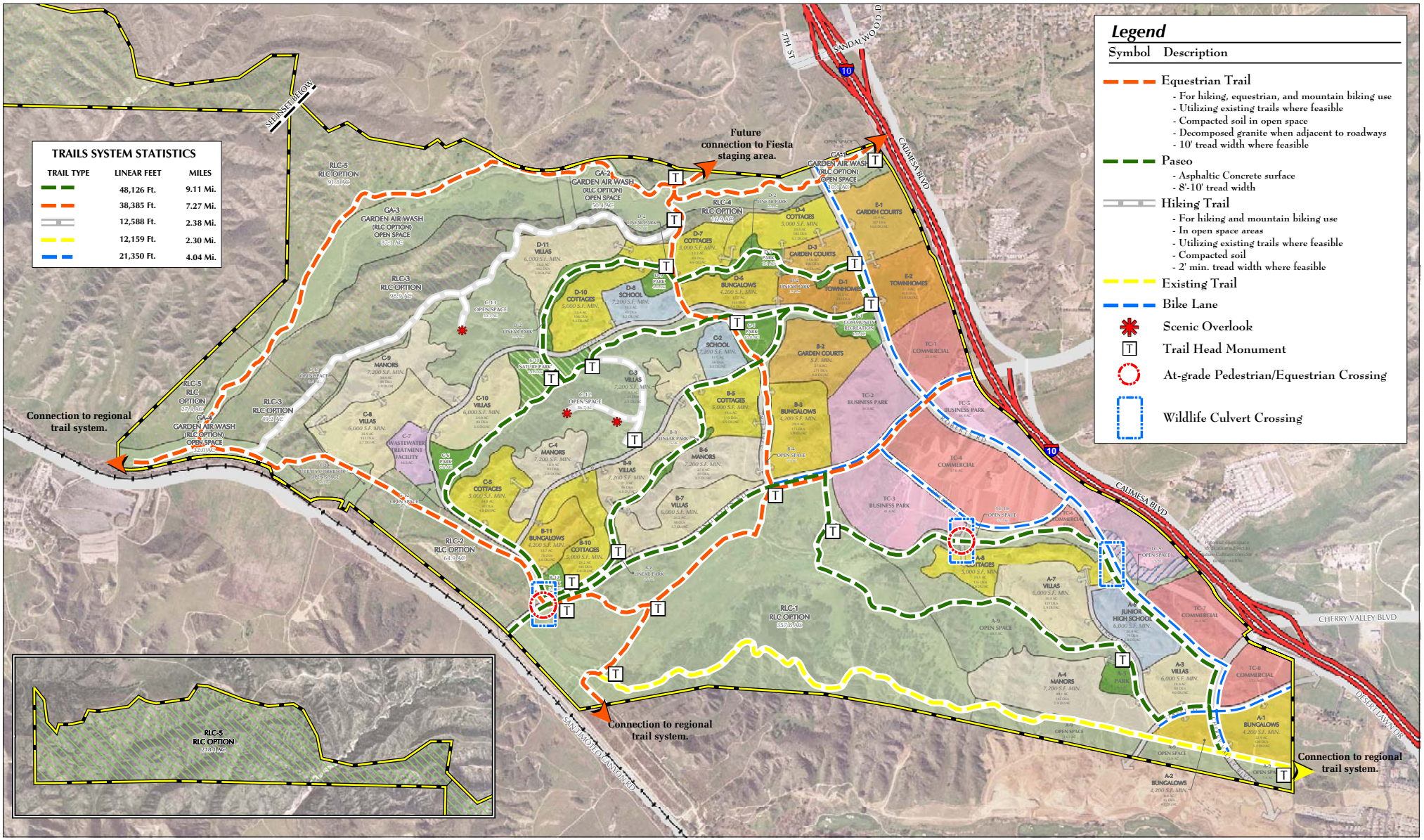
Figure 2-8
Circulation Plan



EDAW VAN DYKE LLP TAB PLANNING CONSULTANTS N.T.S.

Figure 2-9
Trail System Plan

Development Standards for Trails

All trails provided as a part of the Trails System Plan shall be developed pursuant to the Design Guidelines contained in Section IV of Summerwind Ranch at Oak Valley Specific Plan Area No. 1, Amendment No. 1.

Drainage

Several natural streambed areas are located within the project site. Broad alluvial plateaus are divided by steep sided, wide-bottom ravines that serve as natural drainage courses. The overall drainage plan will be designed to perpetuate the natural drainage courses within the site (Figure 2-10). The proposed drainage system will utilize and incorporate natural channels into the ultimate storm drain system. On-site storm drains will outlet into the natural streambed areas. Grading design will strive to minimize grading within the major streambed areas. The circulation plan is designed to minimize road and utility crossings. In addition, arched culverts with natural bottoms will be used to cross natural drainage courses, wherever possible.

The Garden Air Wash, designated as RLC Option Open Space will not be significantly impacted by the proposed development. No grading or streambed alterations are proposed in the northerly watershed area with the exception of one road and utility pipeline crossing, via a "soft bottom" arched culvert.

Two major drainage courses are located within the central portion of the project site. Drainage in the northern section originates completely within the project area and is carried in a natural streambed toward San Timoteo Creek. Short reaches of small-diameter storm drains will be designed within this area to redirect storm flow into the natural stream. One of two detention basins is proposed for this area in order to mitigate the majority of first flush flows. The basin will be developed within the natural streambed area near the lower end of the natural area and will mitigate developed flows prior to release into San Timoteo Creek.

Existing culverts under the I-10 Freeway contribute storm water drainage into most of the southerly section of the project area. These flows will be intercepted and redirected through an on-site storm drain system back into the natural streambed which flows through the area. Developed flows will be picked up within a series of short reach storm drain systems. To mitigate first flush drainage prior to discharge into the open space area, a second detention basin is proposed within a portion of a natural streambed area. The size and depth of the basin will be designed to be compatible with the natural drainage course.

The natural drainage flows from within the project area confluence with upstream drainage flowing westerly parallel to and just east of the existing San Timoteo Canyon Road. These combined flows join prior to discharging into San Timoteo Creek. "Soft bottom" arched culverts will be used to cross the natural streambed areas so as to minimize disturbance and impact to the area. The two upstream detention areas will serve to mitigate "first-flush" drainage prior to entering San Timoteo Creek.

Drainage from the southeast corner of the project site will be picked up and directed south into the SCE easement. Drainage facilities within the adjacent development area have been designed for ultimate developed flows as part of a project within the City of Beaumont. No detention facilities are proposed within this area of the project. All storm drain facilities will be designed in accordance with Riverside County Flood Control District (RCFC & WCD) guidelines and standards. Where needed, channel protection measures will be constructed in open areas to protect from excessive erosion. Protection measures to be considered will include, but not be limited to, energy dissipators, grouted and ungrouted rock, gabions, concrete, turf block, and turf reinforced mats.

Drainage Plan Development Standards

Development Standards have been created to ensure the orderly development of the drainage plan. There are no floodplains or floodways within the boundaries of the project site, and the project site is not subject to dam inundation hazards. Construction of the project would result in an increase of impermeable surfaces which may increase flow velocities. The project is conditioned by the Riverside County Flood Control and Water Conservation District to address the amount of flow and maintain discharge at pre-development levels.

Prior to issuance of grading permits, the applicant shall obtain a NPDES permit from the Regional Water Quality Control Board (RWQCB) for construction and post-development activities. The permit will require the applicant to implement source control and structural best management practices (BMPs) during and after construction activities. If the proposed Water Quality Management Plan for Urban Runoff (for new development within Riverside County and Incorporated Cities) is approved by the RWQCB prior to issuance of grading permits, the City shall review the grading plans to ensure appropriate source control and structural BMPs will be provided during and after construction. The City will be responsible for enforcing implementation of the BMPs. The Development Standards are intended to become the zoning standards for the Summerwind Ranch at Oak Valley and will regulate development on the site.

Water and Sewer

Master Water Plan

The master water plan is designed to accommodate the Summerwind Ranch at Oak Valley community's domestic water demand (Figure 2-11).

The service elevation for the proposed development ranges from 2,037 to 2,377 feet resulting in a total differential elevation of 340 feet. To service the project effectively, the YVWD has identified three operating pressure zones. The lower portion of the site will be serviced by an on-site YVWD tank to be constructed within Phase 2 of the development with a High Water Level (HWL) of 2,340 feet and an ideal service elevation range from 2,037 to 2,210 feet. The second pressure zone, designated as YVWD Zone

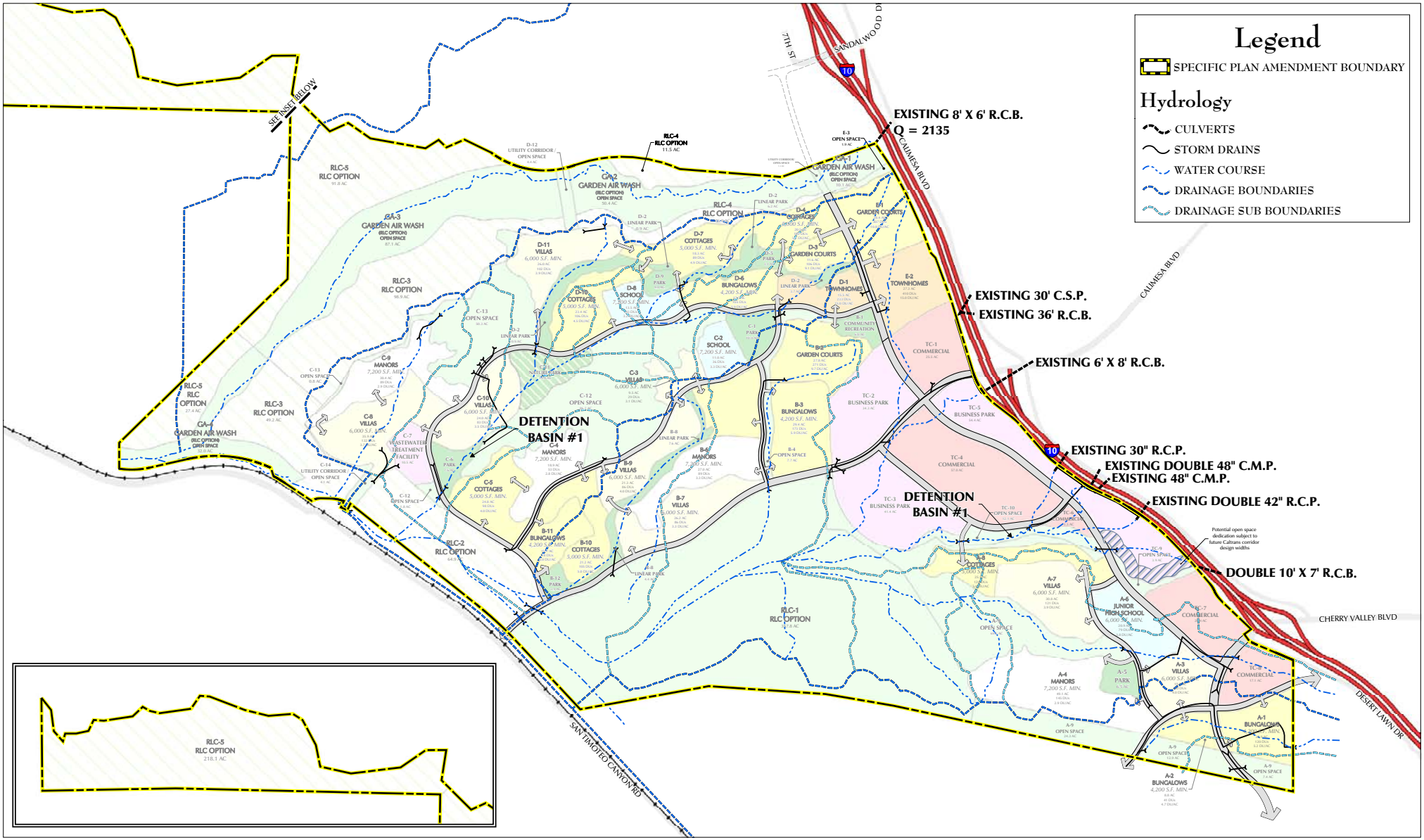


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Figure 2-10
Master Drainage Plan

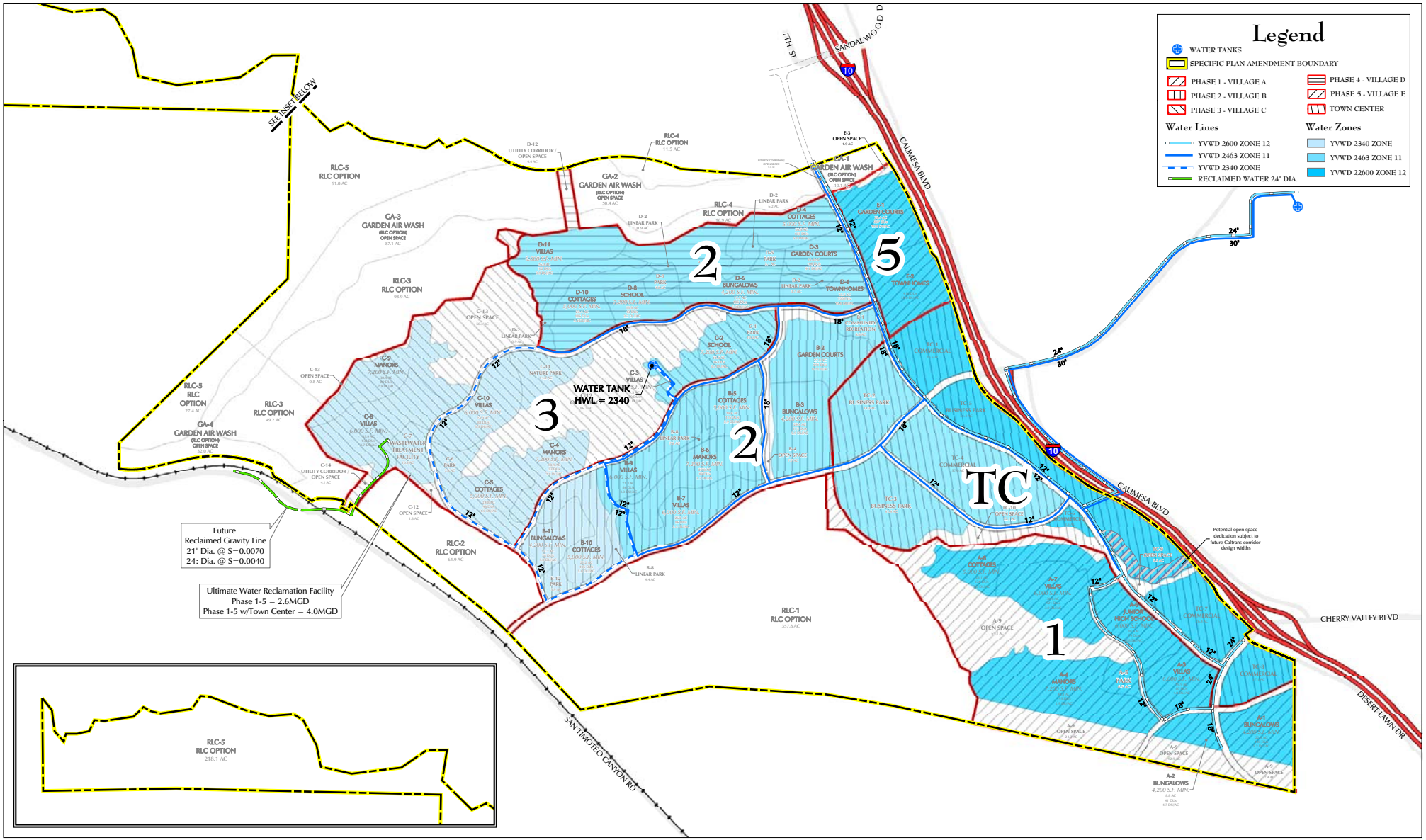

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Figure 2-11
Master Water Plan

R11 with a HWL of 2,463, will service the development located within an elevation range of 2,160 to 2,333 feet. The third pressure zone, designated as YVWD Zone R12, with a HWL of 2,600 feet, will service the development located within an elevation range of 2,300 to 2,470 feet.

The first phase of the project will be serviced by YVWD Zone R11 (Planning Areas A-7 and A-8) and by YVWD Zone R12 (remaining first phase Planning Areas). Approximately 66.3 acres of Phase 5 and 26.1 acres of the Town Center will be served by extending the YVWD facilities from Zone 12. YVWD has recently purchased an off-site location for an additional Zone 11 storage tank on Singleton Road, which will be located approximately one mile north of the I-10 Freeway. The proposed tank and associated pipeline will be connected to the existing upstream water system and will be used to provide water to the Summerwind Ranch at Oak Valley development. The Master Water facilities planned for Summerwind Ranch at Oak Valley will have the capacity to store approximately 9.2 million gallons of water (including a 2-hour, 1,500 gpm fire flow storage of 180,000 gallons). On-site storage tanks will have the capacity to store 1.4 and 4.7 million gallons, respectively (including fire flow storage for each tank).

The landscape plans for the Specific Plan will include water conservation methods, such as selecting native and drought tolerant plant materials, as well as non-native species with low water usage characteristics which are adaptable to hot, dry climates as applicable. Additionally, a computerized irrigation system will be used, which will be equipped with flow sensing capabilities; thus, the irrigation system will automatically shut down in the event of a mainline break or broken head.

Master Sewer Plan

The Summerwind Ranch at Oak Valley is proposed to be built in five phases with a peak wastewater generation rate for Phase 1 at approximately 0.53 MGD. The peak sewer generation rate for Phases 2 through 5 will be approximately 2.13 MGD. The Town Center will be developed concurrently with Phases 1 through 5. The peak sewer generation rate for the Town Center will be approximately 1.78 MGD. Thus, the total peak generation rate from Summerwind Ranch at Oak Valley will be 4.0 MGD. To ensure adequate sewage disposal, a Preliminary Master Sewer Study was prepared and subsequently the Master Sewer Plan was prepared (Figure 2-12).

The sewage generation from Phase 1 will be conveyed by gravity to a proposed temporary lift station. The sewage generation from Phases 2 through 5 may be conveyed by gravity to another temporary lift station. The force main flows from Sewer Lift Station No. 2 will be conveyed to Sewer Lift Station No. 1, where the combined sewer flow will be conveyed to an existing 30-inch diameter gravity sewer line. YVWD is planning to expand the Live Oak Canyon treatment facility. The initial expansion will provide a total capacity of 8 MGD. A subsequent expansion project will increase the total capacity to 10 MGD. This facility will serve existing and proposed development (2,000 units) north of I-10 and a portion of Summerwind Ranch at Oak Valley. However, it will not have sufficient capacity to handle ultimate build out of Summerwind Ranch at Oak Valley. Consequently, sewerage from the first phases of Summerwind Ranch at Oak Valley will need to be pumped northward via a combination of gravity lines and force mains.

Development Standards for Water and Sewer

Development Standards have been created to ensure the orderly development of the drainage plan. The Development Standards will address placement of permanent water and sewer lines, water and sewerage disposal facilities installing requirements and specifications in accordance with the State Department of Health Services and the Riverside County Health Department, and provision of a Water Supply Assessment in pursuant to SB221, YVWD and BCVWD. The Development Standards are intended to become the zoning standards for the Summerwind Ranch at Oak Valley and will regulate development on the site.

Public Facilities Plan

The proposed land use plan for Summerwind Ranch at Oak Valley designates areas for various public uses such as schools, parks, a water reclamation facility, a fire station, and a City Hall (Figure 2-13). In order to meet the needs of the projected number of residents adequately, the aforementioned public facilities will be provided:

Schools

The developer of Summerwind Ranch at Oak Valley has designated sites for two elementary schools and one middle school within the Summerwind at Oak Valley Specific Plan area. Each elementary school is located next to designated park space, which provides schools and parks with joint-use recreational facilities. If the school district decides that any or all three of the school sites are not required, each school site may be developed with single-family dwelling units. The number of dwelling units that will be allowed on each of the three school sites is indicated in Figure 2-13.

Water Reclamation Facility

The YVWD proposes to construct an up to 12 MGD Water Reclamation Facility on a 10-acre site within the northwest corner of the project site. The facility will be constructed in four separate units of 3 MGD each to a build-out capacity of 12 MGD ultimately designed to receive wastewater from this project and other proposed projects. To reduce dependency on the potable water supply, to provide an economical source of landscape irrigation water, and possibly to reduce the size and cost of potable water system infrastructure, it is proposed that water from the District's proposed Water Reclamation Facility be utilized. The Water Reclamation Facility will produce reclaimed water in compliance with California DHS Title 22 Regulations. Treated effluent will be suitable for landscape and golf course irrigation purposes and will supply the YVWD Non-Potable system serving planned commercial and industrial users and City common areas. Any excess flows will be metered and discharged to the approved EMWD reclaimed water line.

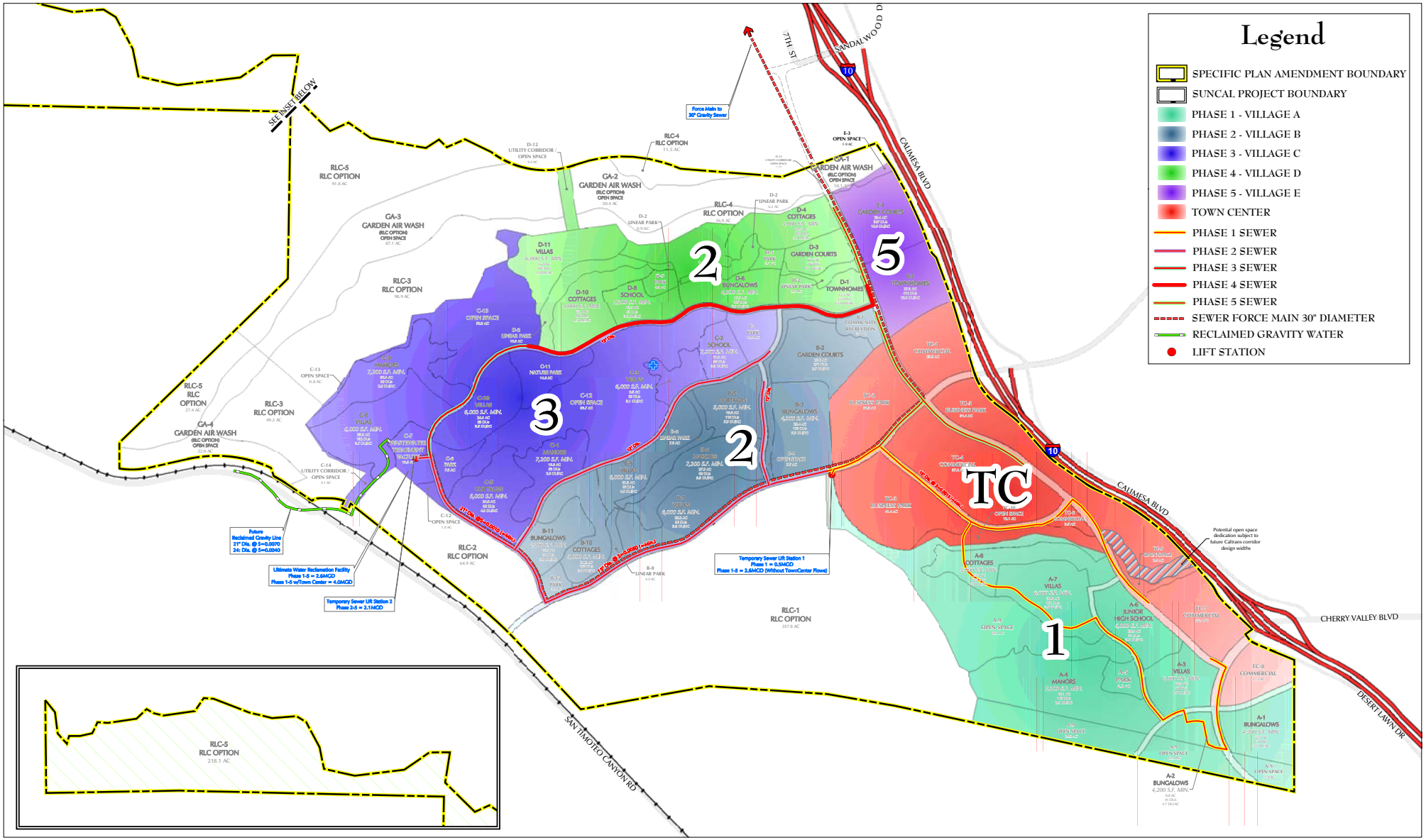

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Figure 2-12
Master Sewer Plan

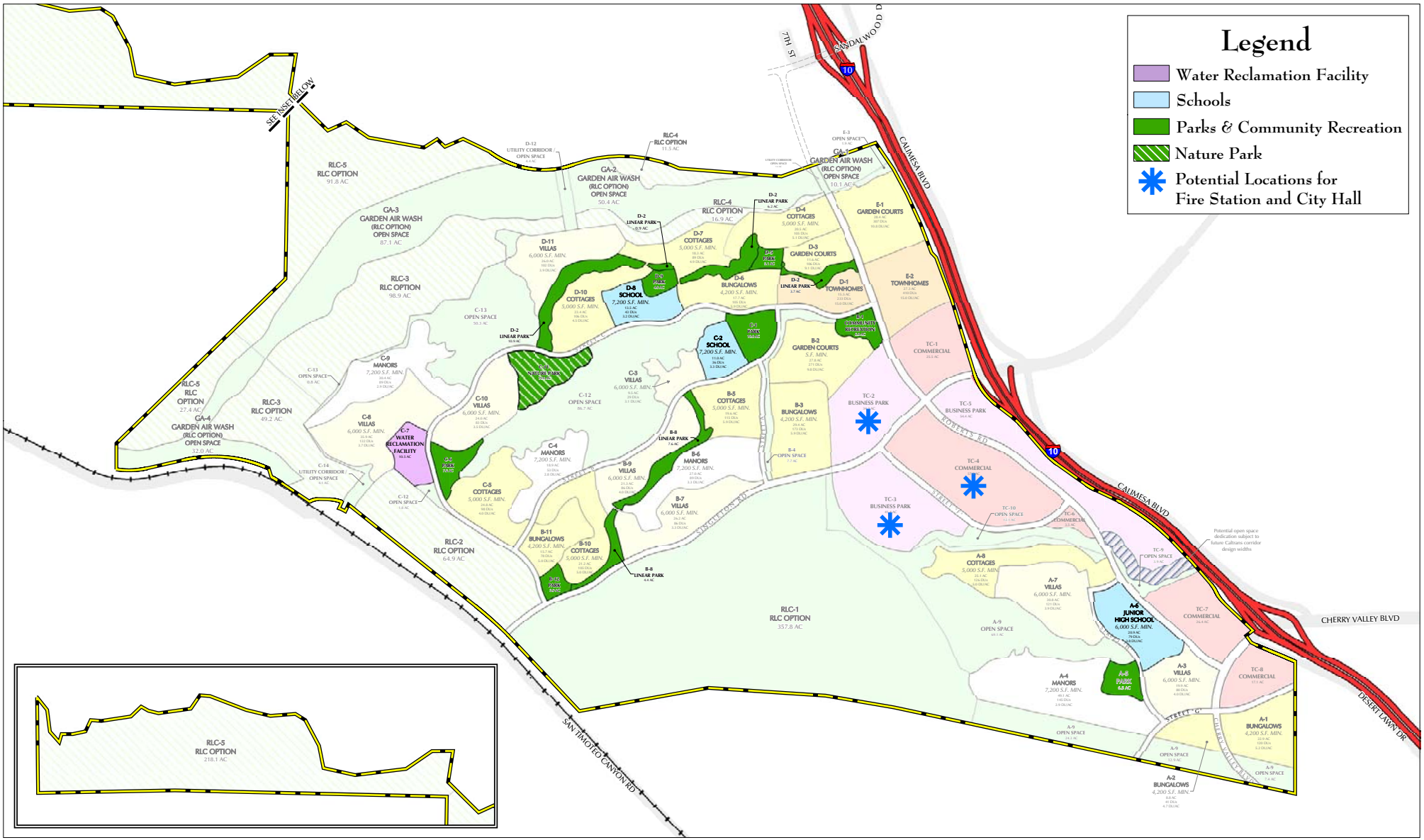

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Figure 2-13
Public Facilities

Fire Station

The City Fire Department has indicated a need for a fire station within Summerwind Ranch at Oak Valley. Although the developer of the Town Center has agreed to provide a location for the fire station within the Town Center, the City Fire Department has not identified an exact location.

City Hall

The City of Calimesa has indicated the need for additional building space to allow for various City departments to conduct daily business. Although the developer of the Town Center has agreed to provide the City with adequate space, the exact location for City Hall operations has not been identified. The developer will work with the City of Calimesa Planning Department to identify a suitable location prior to issuance of grading permits for the Town Center.

Public Facilities Standards

Development Standards have been created to ensure the orderly development of public facilities. The Development Standards will address the tentative tract map filing process, final map approval process, construction of school(s), and issuance of precise grading permits for the Town Center. The Development Standards are intended to become the zoning standards for the Summerwind Ranch at Oak Valley and will regulate development on the site.

Public Facilities Phasing

Summerwind Ranch at Oak Valley is scheduled to be developed in five phases over a 15-year period in accordance with a logical and orderly extension of roadways, public utilities, and other infrastructure. Each phase is expected to last approximately 2-3 years, with the first phase commencing in 2005. The phasing program has been proposed in response to market demands. Developers intend to develop major project roadways, as well as the master planned backbone infrastructure (including mass grading). The exact order in which the roadways and other infrastructure are constructed is dependent upon the location of each planning area and its expected development timing.

The phasing schedule is preliminary only and may undergo modification as construction begins. The order in which each planning area and the backbone infrastructure are developed may occur in sequence and in combination with other planning areas within Summerwind Ranch at Oak Valley. The phasing program is suggested only as a possible phasing sequence. Due to possible unforeseen changes in market conditions and absorption rates, actual development of Summerwind Ranch at Oak Valley may occur at an accelerated or slower rate in fewer or more phases.

Phasing

The site was divided into villages to prepare an effective specific plan. These villages were then divided into planning areas. The base line inventory for each planning area was assessed. Based on the resource/hazard inventory for each planning area, the conceptual land uses were assessed and refined and density values were adjusted. Residential land uses were first assigned the general density category of low, low medium, medium, or high. The intent of the refinement process was to make density assignments compatible with the resources of each planning area. The same process was used for commercial and business park uses. The projected building square footage was assigned based on the planning area resource/hazard inventory. Following the assemblage of the conceptual land use plan, a development phasing program was established. The phasing of development corresponds to the development proposed for each of the five villages and Town Center (Figure 2-14).

Development Phasing Standards

Development Standards have been created to ensure the orderly development in phases. The Development Standards will address the phasing sequence. The Development Standards are intended to become the zoning standards for the Summerwind Ranch at Oak Valley and will regulate development on the site.

Grading Plan

The project includes a range of topography from broad alluvial areas to moderate rolling hills to steep-sided ravines. Grading will be minimized by clustering residential development. To mitigate grading activities in hillside areas, the Amendment to the Specific Plan includes Hillside Development Regulations specifically tailored to the project site. The Grading Plan and Hillside Development Regulations are intended to:

1. Conserve the identified significant ridges, canyons, valleys, wildlife corridors and view sheds which give Summerwind Ranch at Oak Valley its distinctive character.

2. Create open spaces which preserve wildlife corridors, significant ridgelines, canyons, valleys, and riparian areas.

3. Site dwellings and other structures in a manner compatible with natural drainage patterns and physical landforms through sensitive grading design and architecture.

4. Encourage grading designed to complement the natural terrain.

5. Provide safe vehicular circulation patterns for residents, safety and service providers.

6. Utilize landscape design to enhance slope stability, restore slopes adjacent to open space to their natural character, and to soften grading through the selection of appropriately sized (when mature) and appropriately placed plant materials.

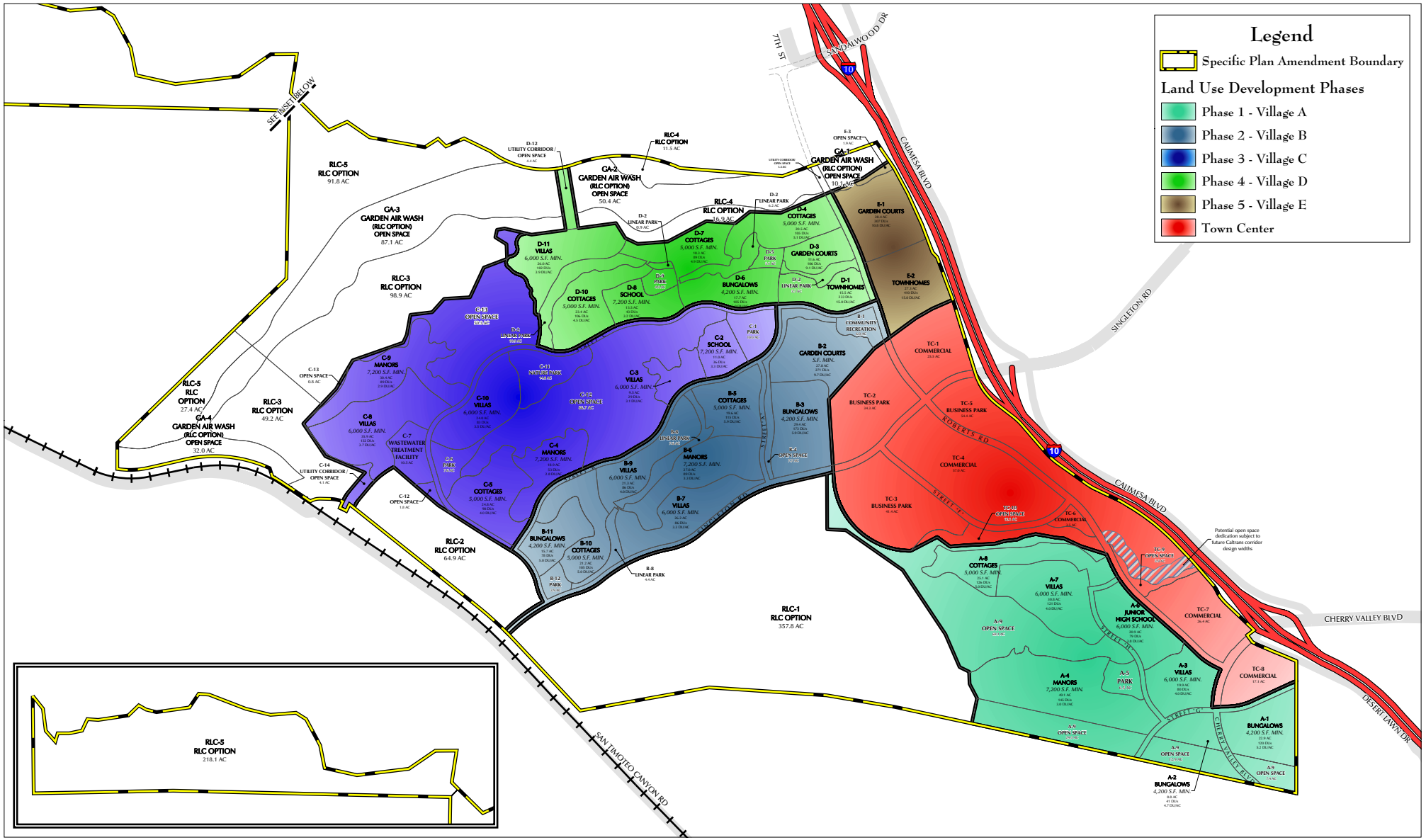

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Figure 2-14
Development Phasing Plan

As the steepness of the land increases, the project-wide open space requirement increases. The regulations include requirements for permanently irrigated interior slopes and specify height and locational standards. These provisions specify how these slopes will be maintained. Contour grading of slopes adjacent to open space will be carried out as shown in Figure 2-15.

Exterior slopes utilizing natural slope restoration techniques will be used on manufactured slopes three feet or greater that are directly adjacent to natural open space areas. These manufactured slopes will utilize a revegetation method that will not require either temporary, supplemental, or permanent irrigation systems. The restoration process will include the grinding of native plant material that is removed from the site during initial grading operations and replanting of this material by compacting it in a layered manner atop manufactured slopes. Thus, slope replanting will consist of non-invasive native plant materials that are indigenous to the area and sensitive to the surrounding environment, utilizing natural ecological succession as a means to provide mature climax plant development that is integrated with the environmental surroundings. Where possible, only those areas which will be built on, resurfaced, or landscaped will be disturbed.

Furthermore, the regulations include a prohibition of grading as follows: within 75 feet of any natural body of water identified for preservation; in unmitigated geologic hazard areas or any other area identified to be unsafe in a geologic report; or in environmentally sensitive areas as shown in Figure 2-16. Other aspects of the Grading Plan relative to grading include drainage standards, hillside street development standards, retaining walls/fences, and architectural standards.

Oak Tree Protection Plan / Oak Tree Inventory

The Summerwind Ranch at Oak Valley Specific Plan Amendment No. 1 includes a plan to protect and facilitate preservation of oak trees on the project site (Figure 2-17). The plan serves to:

1. Recognize the importance of native oak trees in preventing the erosion of hillsides and stream banks, moderating water temperatures in streams through shading, contributing nutrients to streams, supporting a wide variety of wildlife species through the provision of food, nesting, and roosting cover, and contributing to the scenic quality of the community; and

2. To provide for the protection of these trees.

The plan is based on an inventory of coast live oak trees (*Quercus agrifolia*) that was conducted between August 9 and November 3, 2004, by LSA Associates, Inc. The result of the inventory is presented in Table 2-2, below. The survey was conducted in compliance with the requirements of the City of Calimesa Municipal Code Chapter 9.16 Tree Preservation.

Table 2-2
Oak Tree Mitigation

DFR	Oak Trees Impacted	Mitigation Ratio	Total Required Planting Spots	Acorn Planting Spots	Deep One-gallon Containers
High	162	5:1	810	405 (1,215 acorns)	405
Moderate	46	3:1	138	69 (207 acorns)	69
Low	28	1:1	28	14 (42 acorns)	14
TOTAL	**236**	**NA**	**976**	**488 (1,464 acorns)**	**488**

The purpose of the inventory was to: locate and map oak trees within the project area that could potentially be impacted by the project; determine the desirability of retention for each tree; establish a replacement ratio for use in the case that the tree cannot be retained; and locate, count, and map those trees to be preserved.

Oak woodland within the study area, dominated by coast live oak, is found primarily on the north-facing slopes, with many scattered individuals found on the valley floors. In surveying the trees, a mitigation ratio was assigned to each tree based on its desirability for retention (DFR) value, and retention value was based on the aesthetic value of the trees, health, and sizes. Please refer to Table 2-2.

Within the project area, a total of 3,153 oak trees were inventoried, evaluated, and mapped. A total of 236 trees would be impacted by the proposed development (198 impacted oak trees and 38 potentially impacted oak trees), and a total of 2,917 trees would be preserved, which is approximately 93% of all trees on-site. Mitigation for impacts to oak trees would be based on sound biological principles to maximize the amount of oak woodland area created. The use of locally collected acorns will ensure that the regenerated oak seedlings will have the best genetic adaptation. Based on the mitigation factors in Table 2-2, a total of 976 oak trees would be planted using a combination of 50 percent planted acorns (three acorns per planting spot) and 50 percent deep one-gallon containers.

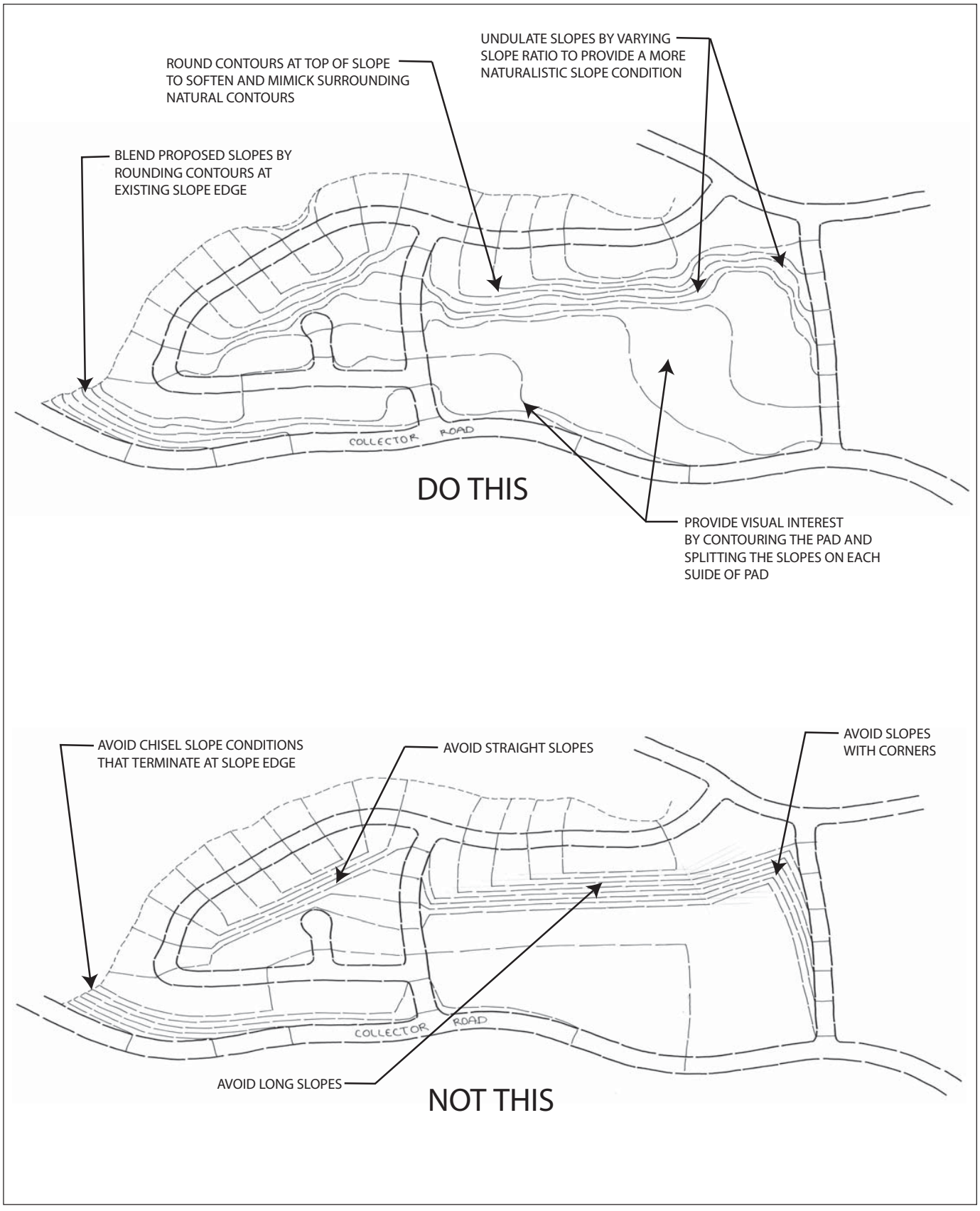

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Figure 2-15
Contour Grading Concept

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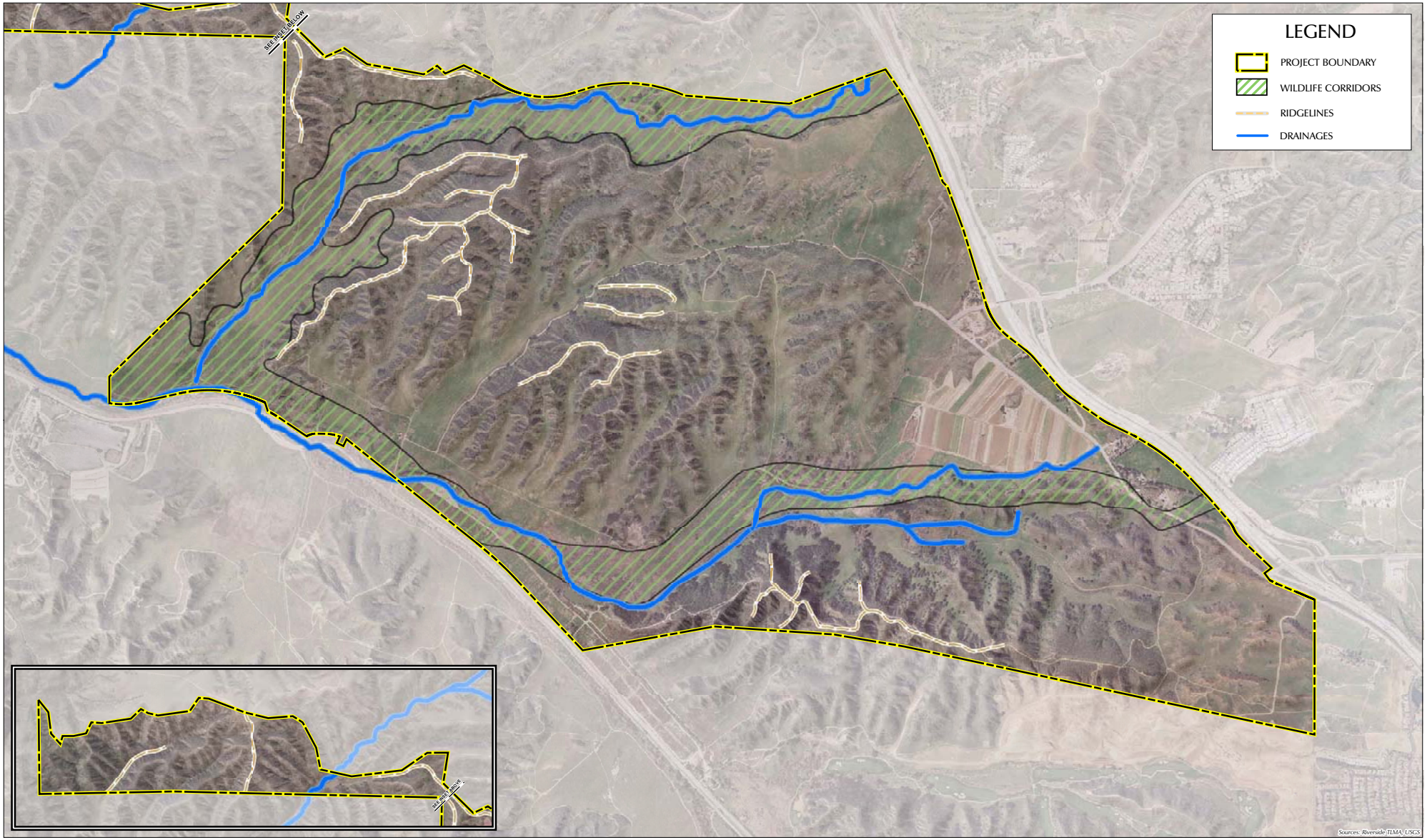

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Figure 2-16
Sensitive Environmental Areas Map

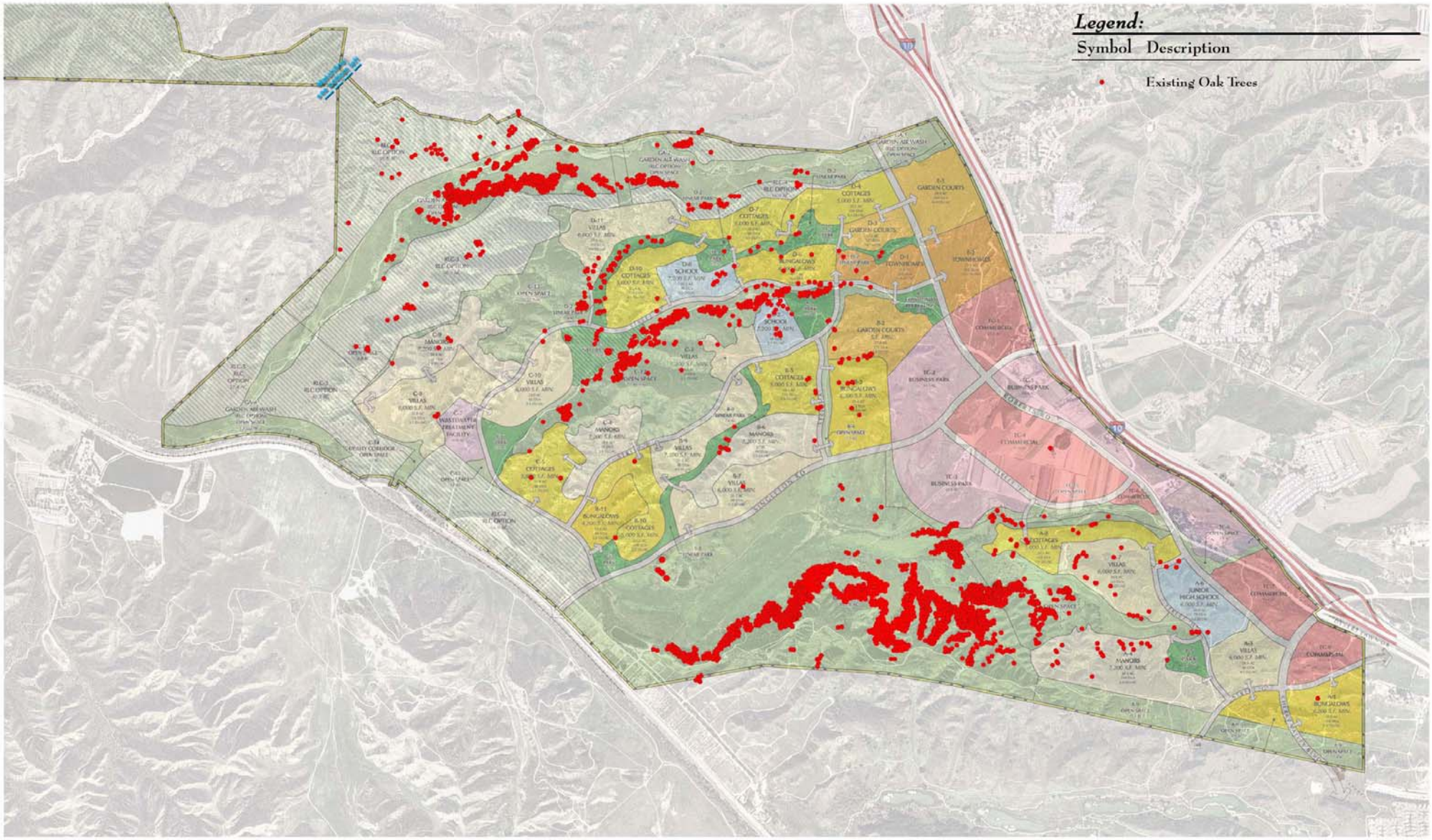

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Figure 2-17
Oak Tree Preservation Plan

2.6.3 GENERAL PLAN AND ZONING DESIGNATIONS

The proposed project site has been previously designated and planned for the development of urban uses. The project site is located within the City's Oak Valley Specific Plan 1, which acts as the zoning for the project site. The proposed amendment to the Specific Plan will decrease the residential acreage by approximately 412 acres and residential units by approximately 1,880 dwelling units. Amending the Specific Plan document is necessary to acknowledge the recent purchase of 357.8 acres of the site by the Riverside Land Conservancy for open space purposes and option for the purchase of an additional 761.1 acres for a similar use.

Additionally, the proposed Specific Plan amendment will implement portions of the Western Riverside MSHCP which identifies a portion of the site as a wildlife corridor. Therefore, conflicts with any applicable land use plan, policy, or regulation will not occur.

2.7 RELATED PROJECTS/CUMULATIVE IMPACTS

CEQA Guidelines require that an EIR discuss cumulative impacts of a project "when the project's incremental effect is cumulatively considerable (CEQA Guidelines, Section15130, sub. I). The CEQA Guidelines, Section 15355 defines cumulative impacts as "two or more individual effects, which, when considered together, compound or increase other environmental impacts." Cumulative impacts produced by several projects are defined as "the change in the environment which results from incremental effect of the project when added to other closely related past, present, and reasonable foreseeable actions." (CEQA Guidelines, Section 15355). This means that the incremental impacts of the individual project would be considerable when viewed in connection with the impacts of past projects, the impacts of other current projects, and the impacts of probable future projects. (CEQA Guidelines, Section 15065, sub. I (c)) "[I]n assessing whether a cumulative impact is significant, the lead agency shall [first] consider whether the cumulative impact [from the proposed project together with other projects] is significant and [shall then consider] whether the proposed project's incremental effects are cumulatively considerable." CEQA Guidelines, Section 15064, sub. (i)(1)).

CEQA Guidelines section 15130, subdivision (a)(3) states that an EIR may determine that a project's incremental contribution to a significant cumulative impact would be rendered less than cumulatively considerable, and thus not significant, if a project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. CEQA Guidelines section 15064, subdivision (i)(3), provides that the incremental contribution may not be cumulatively considerable "if the project will comply with requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem (e.g., water quality control plan, air quality plan, integrated waste management plan) within the geographic area in which the project is located."

CEQA Guidelines section 15130, subdivision (b) indicates that the level of detail of the cumulative analysis need not be as great as for the project impact analyses and that it should reflect the severity of the impacts and their likelihood of occurrence. It should be focused, practical, and reasonable. To be adequate, a discussion of cumulative impacts must include the following elements:

> Either (a) a list of past, present, and probable future projects including, if necessary, those outside the agency's control or (b) a summary of projections contained in an adopted general plan or related planning document, or in a prior adopted or certified environmental document, which described or evaluated regional or areawide conditions contributing to the cumulative impact provided that such documents are referenced and made available for public inspection at a specified location.
>
> A summary of expected environmental impacts of individual projects, with specific reference to additional information stating where such information is available; and
>
> A reasonable analysis of all cumulative impacts of the relevant projects, with an examination of reasonable, feasible options for mitigation or avoiding the project's contribution to such effects.
>
> (CEQA Guidelines, Section 15130, sub. (b)).

For some projects, the only feasible mitigation measures would involve the adoption of ordinances or regulations, rather than the imposition of conditions on a project-by-project basis. (CEQA Guideline, Section 15130, sub. (b)).

2.7.1 CUMULATIVE PROJECTS

For purposes of cumulative analysis, other projects/developments within the Oak Valley area in both the City of Calimesa and the City of Beaumont are considered. Table 2-3 below presents the cumulative projects.

Table 2-3
Cumulative Projects
(Phases 1 through 4 and Project Total)

Project	Phase 1						
	SF[1] (DU)[2]	MF[3] (DU)	Commercial[4] (TSF)[5]	Industrial (TSF)	Schools (STU)[6]	Parks (AC)[7]	Hotel (RM)[8]
Fiesta Property	621.00				600.00	160.00	
Oak Valley Beaumont	1,496.00	237.00			1,200.00		
Other Calimesa Mixed-Used Development					2,000.00		
Omega Homes	68.00						
Oak Valley Greens							
Cougar Ranch	69.00						
Cougar Ranch II	147.00						
Kirkwood Ranch	520.00						
Oak Valley Commercial							
Omega Homes II	121.00						
Noble Creek							
TR 30779	190.00						
Sundance							
JP Ranch							
Country Club Ridge							
Braswell							
Sunset Ranch							
Holbert Ranch							
Willow Springs							
Rolling Hills							
Heartland							
LaBorde Canyon	426.00		48.00				
Phase 1 Total	***3,658.00***	***237.00***	***48.00***		***3,800.00***	***160.00***	

[1]SF = Single-Family Residential
[2]DU = Dwelling Units
[3]MF = Multi-Family Residential and retirement community
[4]Commercial = Commercial retail, office, specialty retail, high-turnover restaurant, and fast food restaurant
[5]TSF = Thousand Square Feet
[6]STU = Students
[7]AC = Acre
[8]RM = Rooms

Project	Phase 2						
	SF[1] (DU)[2]	MF[3] (DU)	Commercial[4] (TSF)[5]	Industrial (TSF)	Schools (STU)[6]	Parks (AC)[7]	Hotel (RM)[8]
Fiesta Property	592.00						
Oak Valley Beaumont	1,271.00	480.00					
Other Calimesa Mixed-Used Development	531.00	113.00	127.90	41.25			
Omega Homes							
Oak Valley Greens							
Cougar Ranch							
Cougar Ranch II							
Kirkwood Ranch							
Oak Valley Commercial							
Omega Homes II							
Noble Creek	483.00						
TR 30779							
Sundance IP Ranch							
JP Ranch	564.00						
Country Club Ridge							
Braswell							
Sunset Ranch							
Holbert Ranch							
Willow Springs							
Rolling Hills							
Heartland							
LaBorde Canyon							
Phase 2 Total	***3,441.00***	***593.00***	***127.90***	***41.25***			

[1]SF = Single-Family Residential

[2]DU = Dwelling Units

[3]MF = Multi-Family Residential and retirement community

[4]Commercial = Commercial retail, office, specialty retail, high-turnover restaurant, and fast food restaurant

[5]TSF = Thousand Square Feet

[6]STU = Students

[7]AC = Acre

[8]RM = Rooms

Project	Phase 3						
	SF[1] (DU)[2]	MF[3] (DU)	Commercial[4] (TSF)[5]	Industrial (TSF)	Schools (STU)[6]	Parks (AC)[7]	Hotel (RM)[8]
Fiesta Property	977.00						
Oak Valley Beaumont	1,168.00	479.00					
Other Calimesa Mixed-Used Development	128.00	161.00	1,119.05	419.10			
Omega Homes							
Oak Valley Greens	2,800.00		117.00				
Cougar Ranch							
Cougar Ranch II							
Kirkwood Ranch							
Oak Valley Commercial			118.30				200.00
Omega Homes II							
Noble Creek							
TR 30779							
Sundance IP Ranch	3,570.00	880.00	280.00		3,000.00	68.90	
JP Ranch							
Country Club Ridge	268.00						
Braswell	68.00						
Sunset Ranch							
Holbert Ranch							
Willow Springs	385.00	3,027.00	1,127.00		600.00	30.50	
Rolling Hills							
Heartland							
LaBorde Canyon							
Phase 3 Total	**9,364.00**	**4,547.00**	**2,761.35**	**419.10**	**3,600.00**	**99.40**	**200.00**

[1]SF = Single-Family Residential

[2]DU = Dwelling Units

[3]MF = Multi-Family Residential and retirement community

[4]Commercial = Commercial retail, office, specialty retail, high-turnover restaurant, and fast food restaurant

[5]TSF = Thousand Square Feet

[6]STU = Students

[7]AC = Acre

[8]RM = Rooms

Project	Phase 4						
	SF[1] (DU)[2]	**MF[3] (DU)**	**Commercial[4] (TSF)[5]**	**Industrial (TSF)**	**Schools (STU)[6]**	**Parks (AC)[7]**	**Hotel (RM)[8]**
Fiesta Property	295.00	515.00	200.00		1,500.00		
Oak Valley Beaumont							
Other Calimesa Mixed-Used Development	195.00		1,468.79				
Omega Homes							
Oak Valley Greens							
Cougar Ranch							
Cougar Ranch II							
Kirkwood Ranch							
Oak Valley Commercial							
Omega Homes II							
Noble Creek							
TR 30779							
Sundance IP Ranch							
JP Ranch							
Country Club Ridge							
Braswell							
Sunset Ranch							
Holbert Ranch	131.00						
Willow Springs							
Rolling Hills	498.00		343.00				
Heartland	1,030.00		100.00	463.00	600.00	24.50	
LaBorde Canyon							
Phase 4 Total	**2,149.00**	**515.00**	**2,111.79**	**463.00**	**2,100.00**	**24.50**	

[1]SF = Single-Family Residential

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[6]STU = Students

[7]AC = Acre

[8]RM = Rooms

	SF[1] (DU)[2]	MF[3] (DU)	Commercial[4] (TSF)[5]	Industrial (TSF)	Schools (STU)[6]	Parks (AC)[7]	Hotel (RM)[8]
Phase 1	3,658.00	237.00	48.00		3,800.00	160.00	
Phase 2	3,441.00	593.00	127.90	41.25			
Phase 3	9,364.00	4,547.00	2,761.35	419.10	3,600.00	99.40	200.00
Phase 4	2,149.00	515.00	2,111.79	463.00	2,100.00	24.50	
Total	**18,612.00**	**5,892.00**	**5,049.04**	**923.35**	**9,500.00**	**283.90**	**200.00**

[1]SF = Single-Family Residential

[2]DU = Dwelling Units

[3]MF = Multi-Family Residential and retirement community

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[6]STU = Students

[7]AC = Acre

[8]RM = Rooms

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3.0 ENVIRONMENTAL ANALYSIS

The following section details project impacts that were previously identified in the IS for the proposed project. The IS is contained in Appendix A-1 of this EIR. The environmental topics addressed in this document are as follows:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Public Services
- Transportation and Traffic
- Utilities and Service Systems

Each impact analysis is structured in the following manner:

1. ***Introduction.*** Provides a brief description of the approach for the analysis and/or the technical report (if applicable), the consultant who prepared the report, the date, and other pertinent information about the report.

2. ***Existing Conditions.*** This section describes the project area and characteristics as they presently occur. This description focuses on the particular impact area (i.e., noise, air quality, etc.) that is being discussed. In accordance with Section 15125 of the State CEQA Guidelines, both the local and regional settings are discussed as they exist prior to implementation of the proposed project.

3. ***Threshold of Significance.*** This section is based on the established CEQA Guidelines, thresholds contained in the IS, or other generally accepted standards. The thresholds are the guiding criteria against which the impacts of the project can be compared to determine if an impact would be significant. In determining whether an impact is "significant" within CEQA's definition, emphasis has been given to the basic policies of CEQA with respect to a particular subject matter, as well as to specific criteria for significance found in the CEQA Guidelines. An effort has been made to avoid overly subjective significance criteria that are not based in specific CEQA policies and/or generally accepted thresholds upon which significance can be determined. For each subject area addressed within this EIR, significance criteria are identified that have been applied in analyzing the potential effects of the proposed project.

4. ***Project Impacts.*** The impacts section describes how implementation of the proposed project would affect the existing conditions related to the site, surrounding area, and region. This section provides both a qualitative as well as quantitative analysis (when the data is available). Appropriate terminology is used to define the degree of the impact. For ease of reference, project impacts are numbered in bold based on the environmental section numbers.

5. ***Cumulative Impacts.*** This section describes the potential impacts of the project in conjunction with other projects as outlined in Section 3.0 of this EIR.

6. ***Mitigation Measures.*** The mitigation measures section identifies the measures recommended to avoid, reduce, or eliminate significant environmental impacts. According to CEQA requirements, this section contains all reasonably feasible mitigation measures that would reduce adverse impacts to a level considered less than significant. This EIR document includes measures that would accomplish that. For ease of reference and to relate each mitigation measure to its appropriate environmental impact section, mitigation measures are numbered based on the environmental section numbers.

7. ***Level of Significance After Mitigation.*** This section states whether the project specific and cumulative impacts identified in the impacts analysis can be mitigated to a less than significant level. If the impacts cannot be adequately mitigated, they are noted as unavoidable adverse impacts. Impacts that can be mitigated are either mitigated to less than significant level, or are lessened but not mitigated to less than significant level and remain unavoidable adverse impacts of the proposed project. Prior to approval of the proposed project, the Calimesa City Council will be required to adopt a Statement of Overriding Considerations for any identified unavoidable impacts. The statement identifies and describes the public benefit(s) associated with the project implementation that offset significant impacts.

3.1 AESTHETICS

3.1.1 INTRODUCTION

This section of the EIR analyzes how the proposed development may impact the aesthetic character of the area, and how visually compatible it would be with the surrounding developments. To better assess the potential aesthetic impacts of the proposed project, a visual simulation study was conducted by Focus 360.

3.1.2 EXISTING CONDITIONS

VISUAL RESOURCES

The overall visual quality of the City of Calimesa is characterized by the diversity of landscape types contrasted with the surrounding environment. The topography of the City is marked by foothills in its eastern boundary, nearly level topography in its northern and central areas, and gently sloping areas in the southwestern boundary. Although the City and the surrounding ridgelines provide visual amenities to the residents of the City as well as the visitors, there are no specially designated "scenic" resources, according to the City's General Plan. The I-10 Freeway also provides uninterrupted view of the surrounding ridgelines and topography, but it is not designated as a "scenic highway" in the General Plan.

The City is divided into four distinct visual units based on landscape character and topography created by the pattern of the ridgelines: San Timoteo Canyon; Central Valleys; Northern Plan; and Northern Plateau and Ravines. The proposed project site is located within the San Timoteo Canyon visual unit. This unit is characterized by a long, broad corridor bounded by steep ridges bordering the San Timoteo Creek. Although the San Timoteo Creek is blocked by eastern ridgelines, a series of valleys within the ridgelines provide viewsheds towards I-10 and the San Bernardino Mountains. The San Timoteo Creek area includes open grassland, agricultural land, and riparian vegetation along the creek. The San Timoteo Canyon Road and the Southern Pacific Railroad Tracks are located in the central portion of this visual unit, forming the City's western boundary.

Located within the San Timoteo Canyon visual unit, the overall topography of the site consists of gently to moderately rolling hills and ridgelines, separated by valleys and ravines, scattered with oak trees and scrub vegetation. Many of these valleys and ravines contain streambeds. The slopes within the project site vary from flat to gently sloping in the canyon bottoms (3:1 to 2:1 slope ratios along the ascending natural slopes). There are near-vertical slopes of up to 20 feet high within a portion of a canyon in the southeastern portion of the project site. Additionally, erosion in some parts of the site has created slopes of approximately 1:1.

The proposed project site is visible from many vantage points around the site. Although visible from many areas within the City, the site is most clearly visible along the 1) I-10 Freeway (the Singleton

Interchange and 7th Street Interchange) and 2) San Timoteo Canyon Road (i.e., the intersection of San Timoteo Canyon Road and Singleton Road.

A series of photographs were taken, which show the existing condition of the project site. Please refer to Figures 3.1-1 through 3.1-3. Figure 3.1-1 is a photo key map, which shows the locations where the photographs were taken. Figures 3.1-2 and 3.1-3 depict the existing site photos A and B.

Viewpoint #1 is a view from the north, adjacent to I-10, looking south toward the Garden Air Wash, RLC option lands, and the future site for single-family residential development. The photo depicts the Garden Air Wash and the undeveloped natural topography of the site.

Viewpoint #2 is a view from the southwest corner of Singleton Interchange, looking south toward the future Town Center site. The photo depicts the undeveloped site and the ridgelines in the background.

Viewpoint #3 is a view from the eastern most edge of the site, looking west and northwest toward the open space and future single-family residential development. The photo depicts the undeveloped site and existing power poles.

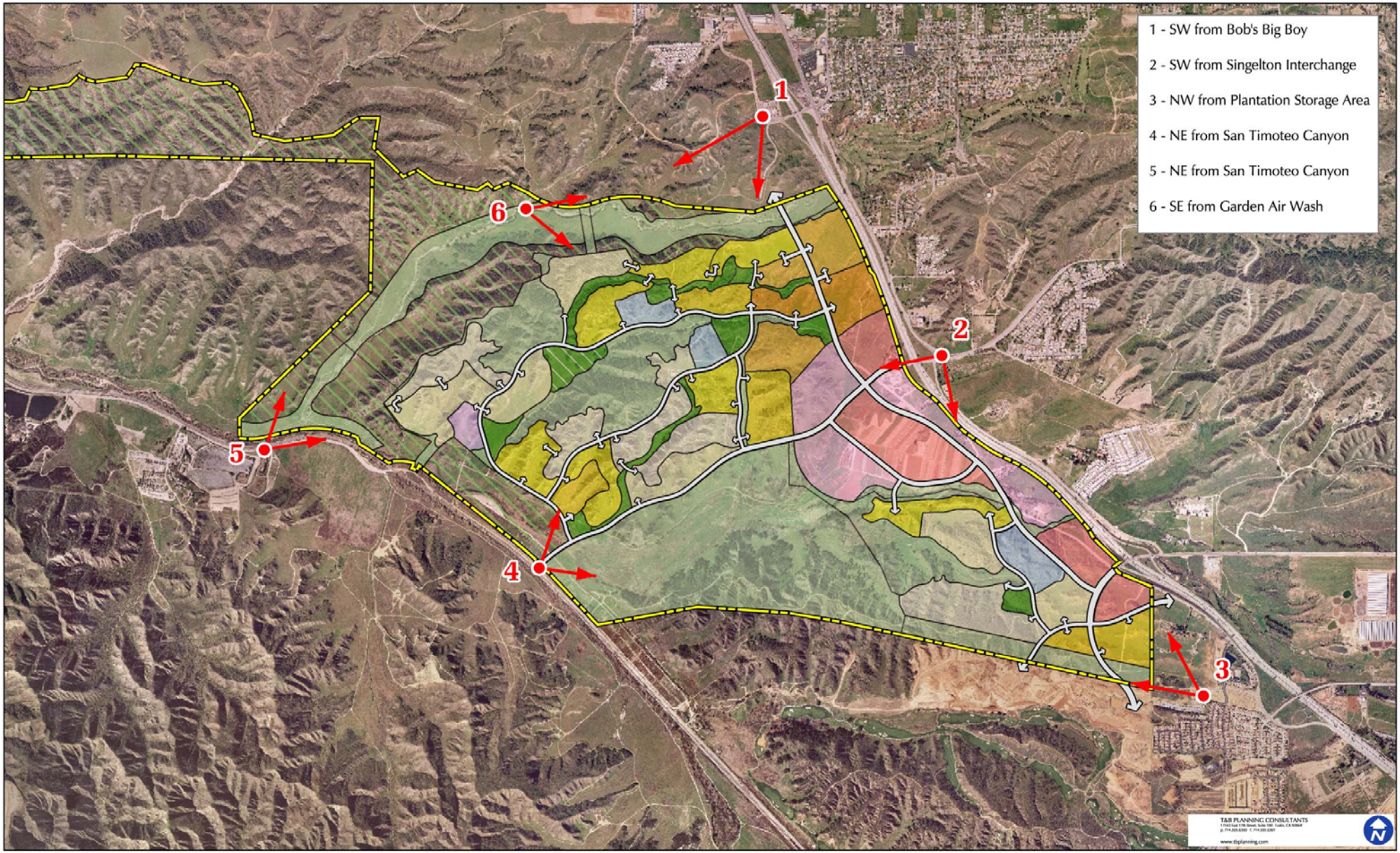
Viewpoint #4 is a view from the northeast corner of San Timoteo Canyon Road, looking northeast and east toward the RLC and RLC Option lands and the future single-family residential development. The photo depicts the undeveloped natural topography of the site, including the ridgelines.

Viewpoint #5 is a view from the western most edge of the site, looking northeast toward the Garden Air Wash and RLC and RLC Option lands. The photo depicts the existing roadway and the Garden Air Wash.

Viewpoint #6 is a view from the northern boundary of the site, looking east toward the Garden Air Wash and the RLC and RLC Option lands. The photo depicts the Garden Air Wash.

HILLSIDE DEVELOPMENT REGULATIONS

The Hillside Development Regulations are designed to address impacts of development in hillside areas and ensure that the proposed project is developed in an environmentally sensitive manner which protects the public health, safety, and welfare. Additionally, the regulations seek to minimize alteration, reduction, and removal of the natural view shed, and to create a more desirable living environment by creating design standards and criteria for hillside development. The regulations encourage the preservation of sensitive environmental areas and natural features in open space by application of standard development regulations contained within the Specific Plan Amendment. The policies seek to uphold the following:



EDAW T&B PLANNING CONSULTANTS N.T.S.

Figure 3.1-1
Photo Key Map

Viewpoint #1

Viewpoint #2

Viewpoint #3

Figure 3.1-2
Existing Site Photos A

Viewpoint #4

Viewpoint #5

Viewpoint #6

Figure 3.1-3
Existing Site Photos B

To conserve the identified significant ridges, canyons, valleys, and wildlife corridors.

- To create open spaces which preserve wildlife corridors, significant ridgelines, canyons, valleys, and riparian areas.
- To site dwellings and other structures in a manner, which is compatible with natural drainage patterns and physical landforms, through sensitive grading design and architecture.
- To encourage grading designed to complement the natural terrain.
- To provide safe vehicular circulation patterns for residents, safety, and service providers.
- To utilize landscape design to enhance slope stability, restore slopes adjacent to open space to their natural character, and to soften grading through the selection of appropriately sized (when mature) and appropriately placed plant materials.

The Hillside Development Regulations provide detailed design criteria, grading, and architectural design standards. Please refer to the Hillside Development Regulations within the Specific Plan Amendment document.

LIGHT AND GLARE

The project site is currently undeveloped with scattered ranch structures on-site and surrounded by open space. Development exists to the east of I-10, adjacent to the proposed Town Center. Therefore, there is minimal light and glare associated with the existing condition of the proposed project site.

3.1.3 THRESHOLD OF SIGNIFICANCE

A significant adverse environmental impact would occur if the project results in any of the following:

- A substantial adverse effect on a scenic vista;
- Substantial damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Substantial degradation of the existing visual character or quality of the site and its surroundings;
- Creation of a new source of substantial light or glare which would adversely affect day or nighttime views in the area; or
- Creation of a new source of substantial shade or shadow that would adversely affect daytime views in the area.

The State CEQA Guidelines also indicate that a significant impact would occur if implementation of the proposed project would result in substantial obstruction of any scenic vista or public open space view. Additionally, a project would adversely impact the surrounding area if it would create an aesthetically offensive site open to view by the public.

3.1.4 PROJECT IMPACTS

VISUAL/SCENIC RESOURCES

Impact A1 The project has the potential to significantly impact the visual resources of the site.

Although the site is currently undeveloped and the project proposes extensive development on the site, no scenic resources would be impacted, as the City of Calimesa General Plan does not designate the site or its features as scenic. Additionally, the proposed development is less dense and has more open space compared to the adopted site plan for the project area. The proposed site plan has taken into account the environmentally sensitive resources within the site, including the natural open space, slopes, and ridgelines, and has proposed a plan that preserves additional open space and avoids the environmentally sensitive areas within the site. Moreover, the specific plan document includes detailed development standards and design guidelines that ensure preservation of the scenic quality of the site in addition to creating a high quality development. The specific plan design guidelines include: architectural design guidelines; community element guidelines; street landscaping guidelines; and landscape design guidelines. The proposed project will also comply with applicable design/development guidelines and Community Design goals outlined in the City of Calimesa General Plan (please refer to the General Plan consistency analysis in Section 3.7, Land Use and Planning). In addition to the standards and guidelines of the specific plan document, the project proposes hillside management regulations that seek to minimize alteration, reduction, and removal of the natural view shed, and to create a more desirable living environment by creating specific design criteria for hillside development. Therefore, with compliance with MM-A1, the potential impact to the visual and scenic quality of the site will be reduced to a less than significant level.

Impact A2 The project has the potential to degrade the visual quality of the site.

The site is currently undeveloped and contains features such as ridgelines and natural drainages that enhance its aesthetic quality. However, the site would not remain undeveloped, as there is an existing adopted specific plan for the site that would develop it with residential and commercial/retail land uses. The proposed project has taken into consideration the natural features of the project area. Development pads are designed to avoid most of the ridgelines and preserve as much of the open space as possible. Therefore, although the site would be developed, its visual quality would be maintained and enhanced through project design, and with compliance with MM-A2, the impact to the aesthetic conditions of the site would be less than significant.

LIGHT AND GLARE

Impact A3 The project has the potential to result in significant light and glare impacts.

Given the existing undeveloped condition of the site and the amount of the proposed development, the project is anticipated to create a significant light and glare impact to the adjacent areas. The proposed

project will introduce new sources of light and glare including, street lighting, residential and commercial lighting, sports fields lighting, and light intrusion from motor vehicles. Although the light and glare from the proposed project may be substantial, it would be less compared to the adopted land use plan for the site. Additionally, the proposed Specific Plan document includes extensive guidelines and standards, such as for lighting that would ensure the light and glare impacts would not create a significant impact to the adjacent areas. With compliance with MM-A3, the potential impacts related to light and glare would be less than significant.

3.1.5 CUMULATIVE IMPACTS

Impact A4 The proposed project has the potential to create cumulative aesthetic and light and glare impacts, in conjunction with other cumulative developments in the area.

The proposed project converts the existing undeveloped site to a developed site, which would include residential, commercial, office, and other uses. These uses would create substantial light and glare. The visual and light and glare impacts of the proposed development would also add to a cumulative aesthetic effect caused by development of several projects in the area. Together, these projects are altering the character of the area by introducing new residential and commercial uses. However, while the combined effects of the identified cumulative projects would alter the character of the surrounding area, the developments within the City of Calimesa are projected in the General Plan build-out. Additionally, the proposed development is less intense compared to the adopted land use plan for the site. With compliance with MM-A4, the potential cumulative aesthetic impacts would be less than significant.

3.1.6 MITIGATION MEASURES

MM-A1 All proposed development shall comply with development standards and design guidelines (i.e., building siting, height, setbacks, architecture, landscaping, perimeter walls, fences, lighting, etc.), established in the Specific Plan document.

MM-A2 Mitigation Measure MM-A1 is applicable to the impact on visual quality of the site.

MM-A3 Mitigation Measure MM-A1 is applicable to the light and glare impact.

MM-A4 Mitigation Measure MM-A1 is applicable to the cumulative impacts.

3.1.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of the above mitigation measure and compliance with hillside development regulations, the potential aesthetic and light and glare impacts would be less than significant.

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3.2 AIR QUALITY

3.2.1 INTRODUCTION

An air quality impact analysis was prepared by the Urban Crossroads on November 1, 2004 to analyze the potential emissions associated with the development of the project site and prepare a carbon monoxide hotspot analysis where appropriate for the intersections identified in the vicinity of the project site. The study also looks at the regional impacts on air quality and identifies mitigation measures to help reduce the potential impacts. The air quality impact analysis in its entirety is contained in Appendix B of this EIR, and the findings are summarized in this section.

3.2.2 EXISTING CONDITIONS

ATMOSPHERIC SETTING

The climate of the proposed project site is characterized by warm summers, mild winters, infrequent rainfall, moderate afternoon breezes, and generally fair weather. The most important weather pattern is associates with the warm season airflow across the populated areas of the Los Angeles Basin which brings polluted air into western Riverside County late in the afternoon. This transport pattern creates unhealthy air quality when the fringes of this "urban smog cloud" extend to the project site during the summer months.

Temperatures in the project area average a very comfortable 65^{o}F year-round. Rainfall in the project area varies considerably in both time and space. Almost all the annual rainfall comes from the fringes of mid-latitude storms from late November to early April with summers often being completely dry. Rainfall in the project vicinity averages 12.5 inches per year, but varies markedly from one year to the next.

Winds are an important parameter in characterizing the air quality environment of a project site because they both determine the regional pattern of air pollution transport and control the local rate of pollution dispersion near a source. Daytime winds are from the northwest at 6-8 mph as air moves regionally onshore from the cool Pacific Ocean to the warm Mojave Desert interior of Southern California. These winds allow for good local mixing, but they may bring air pollutants from urbanized coastal areas into interior valleys. Strong thermal convection in the summer in the San Jacinto Valley ultimately dilutes the smog cloud from urbanized development, but the project area is too close to Los Angeles Basin emissions sources to completely escape the regional air quality degradation resulting from the photochemical airborne reactions that create the summer smog and haze throughout the air basin. At night, air drains off surrounding mountains and then pools on the valley floor. These breezes are cool and clean, but they may allow for local stagnation of air on the valley floor. Such near-calm winds, in conjunction with localized temperature inversions noted below, tend to maximize the impact of any local pollution emissions sources such as freeways, shopping centers, etc.

In addition to winds that control the rate and direction of pollution dispersal, Southern California is notorious for strong temperatures that limit the vertical depth through which pollution can be mixed. In summer, coastal areas are characterized by a sharp discontinuity between the cool marine air at the surface and the warm, sinking air aloft within the high pressure cells over the ocean to the west. This marine/subsidence inversion allows for good local mixing, but acts like a giant lid over the basin.

A second inversion type forms on clear winter nights when cold air off the mountains sinks to the valley floor while the air aloft over the valley remains warm. This forms radiation inversions. These inversions, in conjunction with calm winds, trap pollutants such as automobile exhaust near their source. While these inversions may lead to air pollution "hot spots" in heavily developed coastal areas of the basin, there is not enough traffic in inland valleys to cause any winter air pollution problems. Thus, while summers are periods of hazy visibility and occasional unhealthy air, winter is often a period of spectacular visibility and excellent air quality in the project area.

AMBIENT AIR QUALITY STANDARDS (AAQS)

To gauge the significance of the air quality impacts of the proposed project, those impacts together with existing background air quality levels, must be compared to the applicable ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise, called "sensitive receptors." Healthy adults can tolerate occasional exposure to air pollutants concentrations considerably above these minimum standards before adverse effects are observed. However, recent research has shown that chronic exposure to ozone (the primary ingredient in photochemical smog) may lead to adverse respiratory health even at concentrations close to the ambient standard.

National AAQS were established in 1971 for six pollution species with states retaining the option to add other pollutants, require more stringent compliance, or to include different exposure periods. The initial attainment deadline of 1977 was extended to 1987 for national AAQS, and has now been further extended in air quality problem areas like Southern California until 2010. Because California had established AAQS several years before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is considerable difference between state and national clean air standards. Those standards currently in effect in California are shown in Table 3.2-1.

The federal Clean Air Act Amendments (CAAA) of 1990 required that the U.S. Environmental Protection Agency (EPA) review all national AAQS in light of currently known health effects. The EPA was charged with modifying existing standards or promulgating new ones where appropriate. The EPA subsequently developed standards for chronic ozone exposure (8+ hours per day) and for particulate matter measuring less than 2.5 microns (called "PM-2.5"). New national AAQS were adopted on July 17, 1997. California standards for PM-2.5 are more stringent than the federal PM-2.5 standards.

Table 3.2-1
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[5]	Secondary[6]	Method[7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	0.12 ppm (235 µg/m^3)	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	--		0.08 ppm (157 µg/m^3)		
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		50 µg/m^3		
Fine Particulate Matter ($PM_{2.5}$)[8]	24 Hour	No Separate State Standard		65 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	15 µg/m^3		
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 µg/m^3)	None	Non-Dispersive Infrared Photometry (NDIR)
	1 Hour	20 ppm (23 mg/m^3)		35 ppm (40 µg/m^3)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		--	--	--
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	--	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m^3)	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.25 ppm (470 µg/m^3)		--		
Lead (Pb)[9]	30-day Average	1.5 µg/m^3	Atomic Absorption	--	--	--
	Calendar Quarter	--		1.5 µg/m^3	Same as Primary Standard	High Volume Sampler and Atomic Absorption
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	--	Ultraviolet Fluorescence	0.030 ppm (80 µg/m^3)	--	Spectrophotometry (Pararosaniline Method)
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (365 µg/m^3)	--	
	3 Hour	--		--	0.5 ppm (1,300 µg/m^3)	
	1 Hour	0.25 ppm (655 µg/m^3)		--	--	
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 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		NO FEDERAL STANDARDS		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[9]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

1. 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 reducing 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 Title 17 of the California Code of Regulations.
2. 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 eight hour concentration in a year, averaged over

three years, is equal to or less than the standard. For PM-10, the 24 hour standard is attained when 99 percent of the daily concentrations, averaged over three years, are equal or less than the standard, for PM-2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.

3. 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 gas.
4. Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.
8. New federal 8-hour ozone and fine particulate matter standards were promulgated by U.S. EPA on July 18, 1997. Contact U.S. EPA for further clarification and current federal policies.
9. The ARB 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 concentration.

BASELINE AIR QUALITY

The closest long-term air quality monitoring in the South Coast Air Basin (SCAB) for ozone, nitrogen oxides, and 10-micron diameter PM-10 is carried out by the South Coast Air Quality Management District (SCAQMD) at the Banning Airport site. Additional sites were used to obtain data where it was not available at the Banning Airport site. The closest long-term air monitoring for carbon monoxide was obtained from the Lake Elsinore site located approximately 40 miles to the southwest of the project site, and information for ultra-fine particulate matter (PM-2.5) was obtained from Metropolitan Riverside County Monitoring Station 1 located approximately 30 miles west of the project site. The Perris monitoring site was not used for this project because all criteria pollutants monitored by this site were already captured at the closer Banning site. Table 3.2-2 summarizes the last eight years of monitoring data from the aforementioned site.

Ozone and particulates are seen to be the two most significant air quality concerns in the local area. The eight years of data in Table 3.2-2 shows the number of days standards were exceeded for the study area. Ozone is the pollutant that most often exceeds allowable standards within the study area, with PM-10 also exceeding allowable standards within the study area on a regular basis. More localized pollutants such as carbon monoxide, nitrogen oxides, lead, etc. are very low near the project site because background levels even in Riverside rarely exceed allowable levels. Primary sources of these localized emissions are traffic congestion, internal combustion engines, mobile sources, and smelters/battery plants. However, there are no sources of such emissions near the project site.

Table 3.2-2
Calimesa REA Air Quality Monitoring Summary – 1996-2003

Pollutant/Standard	1996	1997	1998	1999	2000	2001	2002	2003
Ozone								
1-hour > 0.09 ppm (days)	63	34	67	55	52	63	64	75
1-hour > 0.12 ppm (days)	25	2	25	5	4	16	13	27
8-hour $\geq$ 0.08 ppm (days)	XX	9	52	33	39	49	52	63
Max. 1-hour conc. (ppm)	0.2	0.13	0.17	0.14	0.14	0.149	0.16	0.17
Carbon Monoxide[1]								
1-hour > 20. ppm (days)	0	0*	0	XX	XX	XX	XX	XX
8-hour > 9. ppm (days)	0	0*	0	0	0	0	0	0
Max. 1-hour conc. (ppm)	9	7	5	XX	4	2	3	4
Max. 8-hour conc. (ppm)	5	5.8	4.6	XX	2	2	2.0	1.3
Nitrogen Dioxide								
1-hour > 0.25 ppm (days)	0	0*	1	1	0	XX	0	0
Max. 1-hour conc. (ppm)	0.11	0.12*	0.26	0.31	0.21	0.24	0.15	0.15
Particulate Lead[2]								
1-month $\geq$ 1.5 ug/m^3 (months)	0.06	0.07	0.08	0.06	0.06	0.04	0.03	XX
Max. 1-hour conc. (ug/m^3)	0.04	0.04	0.04	0.05	0.05	0.03	0.02	XX
Particulate Sulfate[2]								
24-hour > 25. ug/m^3 (% samples)	0	0	0	0	0	0.0	0	0
Max. 24-mon. conc. (ug/m^3)	14.9	13.1	10.1	0.7	11	10.7	11.7	10.1
Inhalable Particulates (PM-10)								
24-hour > 50 ug/m^3 (days exceeded/sampled)	10/52*	14/57	2/52*	4/34*	5/59	7/54	6/54	9/60
24-hour > 150 ug/m^3 (days exceeded/sampled)	0/60	1/57	0/52*	0/34*	0/59	1/54	0/54	0/60
Max. 24-hour conc. (ug/m^3)	96	227	62*	86*	69	219	70	79
Ultra-Fine Particulates (PM-2.5)[2]								
24-hour > 65 pg/m^3 (days exceeded/sampled)	XX	XX	XX	XX	11/304*	19/325	8/327	8/350
Max. 24-hour conc. (pm/m^3)	XX	XX	XX	111.2	119/6*	98	77.6	104.3

Source: South Coast AQMD (www.aqmd.gov) – Banning, Lake Elsinore, and Metropolitan Riverside County 1 Area Air Monitoring Station data summaries.

XX = Pollutant not monitored

* = Less than 12 months of data. May not be representative.

Data obtained from Banning Airport Monitoring Station unless otherwise noted.

[1] Data obtained from Lake Elsinore Monitoring Station
[2] Data obtained from Metropolitan Riverside County Monitoring Station 1

AIR QUALITY MANAGEMENT PLANNING

The air in Southern California continues to become cleaner, with recent years registering the cleanest in decades. The vast improvement in air quality is the direct result of Southern California's comprehensive, multiyear strategy of reducing air pollution from all sources outlined in its Air Quality Management Plan (AQMP). However, the air in Southern California is far from meeting all federal and state air quality standards, and in fact is among the worst in the nation. To reach the clean air goal in the few years remaining until Clean Air Act deadlines, Southern California must not only continue its diligence but intensify its pollution reduction efforts.

In 1988, because of uncertainty in federal Clean Air Act reauthorization, the California legislature enacted the California Clean Air Act (CCAA). The CCAA requires that regional emissions be reduced by 5 percent per year until attainment can be demonstrated. In July 1991, the SCAQMD adopted a revised AQMP which was designed to meet the CCAA requirements.

The new PM-2.5 annual average standard was set at 12 micrograms per cubic meter. In addition CARB also revised the monitoring methods for these standards and delayed action on the proposed 24-hour PM-2.5 standard in light of recent findings related to statistical issues in several key short-term exposure health effects studies. Achieving these standards poses a greater challenge than meeting the new federal 8-hour ozone and PM-2.5 standards.

On June 2002, the California Air Resources Board (CARB) also adopted new, stricter standards for particulate matter that would affect both the coarse as well as fine particulate fraction. The newly adopted standards reduce the PM-10 annual average standard from 30 micrograms per cubic meter to 20 micrograms per cubic meter and retained the 24-hour PM-10 standard of 50 micrograms per cubic meter.

3.2.3 THRESHOLD OF SIGNIFICANCE

Many air quality impacts which are derived from dispersed mobile sources (i.e., the dominant pollution generators in the basin) often occur hours later and miles away after photochemical processes have converted primary exhaust pollutants into secondary contaminants such as ozone. The incremental regional air quality impact of an individual project is generally very small and difficult to measure. The SCAQMD has therefore developed suggested significance thresholds based on the volume of pollution emitted rather than actual ambient air quality because the direct air quality impact of a project is not quantifiable on a regional scale. The 1993 SCAQMD CEQA Air Quality Handbook states that any projects in the SCAB with daily emissions that exceed any of the following thresholds should be considered as having an individually and cumulatively significant air quality impact:

Reactive Organic Compounds (ROC)	55 pounds/day
Nitrogen Oxides (NO_X)	55 pounds/day
Carbon Monoxide (CO)	550 pounds/day
Sulfur Dioxide (SO_2)	150 pounds/day
Particulate Matter (PM-10)	150 pounds/day

During construction, the above significance thresholds for ROC and NOX, the two main ozone precursor emissions, are relaxed to 75 and 100 pounds per day, respectively. The SCAQMD also supports the use of quarterly thresholds for construction emissions only, and are as follows:

Reactive Organic Compounds (ROC)	2.5 tons/quarter
Nitrogen Oxides (NO_X)	2.5 tons/quarter
Carbon Monoxide (CO)	24.75 tons/quarter
Sulfur Dioxide (SO_2)	6.75 tons/quarter
Particulate Matter (PM-10)	6.75 tons/quarter

Pursuant to SCAQMD Guidelines, if a daily emission threshold is exceeded regardless of quarterly results, the project is determined to have a significant air quality impact for construction related emissions. Therefore, a more conservative approach is to evaluate construction emissions based on daily emissions instead of quarterly emissions. This analysis takes the conservative approach to construction emissions, and analyzes emissions on a daily basis rather than quarterly.

It should be noted that these thresholds do not take into account several important considerations:

- Emission levels from one large project may exceed thresholds while those from numerous smaller projects with identical emission might not, even through the regional impact is the same.
- Large developments have a greater opportunity to effectively implement transportation control measures (TCMs) because of a greater potential participant pool in trip/VMT diversion programs.
- Project related emissions and their regional impact are likely to be already incorporated into regional growth projections.

The Lead Agency may make a finding of a significant impact for projects exceeding the SCAQMD thresholds, but use as many of the above criteria in a statement of overriding considerations as are applicable.

Additional indicators of potentially significant air quality impacts are listed in the SCAQMD Handbook that should be used as screening criteria to evaluate the need for further analysis with respect to air quality. Whenever possible, the project should be evaluated in a quantitative analysis; otherwise a qualitative analysis is appropriate. The additional indicators are as follows:

- Project could interfere with the attainment of the federal or state ambient air quality standards by either violating or contributing to an existing or projected air quality violation;

- Project could result in population increases within the regional statistical area which would be in excess of that projected in the AQMP;
- Project could generate vehicle trips that cause a CO hotspot;
- Project might have the potential to create or be subjected to objectionable odors;
- Project could have hazardous materials on-site and could result in an accidental release of air toxic emissions;
- Project could emit an air toxic contaminant regulated by District rules or that is on a federal or state air toxic list;
- Project could involve disposal of hazardous waste;
- Project could be occupied by sensitive receptors near a facility that emits air toxics or near CO hotspots;
- Project could emit carcinogenic air contaminants that could pose a cancer risk.

Furthermore, the criteria established by SCAQMD indicate a CO analysis should be performed when air quality has been identified as having a significant impact. These impacts on transportation/traffic will be considered significant if any of the following criteria apply:

- Peak period levels on major arterials are disrupted to a point where level of service (LOS) is reduced to D, E, or F for more than one month
- An intersection's volume to capacity ratio increases by 0.02 (two percent) or more when the LOS is already D, E, or F.
- A major roadway is closed to all through traffic, and no alternative route is available.
- There is an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system.
- The demand for parking facilities is substantially increased.
- Water borne, rail car, or air traffic is substantially altered.
- Traffic hazards to motor vehicles, bicyclists, or pedestrians are substantially increased.
- The need for more than 350 employees
- An increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round trips per day.
- An increase in customer traffic by more than 700 visits per day.

For purposes of this analysis, a CO hotspot evaluation is required for all intersections where LOS is D, E, or F.

3.2.4 PROJECT IMPACTS

Consistent with the traffic analysis, the project analysis years for the air quality impact analysis have been identified as Existing Conditions, Phase 1 (2007), Phase 2 (2009), Phase 3 (2011), Year 2030 Project Build-out, and General Plan Build-out.

Intensification of land uses potentially impacts ambient air quality on two scales of motion. As cars drive throughout southern California, the small incremental contribution to the basin air pollution burden from

any single vehicle is added to that from several million other vehicles. The impact from the Summerwind Ranch development, even if it generates a significant number of new vehicle trips, is small on a regional scale. Basin wide air quality impacts are, therefore, addressed in terms of project compatibility with regional air quality plans. If any given project or plan has been properly incorporated into basin wide growth projections which are the basis for regional air quality and transportation planning, then the basin wide impact of any proposed development is presumed, by definition, to be less than significant.

Locally, changes in the location of any collection of automotive sources, or changes in the number of vehicles or travel speeds may impact the microscale air quality around any given development site. Traffic increases not only contribute air pollutants in direct proportion to their cumulative percentage of traffic volume growth, but they may slow all existing traffic to slower, more inefficient travel speeds. The development traffic and air quality impact is thus potentially compounded.

Short-term construction activity emissions will occur during project build-out. Such emissions include on-site generation of dust and equipment exhaust, and off-site emissions from construction employees commuting and/or trucks delivering building materials.

For project related emissions the URBEMIS2002 v. 7.5.0 model was used to forecast expected emissions levels for both construction and operational activities. Output from the model runs for both construction and operational scenarios are provided in Appendices A and B of the air quality impact analysis (Appendix B of this EIR). Table 3.2-3 summarizes air emissions for construction, area source, and operational activities.

CONSTRUCTION ACTIVITY IMPACTS

Impact AQ1 Construction activity would result in significant short-term impacts on local and regional air quality due to generation of fugitive dust.

Dust is normally a major concern during construction of new buildings and infrastructure. Because such emissions are not amendable to collection and discharge through a controlled source, they are called “fugitive emissions.” Emission rates vary as a function of many parameters (soil test, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.).

PM-10 emissions were calculated by assuming that, at worst case, 175 acres of the project area is under simultaneous heavy construction at any point during the build-out lifetime of the project. Major grading activity for the construction period being analyzed is assumed to last approximately three months. Based on Table 3.2-3, the project would generate approximately 340.73 pounds per day of PM-10 during the earthmoving phases of project construction. Considering SCAQMD criteria, these emissions are significant. They can be mitigated to less than significant by application of dust abatement measures such as those contained in SCAQMD Rule 403 (see MM-AQ1).

In addition to the fine particles that remain suspended in the atmosphere semi-indefinitely, construction activities generate many larger particles with shorter atmospheric residence times. This dust is comprised mainly of larger diameter inert silicates that are chemically non-reactive and are further readily filtered out by human breathing passages. These fugitive dust particles are therefore more of a potential soiling nuisance as they settle out on parked cars, outdoor furniture, or landscape foliage rather than any adverse health hazard. Any nuisance potential will tend to be highly localized when a new tract is built in proximity to an already completed development.

Impact AQ2 Construction activity would result in significant short-term impacts on local and regional air quality due to generation of NOx, ROG, and CO.

For construction activity impacts it is assumed that a conservative development schedule includes building approximately 450 dwelling units (DU), and 1,237 thousand square feet (TSF) of commercial/business space over a 24-month period. Use of these assumptions for average conditions is likely a "worst case" scenario for analysis purposes only. Exact development phasing will most likely depend on market demand and rate of absorption.

Exhaust emissions will result from both on-road and off-road heavy equipment during site grading and construction activities. The types and numbers of equipment will vary among contractors such that these emissions cannot be quantified with a great deal of certainty. It is assumed that a project the size of Summerwind Ranch may utilize approximately 20-40 pieces of heavy equipment at any one time during mass grading and construction activities. Assuming that 40 pieces of heavy equipment were operated an average of eight hours per day for three months, the estimated emissions from construction activity representative of any phase are shown in Table 3.2-3. As shown, the emissions of NOx, ROG, and CO exceed SCAQMD thresholds and are significant. Mitigation measures MM AQ2-1, 2, and 3 are provided for these emissions; however, the emissions levels for NOx and ROG would remain significant for the duration of construction. Emissions of CO could be mitigated to less than significant, while SOx emissions are less than significant without mitigation.

Construction activity air quality impacts occur mainly in proximity to individual disturbance areas. However, there may be some "spill-over" into the surrounding community. That spill-over may be physical as vehicles drop or carry out dirt or silt is washed into public streets. Spill-over may also occur via congestion effects. Construction may entail roadway encroachment, detours, lane closures, and competition between construction vehicles (trucks and contractor employee commuting) and ambient traffic for available roadway capacity. Emission controls require good housekeeping procedures and a construction traffic management plan that maintains such "spill-over" effects at a less than significant level.

Impact AQ3 Construction activities would potentially exceed the SCAQMD threshold for VOCs.

Construction activities also generate evaporative emissions of volatile organic compounds (VOCs) from paints, solvents, asphalt, roofing tar, and other coatings. The volatility of the materials used in asphalt is

regulated by the AQMD rules, as are paints and solvents. Typical water based paints contain around two pounds of VOCs per gallon of paint (CEQA Air Quality Handbook," Table A9-13-C). Application of more than 37.5 gallons per day of paint would cause the SCAQMD threshold of 75 pounds per day of VOCs to be exceeded. A painting schedule to limit average weekly surface coating to less than 225 gallons (226 gal ÷ 6 days = 37.5 gal/day) is recommended to maintain the potential VOC emission impacts at less than significant levels.

Overlap between painting activities at one project phase and on-going construction at another phase could occur. Construction phasing will depend upon the rate of absorption of new homes. A small amount of ROC emissions during other construction activities could be released concurrently with VOC emissions from house painting. The level of additional constraint to maintain a less than significant VOC impact during surface coating operations is not precisely known, but is relatively small.

Based on this analysis, the project will result in short-term significant construction impacts (see Table 3.2-3). The technology does not currently exist to build out roughly 450 residential dwelling units and 1,237 TSF of commercial/business space in a semi-arid climate without creating substantial amounts of fugitive dust, equipment exhaust and VOC emissions. These temporary impacts can, however, be substantially reduced if a commitment is made to pursue available mitigation as aggressively as possible. With compliance with MM-AQ3, the potential of "excess" VOC emissions and the number of days with potentially significant impacts will be less than significant.

OPERATIONAL (VEHICULAR AND AREA SOURCE) IMPACTS

Impact AQ4 Project operation would result in significant long term operational impacts on regional air quality by exceeding SCAQMD thresholds.

The project related area source emissions burdens, along with a comparison of SCAQMD recommended significance thresholds, are in Table 3.2-3, above. It is assumed that both wood burning stoves and natural wood burning fireplaces will not be included in the proposed development. The use of "clean burning" fireplaces (e.g., electric or natural gas) rather than traditional inefficient wood burning fireplaces is consistent with the County of Riverside Countywide Design Standards and Guidelines adopted by the Riverside County Board of Supervisors on January 13, 2004.

Project operational (vehicular) impacts are dependent on both overall daily vehicle trip generation and the effect of the project on peak hour traffic volumes and traffic operations in the vicinity of the project. By far, the largest project related air quality impact centers on the 95,366 vehicle trips associated with the project. Overall project daily emissions are evaluated first, followed by analysis of the potential peak hour "micro-scale" CO air quality impacts of the project.

Table 3.2-3
Project Emissions Summary

SCAQMD Daily Thresholds for Project Operations (pounds per day)					
	ROG	**NO_X**	**CO**	**PM-10**	**SO_X**
Daily (lbs/day)	**55**	**55**	**550**	**150**	**150**
Summer Operating Emissions					
Area Source	186.29	62.01	40.77	0.13	0.48
Operations	202.36	135.26	1,951.35	806.01	5.65
Total	388.65	197.27	1,992.12	806.14	6.13
% Threshold	707%	359%	362%	537%	4%
Winter Operating Emissions					
Area Source	184.84	61.66	25.68	0.12	0.00
Operations	160.09	182.16	1,552.69	806.01	4.57
Total	344.93	243.82	1,578.37	806.01	4.57
% Threshold	627%	443%	287%	537%	3%
SCAQMD Daily Thresholds for Construction (pounds per day)					
	ROG	**NO_X**	**CO**	**PM-10**	**SO_X**
Daily (lbs/day)	**175**	**100**	**550**	**150**	**150**
Project Construction Emissions					
Construction	2,194.43	2,030.90	2,727.98	340.73	0.04
% Threshold	2,926%	2,031%	496%	227%	0%

Mitigated Project Emissions Summary

SCAQMD Daily Thresholds for Project Operations (pounds per day)					
	ROG	**NO_X**	**CO**	**PM-10**	**SO_X**
Daily (lbs/day)	**55**	**55**	**550**	**150**	**150**
Summer Operating Emissions					
Area Source	185.74	55.39	37.94	0.12	0.48
Operations	179.43	114.21	1,648.89	679.29	4.77
Total	365.17	169.60	1,686.83	679.41	5.25
% Threshold	664%	308%	307%	453%	4%
Winter Operating Emissions					
Area Source	184.3	55.03	22.85	0.1	0
Operations	136.84	153.76	1,313.08	679.29	3.85
Total	321.14	208.79	1,335.93	679.39	0.25
% Threshold	584%	380%	243%	453%	0%

SCAQMD Daily Thresholds for Construction (pounds per day)					
	ROG	**NO_X**	**CO**	**PM-10**	**SO_X**
Daily (lbs/day)	**75**	**100**	**550**	**150**	**150**
Project Construction Emissions					
Construction	200.24	306.65	129.78	65.71	0.04
% Threshold	267%	307%	24%	44%	0%

The project related emissions levels for ozone forming pollutants ROC, NO_X, CO, and PM-10 exceed the SCAQMD thresholds even after reasonable mitigation by 584%, 380%, 243%, and 453%, respectively and are significant. Mitigation measures AQ4-1, 2, 3, 4, and 4 are provided to alleviate the impact to the extent possible.

Impact AQ5 The project's significant operational impacts could lead to inconsistency with the SCAQMD's AQMP.

A mixed-use development project such as the Summerwind Ranch development relates to the air quality planning process through the growth forecasts that were used as inputs into the regional transportation model. If a proposed development is consistent with those growth forecasts, and if all available emissions reduction strategies are implemented as effectively as possible on a project-specific basis, then the project is consistent with the AQMP. Although the SCAQMD recommends the projects that are not consistent with the AQMP should be designated as having a significant air quality impact, consistency itself is not considered as a sufficient basis to support a finding of a less-than-significant regional impact. The Summerwind Ranch development is consistent with the regional growth forecasts.

The AQMP contains a number of land use and transportation control measures (TCMs), which are divided into three categories:

- High occupancy vehicle (HOV) measures
- Transit and Systems Management measures
- Information-based measures

The AQMP does not contemplate that these measures would be implemented directly on any single development basis. Rather, the AQMP establishes a regulatory scheme of the appropriate control measures being implemented by cities and counties through their adoption of the control measures as ordinances, capital improvement programs, funding priorities, etc. The Summerwind Ranch development complies with the County's air quality program. Policies such as those related to energy efficiency and conservation are supported by the project through the use of energy efficient water heaters and appliances, and policies related to stationary pollution sources are supported by the projects' adherence to construction practices that reduce fugitive dust and excess construction related emissions where possible (e.g., consistent with the SCAQMD Rule 403). Therefore, this impact is considered less than significant.

SECONDARY EFFECTS EVALUATION

Impact AQ6 The project would potentially expose a substantial number of people to substantial concentrations of air pollutants.

The potential impact of the proposed project on sensitive receptors has also been considered. Sensitive receptors can include uses such as long term health care facilities, rehabilitation centers, and retirement homes. Residences, schools, playgrounds, child care centers, and athletic facilities can also be considered as sensitive receptors.

The only potential sensitive receptors included in the project are the residential, school, and active park components of the project. The residential and school uses are not located within a quarter mile of any facilities emitting toxic pollutants and/or odors, nor are the residential uses located adjacent to a congested roadway or other area with a high background carbon monoxide concentration. Therefore, no significant impact associated with sensitive receptors would occur as a result of the project.

ODOR SOURCES

The potential for the project to generate objectionable odors has also been considered. Land uses generally associated with odor complaints include:

- Agricultural uses (livestock and farming)
- Wastewater treatment plants
- Food processing plants
- Chemical plants
- Composting operations
- Refineries
- Landfills
- Dairies
- Fiberglass molding facilities

Impact AQ7 The proposed wastewater treatment plant could potentially expose a substantial number of people to objectionable odors.

Typical wastewater treatment facilities have the potential to generate emissions of NOx, VOCs, and hydrocarbons as well as objectionable odors. However, the type of treatment facility proposed for the Summerwind Ranch project is a Membrane Bio Reactor (MBR). This type of technology has demonstrated advantages in effluent quality, fit for recycling and re-use for various applications, smaller footprint, and reduced odors. The South Coast Air Quality Management District (SCAQMD) states that a MBR facility is considered to be the most efficient type of wastewater treatment facility from an emissions standpoint as it emits the least emissions and objectionable odors. Tentatively, the plans for the facility include design features that would help to further reduce odors and emissions. Specifically, all

process areas will be covered and air exhausted through odor scrubbers. Odor scrubbers will be either caustic/hypochlorite chemical scrubbers or carbon or perhaps a combination depending on the hydrogen sulfide levels in the respective areas ventilated. These measures would allow control of potential odor impacts from the facility, resulting in less than significant impact. However, should the facility design change or alternatives be considered, appropriate environmental analysis may be required under CEQA prior to approval by the service agency.

MICROSCALE CARBON MONOXIDE AIR QUALITY IMPACTS

A hotspot CO analysis is required to predict CO levels at adjacent intersections and project access locations from vehicle operations if the intersections are identified as having a significant impact on air quality. The criteria established by SCAQMD, included under significance threshold, were used to analyze the potential CO impacts. As indicated above, for purposes of this analysis, a CO hotspot evaluation is required for all intersections where LOS is D, E, or F.

The CARB's EMFAC2002 model was used to determine emissions factors for both idling and running vehicles, utilized as inputs into the EPA's CAL3QHC dispersion model, which was used to determine "hotspot" concentrations near intersections.

CAL3QHC Version 2.0 is a Gaussian-type line-source air pollutant dispersion model. It was developed by the EPA based on a California model (CALINE3) and is the recommended model for predicting pollutant concentrations near intersections. CAL3QHC input variables include free flow and calculated idle emission factors; traffic volumes, LOS values, and signal timing; roadway geometrics; site characteristics; and meteorological conditions. In 1991, the EPA sponsored an evaluation of different dispersion models to test performance and accuracy; the results of this evaluation indicated that CAL3QHC was one of the best performing models. For this analysis, the use of CAL3QHC in lieu of the CALINE4 dispersion model is based on the premise that CAL3QHC more accurately depicts CO concentrations near intersections because the CAL3QHC dispersion model takes into account queuing at intersections, LOS values, and signal timing, whereas CALINE4 is a dispersion model designed for analyzing concentrations on roadway lengths (using approach and departure speeds) rather than at intersections.

The methodology used to analyze potential CO hotspot intersections is based on procedures outlined by both SCAQMD (CEQA Handbook) and the EPA (USEPA, Guideline for Modeling Carbon Monoxide from Roadway Intersections, EPA-454/R-95-005, 1992). The procedures were used to calculate worst case one-hour CO concentrations. Traffic data for existing conditions, and future scenarios were viewed to identify intersections at which CO concentrations could have a potentially adverse impact (with and without project). The selection of worst case intersections is based on the LOS of an intersection. The LOS is a measure of the operating conditions of an intersection based on the combined traffic volume, signal timing and related congestion and delay. The LOS delay is rated on a scale from A to F, with a LOS A describing intersection operations with very low delays (i.e., less than 10 seconds per vehicle) and an LOS F describing intersection operations with delays in excess of 80 seconds per vehicle (signalized

intersections only). This condition is considered over saturation, which is when traffic volumes exceed the capacity of the intersection.

The levels of service are defined for the various analysis methodologies in Table 3.2-4:

Table 3.2-4
Level of Service Methodologies

Level of Service	Average Total Delay Per Vehicle (seconds)	
	Signalized	Unsignalized
A	0 to 10.00	0 to 10.00
B	10.01 to 20.00	10.01 to 15.00
C	20.01 to 35.00	15.01 to 25.00
D	35.01 to 55.00	25.01 to 35.00
E	55.01 to 80.00	35.01 to 50.00
F	80.01 and up	50.01 and up

The existing and future scenarios evaluated in the traffic study and thus available for analysis from an air quality perspective include Existing Conditions, Phase 1 (2007), Phase 2 (2009), Phase 3 (2011), Year 2030, and General Plan Build-out. The peak hour traffic volume and traffic operations data has been obtained from Summerwind Ranch Traffic Impact Analysis (Urban Crossroads, Inc., October 2004). For purposes of this analysis, a CO hotspot evaluation was performed at intersections where LOS was D, E, or F, which represent the worst case scenario.

Impact AQ8 The project would potentially expose a substantial number of people to adverse concentrations of carbon monoxide.

According to 2003 air quality data (Table 3.2-2), the background one hour CO level for the study area is 4.0 parts per million (ppm). Per California Air Quality Standards for CO, the concentration of CO should not exceed 20.0 ppm for an averaging period of one hour. Therefore, microscale analysis showing a localized contribution to CO of 16.0 ppm would be required to exceed the allowable threshold.

Table 3.2-5 summarizes the existing conditions peak hour microscale CO analysis for the intersections at I-10 Freeway Southbound Ramps (NS) and County Line Road. None of the previously mentioned locations are projected to experience CO levels in excess of the allowable concentration of 20.0 ppm. The highest projected CO hotspot level is 4.60 ppm. Appendix C contains a detailed output from the CAL3QHC model.

Table 3.2-5
Existing Conditions Carbon Monoxide (CO) Hot Spot Levels

#	Intersection	AM	PM
1	I-10 Freeway SB Ramps / County Line Road	4.50	4.60

Table 3.2-6 summarizes the Phase 3 (Year 2011) microscale CO analysis for the intersections at I-10 Freeway Southbound Ramps (NS) and Oak Valley Parkway. None of the previously mentioned locations are projected to experience CO levels in excess of the allowable concentration of 20.0 ppm. The highest projected CO hotspot level is 7.00 ppm. Appendix D of the Air Quality Impact Analysis contains a detailed output from the CAL3QHC model.

Table 3.2-6
Phase 3 (2011) Project Conditions CO Hot Spot Levels

#	Intersection	AM	PM
1	I-10 Freeway SB Ramps / Oak Valley Parkway	6.00	7.00

Table 3.2-7 summarizes Year 2030 peak hour microscale CO analysis for the intersections at I-10 Freeway Southbound Ramps (NS) and Oak Valley Parkway (EW), I-10 Freeway Northbound Ramps (NS) and 14th Street (EW), and Portero Boulevard (NS), and Oak Valley Parkway (EW). None of the previously mentioned locations are projected to experience CO levels in excess of the allowable concentration of 20.0 ppm. The highest projected CO hotspot level is 7.50 ppm. Appendix E of the air quality impact analysis (Appendix B of this EIR) contains a detailed output from the CAL3QHC model.

Table 3.2-7
2030 Project Build-Out Conditions CO Hot Spot Levels

#	Intersection	AM	PM
1	I-10 Freeway SB Ramps / Oak Valley Parkway	5.70	7.50
2	I-10 Freeway NB Ramps / 14th Street	6.40	7.30
3	Portero Boulevard / Oak Valley Parkway	5.30	6.00

Table 3.2-8 summarizes General Plan Build-out peak hour microscale CO analysis for the intersections at 7th Street (NS) and Sandalwood Drive (EW), I-10 Freeway Southbound Ramps (NS), and Oak Valley Parkway (EW), Portero Boulevard (NS) and Oak Valley Parkway (EW), and "J" Street (NS), and Oak

Valley (EW). None of the previously mentioned locations are projected to experience CO levels in excess of the allowable concentration of 20.0 ppm. The highest projected CO hotspot level is 7.40 ppm. Appendix F of the air quality impact analysis (Appendix B of this EIR) contains a detailed output from the CAL3QHC model.

Existing traffic volumes combined with project volumes did not result in a CO hotspot when modeled using the CAL3QHC model.

Table 3.2-8
General Plan Build-Out Conditions CO Hot Spot Levels

#	Intersection	AM	PM
1	7th Street / Sandalwood Drive	5.40	5.40
2	I-10 Freeway SB Ramps / Oak Valley Parkway	6.70	7.40
3	Portero Boulevard / Oak Valley Parkway	6.40	6.60
4	"J" Street / Oak Valley Parkway	6.80	7.00

It should also be noted that the current ambient CO background level near the project site is approximately 4 parts per million (PPM). Since none of the project intersections that were analyzed resulted in one hour CO levels near the 20 PPM required to create a CO hotspot, it is reasonable to assume that other intersections in study area that operate at favorable levels of service would also not create a local CO hotspot.

3.2.5 CUMULATIVE IMPACTS

Impact AQ9 The proposed project would result in significant cumulative impacts.

As shown in Table 3.2-8, when project traffic is added to build-out traffic volumes, the proposed project would not result in a significant cumulative impact related to localized concentrations of CO. However, as the proposed project would individually result in a significant unmitigable regional impact on air quality, it would, in conjunction with the development of other projects, result in a significant unmitigable cumulative impact on regional air quality. Although project-related emissions levels exceed the SCAQMD thresholds after reasonable mitigation, the growth assumptions for Riverside County call for the conversion of agricultural and ranch lands to other transportation intensive land uses over the next 20 years. The proposed Summerwind Ranch development provides housing and jobs within the Riverside County area that are well within forecasted levels and the project has been included in the City's General Plan since 1995.

3.2.6 MITIGATION MEASURES

CONSTRUCTION

Measures for Control of Fugitive Dust

MM AQ1 The project proponent will implement Rule 403 as applicable, which would include but not be limited to the following:

- Portions of the site under active construction shall be watered as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction (locations where grading is to occur will be thoroughly watered prior to earthmoving).

- Soils shall be watered/stabilized prior to, during, and following cut and fill activities.

- A minimum soil moisture content of 12% shall be maintained during earth-moving activities using the ASTM method D-2216.

- All trucks hauling dirt, sand, soil, or other loose materials shall be covered, or maintain at least two feet of freeboard in accordance with the requirements of Section 23114 of the California Vehicle Code (CVC).

- Construction access roads shall be paved at least 100 feet onto the site from main roads.

- Traffic speeds on all unpaved roads shall be reduced to 15 mph or less. Roads shall be watered every two hours during active construction operations, and/or a chemical stabilizer shall be applied to all unpaved surfaces.

- Disturbed areas shall be revegetated as quickly as possible consistent with approved erosion control plans.

- A Traffic Control Plan shall be provided for each major phase of construction by the Applicant and approved by the City Engineer addressing construction site access and egress, temporary road detours, construction traffic parking and staging, and haul routes.

- All streets used for construction site access or egress shall be swept once daily during active construction if visible soil materials are carried to adjacent streets.

Measures for Construction Equipment and Vehicles Exhaust Emissions:

MM AQ2-1 Construction equipment with low emission factors and high energy efficiency shall be used where possible and when available.

MM AQ2-2 To minimize equipment emissions, engine maintenance shall be performed regularly.

MM AQ2-3 Alternative fuels such as ultra-low sulfur diesel for off-road construction vehicles/equipment shall be used where possible.

Measures for VOC Emissions

MM AQ3 Application of architectural coatings (i.e., paint, etc.) shall be limited to an average of no more than 225 gallons per week and/or "Zero-VOC" paint shall be used.

OPERATIONS

The following mitigation measures are recommended to help reduce operational air quality impacts for mobile and stationary sources:

MM AQ4-1 On-site bicycle trails linking the facility to designated bicycle commuting routes shall be provided.

MM AQ4-2 Site improvements such as street lighting, street furniture, route signs, bus turnouts, and sidewalks or pedestrian paths shall be provided.

MM AQ4-3 The proposed dwelling units shall exceed minimum statewide energy construction requirements, as follows:

- Use of low emission water heaters
- Use of energy efficient appliances
- Use of light colored/earth tone roof tiles
- Increase insulation in excess of Title 24 requirements

MM AQ4-4 Park and ride lots shall be provided near freeway access, as follows:

- Development of approximately 50-60 parking spaces within the residential component of the project.
- Development of approximately 100 parking spaces within the commercial component of the project.

MM AQ4-5 According to Ride Guide provided by the RTA (Riverside Transit Agency), bus route 36 shall serve the proposed project site. The project will provide bus turnout facilities to serve this route as recommended by RTA.

MM AQ9 Cumulative impacts are reduced by implementation of mitigation measures for construction and operations. But the impacts remain significant.

3.2.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

For the short-term construction activity, implementation of the recommended mitigation measures has the potential to reduce the number of days of potentially significant air quality impacts. However, even with mitigation measures, short-term construction impacts cannot be maintained at less than significant levels.

Operational emissions for mobile and stationary sources exceed the thresholds set forth by the SCAQMD. Although mitigation measures would help to reduce the potential impacts, the daily trip elimination/diversion or the level of on-site stationary source emissions could not be reduced by more than 15% of the values shown on Table 3.2-3. Because the levels of ozone-forming emissions (ROC, NO_X) and particulate matter (PM-10) exceed the significance thresholds by hundreds of percent, a 15% reduction from developer promoted mitigation would not alter any conclusions about operational activity impact significance. Therefore, the impacts remain significant.

Cumulative impacts are partially alleviated by implementation of mitigation measures for construction and operations; however, the impact remains significant and unavoidable.

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3.3 BIOLOGICAL RESOURCES

3.3.1 INTRODUCTION

LSA Associates Inc. (LSA) conducted general biological reconnaissance surveys as well as various focused, species-specific, protocol-level biological surveys within and adjacent to the proposed project area within the past several years. The purpose of the surveys was to inventory and evaluate the biological resources on-site by delineating existing vegetation communities, assessing the potential for sensitive plant and wildlife species associated with those communities, and conducting focused searches for sensitive plant and wildlife species on-site. In addition, wetland delineations were conducted in August and November of 2002 to determine the extent of jurisdictional wetland and water resources within the project area. The results of the surveys are summarized below and are presented in detail in Appendix C, Biological Technical Report, of this EIR.

3.3.2 EXISTING AND AFFECTED ENVIRONMENT

The following description of the existing biological conditions within the study area is based on the results of the biological surveys and database queries described in Appendix C along with an analysis of the available documentation for the project study area.

VEGETATION COMMUNITIES AND COVER TYPES

Eight vegetation communities and cover types were identified within the project area during general surveys (Table 3.3-1 and Appendix C). Native vegetation communities observed in the project area are chaparral, coastal sage scrub, meadow, oak woodland, and riparian woodland. Disturbed, non-native cover types such as agricultural land, ornamental trees, and non-native grassland also occur within the project boundaries due to extensive agricultural and grazing practices over the past century. Each vegetation class is discussed briefly below and discussed and mapped in detail in Appendix C.

Chaparral

Chaparral is a common plant community generally found throughout the interior of southern California dominated by chamise (*Adenostoma fasciculatum*), laurel sumac (*Malosma lauriana*), scrub oak (*Quercus berberbidifolia*), and hoaryleaf ceanothus (*Ceanothus crassifolius*). This community typically occurs along slopes and valleys in the project area that have not been disturbed by past grazing or agricultural uses and covers approximately 1151.5 acres of the project site. Chaparral is one of the predominant vegetation communities present on-site.

Table 3.3-1
Vegetation Communities and Cover Types

Vegetation	Acres	Percent of Site
Chaparral	1151.5	44.5
Coastal Sage Scrub*	234.7	9.0
Meadow	95.2	3.7
Oak Woodland*	150.4	5.8
Riparian Woodland*	51.4	2.0
Agricultural Land	116.4	4.5
Ornamental Trees	8.9	0.3
Non-Native Grassland	782.2	30.2
Total	**2590.7**	**100.0**

*Vegetation communities considered sensitive by CDFG.

Coastal Sage Scrub

Coastal sage scrub typically occurs along the coastal ranges of central and southern California and is dominated by California buckwheat (*Eriogonum fasciculatum*) and California sage (*Artemisia californica*). Approximately 234.7 acres of this plant community occurs in patches within the chaparral and non-native grassland cover types throughout the project area.

Meadow

The meadow plant community is found throughout California and is dominated by hydrophytic vegetation including western ragweed (*Ambrosia psilostachya*), pale spikerush (*Eleocharis macrostachya*), spikerush (*Eleocharis parishii*), sedge (*Carex praegracillus*), tall flatsedge (*Cyperus eragrostis*), and yerba mansa (*Anemopsis californica*). The meadow plant community occurs in the southern region of the site and covers approximately 95.2 acres. Approximately 41.8 acres is characterized as jurisdictional wetland meadow. The remaining 53.4 acres is disturbed meadow habitat dominated by non-native grasses and scattered meadow plant species mentioned above.

Oak Woodland

The oak woodland vegetation is a common cover type in California and is dominated by coast live oak (*Quercus agrifolia*). This vegetation community is found in patches throughout the project area along canyon edges and on north-facing slopes. Approximately 150.4 acres of oak woodland occurs within the project area. Very few oak seedlings or saplings are present, possibly as a result of livestock grazing and/or invasion by non-native grasses, and the multiple-year drought the area has recently experienced.

A survey of existing oak trees on the Summerwind project site was conducted between August 19, 2004 and November 3, 2004, by LSA biologists (see report in Appendix C of this EIR). The entire site was

surveyed on foot and by vehicle, using aerial photographs to locate potential oak trees to be inventoried. Each individual tree within the potential development area was mapped, assessed for several parameters including health, size, canopy, and aesthetic value, and recorded to a data base.

The oak tree woodland within preservation areas not individually inventoried, but were counted. Due to the steepness of many of the slopes on which many of the oak trees grow and the irregular pattern of growth within large stands of oak trees, it is anticipated the tree count will be approximately $\pm$ 5 percent of the actual tree count.

Based on the inventory, there are approximately 3,153 oak trees on the site.

Riparian Woodland

The riparian woodland cover type is commonly observed along many of the rivers and streams in southern California. This habitat is dominated by California sycamore (*Platanus racemosa*), Fremont's cottonwood (*Populus fremontii*), a variety of willows *(Salix* spp.), and mule fat (*Baccharis salicifolia*). Approximately 51.4 acres of riparian woodland occurs on-site along three tributaries of the San Timoteo Creek in the southern portion of the project area.

Agricultural Land

This cover type is designated for agricultural purposes such as fruit or vegetable farming and has no ecological value for native flora and fauna. Approximately 116.4 acre of agricultural land is present in the southwestern portion of the project site.

Ornamental Trees

Ornamental trees are commonly used for aesthetic purposes in urban areas and as wind breaks in more rural settings throughout California. As a result of past introductions, these ornamental trees have spread throughout southern California. Approximately 8.9 acres of ornamental tree stands occur in the northwestern region of the project site and are dominated by Peruvian pepper (*Schimus molle*) and European olive (*Olea europaea*).

Non-Native Grassland

The non-native grassland community is typically found throughout California in areas that have undergone past disturbances such as grazing or grading from construction activities. Most non-native grasses are native to the Mediterranean and include a variety of brome species (Bromus spp.). In the project area, dominant species found in this cover type include red-stemmed filaree (*Erodium cicutarium*), long beaked filaree (*Erodium botyrs*), and short-podded mustard (*Hirschfeldia incana*). Approximately 782.2 acres of non-native grassland occurs on-site, making it as one of the predominant cover types found throughout the project area.

WETLANDS AND WATERS

The project area is characterized by several natural streambeds that serve as regional and sub-regional drainage courses. Approximately 83 acres of jurisdictional streambeds, including wetlands, have been delineated on-site. The proposed project would impact approximately two acres (2 %) of these jurisdictional wetlands and waters known as *waters of the U.S.* as defined by the U.S. Army Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act. Jurisdictional wetlands are characterized through the Corps as areas consisting of all three wetland parameters: hydrophytic vegetation, wetland hydrology, and hydric soils. Jurisdictional waters are characterized as any water body that is connected (directly or indirectly) to navigable waters used for interstate commerce. The remaining 81 acres (98%), which includes Garden Air Wash, would be preserved on-site.

The three ephemeral drainages dominated by patches of wet meadow habitat in the southern portion of the project site are tributaries to the San Timoteo Creek (see Figure 3 in Appendix C). The San Timoteo Creek flows into the Santa Ana River, which ultimately drains into the Pacific Ocean. As such, these drainages directly flow into navigable waters and meet specific criteria defined by the Corps as jurisdictional *waters of the U.S.* Therefore, the estimated impacts proposed by the project to these areas must be approved by the Corps through a Nationwide permit or an Individual permit before project implementation.

California Department of Fish and Game (CDFG) also regulate any alteration of a river, stream, or lake where fish and wildlife resources may be adversely affected. Under Section 1600 of the California Fish and Game Code, impacts to the three ephemeral drainages on-site must be approved under a Section 1600 Streambed Alteration Agreement to begin project implementation.

In regards to water quality, the Regional Water Quality Control Board (RWQCB) regulates water quality under Section 401 of the Clean Water Act. The proposed project area is under the jurisdiction of the Santa Ana RWQCB and must obtain a Section 401 Certification to administer project plans.

WILDLIFE SPECIES

One hundred and sixty seven wildlife species were identified during the various general and focused wildlife surveys conducted for the proposed project (Appendix C). Insect, amphibian, reptile, bird, and mammal species were widely distributed throughout the project area. Notable bird species observed in the project area include northern harrier (*Circus cyaneus*), Cooper's hawk (*Accipter cooperii*), golden eagle (*Aquila chrysateos*), bald eagle (*Haliaeetus leucocephalus*), loggerhead shrike (*Lanius ludovicianus*), yellow warbler (*Dendroica petechia*), yellow-breasted chat (*Icteria virens*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), and tricolored blackbird (*Agelaius tricolor*).

SENSITIVE VEGETATION COMMUNITIES

Sensitive vegetation communities are those that are considered rare in the region, support sensitive plant or wildlife species, covered by the *Final Multiple Species Habitat Conservation Plan* (MSHCP) *Volume 1, The Plan Parts 1 and 2* (Dudek 2003), or receive regulatory protection (e.g., wetlands as defined by the Corps and CDFG). In addition, vegetation communities listed on the California Natural Diversity Database (CNDDB) as having the highest inventory priorities are considered sensitive (CDFG 2003). Three vegetation communities within the project area are considered to be of high priority for inventory in the CNDDB, including coastal sage scrub, oak woodlands, and riparian woodland. These vegetation communities are discussed briefly below and are discussed and mapped in detail in Appendix C.

Coastal Sage Scrub

Coastal sage scrub is considered "rare" by CDFG and "worthy of consideration" by CNDDB (CDFG 2003). This shrub-dominated community occurs on xeric sites with shallow soils and is dominated by species that are typically drought deciduous with shallow root systems. Degradation of this community is due to urban and agricultural uses. This community is located throughout the project site as isolated patches within chaparral and non-native grassland communities.

Oak Woodland

Oak woodland is considered "rare" by CDFG and "worthy of consideration" by CNDDB (CDFG 2003). The conversion of oak woodlands to urban and agricultural uses, livestock grazing, and habitat fragmentation are the primary factors contributing to the decline of oak woodlands in southern California. This community is located in patches throughout the project area along canyon edges and on north-facing slopes.

Riparian Woodland

Riparian woodland is considered "rare" by CDFG and "worthy of consideration" by CNDDB (CDFG 2003). Riparian woodlands and forests are situated along stream courses and adjacent stream banks and provide various functions to wildlife, including links and corridors for wildlife movement. Habitat loss of this community is primarily due to the channelization of many streams and river systems for urban and agricultural uses. This community is located along three tributaries to the San Timoteo Creek in the southern portion of the project site.

SENSITIVE PLANT AND WILDLIFE SPECIES

Sensitive plant and wildlife species are species that are either legally protected under the federal and/or state Endangered Species Acts (ESAs) or other regulations or are species considered by the scientific community to be sufficiently rare to qualify for such listing. Sensitive species include species listed or proposed for listing as rare, threatened, or endangered under the federal ESA, the California ESA, or the California Native Plant Protection Act. Also included in this list are species that are of special concern to

CDFG, are fully protected in California, are covered under the Migratory Bird Treaty Act (MBTA), are covered under the Bald Eagle Protection Act (BEPA), or are covered under the Final MSHCP. Furthermore, it is mandatory that CNPS list 1A, 1B, and 2 species be fully considered during surveys as they meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 (California ESA) during the preparation of environmental documents related to CEQA (CNPS 2001).

Below is a brief discussion of sensitive plant and wildlife species that are known to occur or have the potential to occur within the project vicinity. A more detailed discussion of these species is provided in Appendix C.

Plants

Eight sensitive plant species have the potential to occur within the project vicinity. They are Yucaipa onion, Plummer's mariposa lily, Parry's spineflower, smooth tarplant, California black walnut, Coulter's goldfields, Hall's monardella, and Wright's trichocoronis. These sensitive species are included in Table 3.3-2 and various listed species are discussed .

Federally Listed Plant Species

Two federally listed plant species are known to occur within the project vicinity, including the San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*) and the slender-horned spineflower (*Dodecahema leptoceras*).

San Jacinto Valley Crownscale

San Jacinto Valley crownscale is a federally listed endangered species, is classified as a CNPS 1B species, and is covered under the MSHCP. It is restricted to alkaline and clay soils of vernal pools and native grasslands at elevations between 380 and 500 meters. Locally, this species is known from only one protected location in the San Jacinto Valley associated with Traver-Domino-Willows soil type. The project site does not harbor these types of soils and is geographically isolated from the one known population in the San Jacinto Valley. Thus, this species is not expected to occur within the project boundary based on the analysis of the conditions present on-site, the affinity of the species, and its preferred habitat restrictions. Because this species is not expected to occur on-site, it will not be discussed further in this EIR.

Slender-Horned Spineflower

Slender-horned spineflower is a federally and state-listed endangered species, is classified as a CNPS 1B species, and is covered under the MSHCP. It occurs in sandy soils of cismontane woodlands, alluvial scrub, and coastal scrub at elevations between 200 and 760 meters. Locally, this species is known to occur in alluvial scrub of Arroyo Seco, Kolb Creeks, Temescal Canyon Wash, Bautista Creek, Vail Lake,

and the San Jacinto River within Riverside County. Habitat assessments of the project area concluded that alluvial scrub does not occur within the project boundary and suitable sandy alluvium soils are not present. Thus, this species is not expected to occur within the project boundary based on the analysis of the conditions present on-site, the affinity of the species, and its preferred habitat conditions. Because this species is not expected to occur on-site, it will not be discussed further in this EIR.

State-listed Plant Species

No state-listed plant species are known to occur within the project vicinity other than the slender-horned spineflower described above.

Non-listed, Sensitive Plant Species

In addition to the two federally listed species discussed above, six non-listed, sensitive species have the potential to occur within the proposed project area. Of these six species, 3 are not expected to occur in the project area due to unsuitable elevations on-site and 3 have a low potential for occurrence due to disturbed habitat conditions on-site.

Of the non-listed sensitive plant species, there is a low potential for the Yucaipa onion (*Allium marvinii*) to occur in the project area. Based on the MSHCP, the project area is located in designated Yucaipa onion habitat, in which habitat assessments and focused surveys are required. To be in compliance with the MSHCP, focused surveys must be completed before project implementation.

Non-listed, native coast live oak trees on-site will be protected through an Oak Tree Preservation Plan. The plan will provide preservation of the trees within the project area to offset impacts to individual trees within the development area. The Oak Tree Preservation Plan is discussed in more detail in Section 3.5.2.

Wildlife

Twenty-nine sensitive wildlife species are known to occur within the project vicinity. These sensitive species are discussed briefly below. In addition, the sensitive wildlife species that have been previously recorded in the project area or that were detected during project surveys are listed in Table 3.3-2.

Federally Listed Wildlife Species

Nine federally listed wildlife species have the potential to occur within the project vicinity, including the Quino checkerspot butterfly (*Euphydryas editha quino*), mountain yellow-legged frog (*Rana muscosa*), bald eagle, western yellow-billed cuckoo (*Coccyzuz americanus occidentailis*), southwestern willow flycatcher (*Empidonax traillii extimus*), California gnatcatcher *(Polioptila californica californica*), least Bell's vireo (*Vireo bellii pusillus*), Stephens' kangaroo rat (*Dipodomys stephensi*), and the San Bernardino kangaroo rat (*Dipodomys merriami parvus*).

Quino Checkerspot Butterfly

The Quino checkerspot butterfly is a federally listed endangered species and is covered under the MSHCP. The species is restricted to open grassland and sunny openings within shrubland habitats. Its distribution is defined primarily by the presence of host plants including dot-seed plantain (*Plantago erecta*) and owl's clover (*Castilleja exerta*). Focused protocol surveys conducted in 1999 by LSA (2004) concluded that this species was not present in the project area during the annual Quino checkerspot flight season. Since the previous surveys conducted 1999, the project site has been removed from the Quino checkerspot survey area. Neither the USFWS nor the MSHCP currently require protocol surveys for this species at the project site. Only three small isolated patches of dot-seed plantain were detected throughout the 2,590-acre project area. With unsuitable habitat characteristics on-site, it is not likely that a population could be sustained in this area. Thus, the Quino checkerspot butterfly has a low potential to occur in the project vicinity.

Mountain Yellow-Legged Frog

The mountain yellow-legged frog is a federally proposed endangered species, a state species of special concern, and is covered under the MSHCP. It inhabits stream channels with rocky, sloping banks located close to open water in montane riparian habitat. Locally it is known from a small remnant population along four tributaries to the San Jacinto River and the San Jacinto Mountains. Although suitable habitat occurs on-site, the project area is outside of the distributional range and this species is not expected to occur within the project boundary. The mountain yellow-legged frog ranges in elevations of 1300-2300 meters. Because this species is not expected to occur on-site, it will not be discussed further in this EIR.

Bald Eagle

The bald eagle is a federally listed threatened and a fully protected, state-listed endangered species. It is also covered under the MSHCP. It inhabits coniferous woodland and forest areas near rocky cliffs and water. The bald eagle feeds on fish, birds, and small mammals. Locally, it is known to winter at reservoirs in Riverside County. During the November 2002 surveys, this species was observed several times as a migrant flying through the southeastern portion of the project area. It is thought that these individuals were most likely flying toward the local reservoirs in the vicinity. The bald eagle was not observed nesting or perching in the project area during the 1999 or 2002 biological surveys conducted by LSA (2004). In addition, the bald eagle is not expected to nest on-site since suitable nesting habitat, such as coniferous forests or rocky cliffs, is lacking.

Western Yellow-billed Cuckoo

The western yellow-billed cuckoo is a federal candidate for listing, a state-listed endangered species, and is covered under the MSHCP. It inhabits mature willow and alder streamside riparian areas, open woodland, and orchards. This species is not expected to occur within the project boundary because the habitat on-site is too open and not extensive enough to support the western yellow-billed cuckoo. Because this species is not expected to occur on-site, it will not be discussed further in this EIR.

Southwestern Willow Flycatcher

The southwestern willow flycatcher is a federally listed endangered species and is covered under the MSHCP. It inhabits dense willow, cottonwood, and tamarisk thickets and woodland along streams and rivers. Focused protocol surveys conducted in 2002 by LSA (2004) concluded that this species was not present in the project area. However, due to suitable habitat on-site, recent species documentation the San Timoteo Creek, and the species' known historical distribution throughout the project vicinity (Dudek 2003), the southwestern willow flycatcher has a high potential to occur within the project boundaries.

California Gnatcatcher

The California gnatcatcher is a federally listed threatened species and is covered under the MSHCP. It is a permanent resident of coastal sage scrub in arid washes, mesa tops, and gentle rising slopes with a 20 to 50 percent cover ratio (Atwood 2001). In the project area, the habitat conditions do not appear to have a high level of structure or horizontal homogeneity that correlates to California gnatcatcher occupied habitat. The project area also lacks a low level of perennial diversity that correlates with greater reproduction success for the species (LSA 2004). In addition, focused protocol surveys conducted in 1999 and 2002 by LSA (2004) concluded that this species was not present in the project area. However, during the biological reconnaissance surveys conducted by LSA in 2002, a juvenile California gnatcatcher was detected foraging on-site (within Specific Plan area 318, adjacent to the project site). The potential for the gnatcatcher occurring and nesting in the project vicinity is high because: 1) This species has been recently documented within the project area, and 2) an area designated by USFWS in 2000 as critical habitat for this species exists within approximately 0.25-mile from the project site.

Least Bell's Vireo

The least Bell's vireo is a federally and state-listed endangered species and is covered by the MSHCP. It is known to be a local summer resident to southern California, with the largest populations known along the Santa Margarita River in San Diego County and the Santa Ana River in Riverside County. It inhabits riparian woodlands, scrub, and thickets. Focused protocol surveys conducted in 2002 by LSA (2004) concluded that this species was not present in the project area. However, due to suitable habitat on-site, recent species documentation in the San Timoteo Creek up- and down-stream of the project location (CDFG 2004), and the species' known historical distribution throughout the project vicinity (Dudek 2003), the least Bell's vireo has a high potential to occur within the project site.

Stephens' Kangaroo Rat

The Stephens' kangaroo rat is a federally listed endangered, state-listed threatened species and is covered under the MSHCP. It inhabits sandy soil of grasslands, coastal sage scrub, and chaparral. Due to the highly disturbed soil and habitat conditions in these vegetation communities on-site, this species is not likely to occur. In addition, focused protocol trapping surveys conducted in 1999 and 2002 by LSA (2004) concluded that this species was not present in the project area during these two survey seasons.

However, due to known historical and recent population locations approximately 5 miles west of the site, the Stephens' kangaroo rat has a low potential to occur in the project vicinity.

San Bernardino Kangaroo Rat

The San Bernardino kangaroo rat is a federally listed endangered, state species of special concern and is covered under the MSHCP. It inhabits sandy soil of alluvial fans, river channels, and sandy terraces. Since the project location is outside of its distributional range and there are no known historical occurrences in the project vicinity, this species is not likely to occur (LSA 2004). In addition, focused protocol trapping surveys conducted in 1999 and 2002 by LSA (2004) concluded that this species was not present in the project area during these two survey seasons. Due to the survey results and the habitat conditions, the San Bernardino kangaroo rat is not expected to occur in the project vicinity. Because this species is not expected to occur on-site, it will not be discussed further in this EIR.

State-listed Wildlife Species

No other state-listed wildlife species are known to occur within the project vicinity other than the species described above in the federally listed species section.

Non-listed, Sensitive Wildlife Species

In addition to the federally and state-listed species discussed above, 21 additional sensitive wildlife species, considered sensitive by CDFG and covered by the MSHCP, have the potential to occur within the project boundary. Of these 21 species, 1 is not expected to occur on-site; 2 have a low potential for occurrence; 2 have a moderate potential for occurrence; and 16 have been detected on-site, including the northern harrier, Cooper's hawk, golden eagle, loggerhead shrike, northwestern San Diego pocket mouse, and, southern mule deer.

Of the non-listed sensitive wildlife species, there is a moderate potential for the burrowing owl to occur in the project area. Based on the MSHCP, the project area is located in designated burrowing owl habitat, in which habitat assessments and focused surveys are required. To be in compliance with the MSHCP, focused surveys for the burrowing owl must be completed prior to initiation of each phase of construction.

Table 3.3-2
Potentially Occurring Sensitive Species

Common Name Scientific Name	Sensitivity Status[1]	Habitat Requirements	Probability of Occurring On-site
Plants			
Yucaipa onion *Allium marvinii*	CNPS List 1B, MSHCP	Openings in chaparral in clay soils within elevations of 760-1065 meters. Blooms April-May.	Low potential. Disturbed conditions present in chaparral habitats are not suitable. Not observed during focused surveys for wildlife or general biological surveys. However, habitat assessment/focused surveys are required to be in compliance with the MSHCP. Preconstruction surveys are required to comply with MSHCP.
San Jacinto Valley crownscale *Atriplex coronata* var. *notatior*	FE, CNPS List 1B, MSHCP	Restricted to alkaline, silty-clay soils of playas, vernal pools, and grasslands in association with Traver-Domino-Willows soils within elevations of 380-500 meters. Blooms April-August.	Not expected to occur on-site. Unsuitable soil types and disturbed grassland habitats. Only one known occurrence in San Jacinto Valley exists. Not expected to occur in the project area.
Plummer's mariposa lily *Calochortus plummerae*	SSC, CNPS List 1B	Occurs in sandy soils in alluvial scrub, coastal scrub, and grasslands below 1,524 meters. Blooms in May-July.	Low potential. Marginal habitat occurs on-site due to disturbance. Not observed during general biological surveys during the appropriate blooming period.
Parry's spineflower *Chorizanthe parryi* var. *parryi*	SP, CNPS List 3	Occurs in sandy soils in coastal scrub and chaparral within elevations of 275-1,000 meters. Blooms in April-June.	Moderate potential. Suitable habitat is present, but was not detected on biological surveys during blooming period.
Slender-horned spineflower *Dodecahema leptoceras*	FE, SE, CNPS List 1B, MSHCP	Occurs in sandy soils in alluvial scrub, coastal scrub, and cismontane woodlands within elevations of 200-760 meters. Blooms April-June.	Not expected to occur on-site. Suitable habitat is not present in project area. Known occurrences in the county are in alluvial scrub, which is not present on-site.
Smooth tarplant *Hemizonia (Centromadia) pungens* ssp. *laevis*	CNPS List 1B, MSHCP	Occurs in chenopod scrub, meadows and seeps, riparian woodland, grasslands in alkaline soils within elevations of 0-480 meters. Blooms April-September.	Low potential. Marginal habitat occurs on-site due to disturbance. Not observed during general biological surveys during the appropriate blooming period.

Common Name Scientific Name	Sensitivity Status[1]	Habitat Requirements	Probability of Occurring On-site
Santa Ana River woolly star *Eriastrum densifolium* var. *sanctorum*	FE, SE, CNPS List 1b, MSHCP	Sandy soils of river floodplains and terraces. Blooms June to August.	Not expected to occur on-site. Suitable habitat is not present in project area. Known occurrences in the county are only along the Santa Ana River near SR-60.
California black walnut *Juglans californica*	CNPS List 4, MSHCP	Occurs in chaparral, cismontane woodland, coastal scrub, and alluvial scrubs within elevations of 50-900 meters. Blooms March- May.	Low potential. Obvious deciduous tree not observed during general biological surveys of the project area. Suitable riparian habitat occurs in southern portion of the project area.
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	SP, CNPS List 1B, MSHCP	Alkaline soils of marshes, vernal pools, and grasslands from sea level to 1,524 meters in elevation. Blooms March-June.	Low potential. Alkaline soils are highly disturbed on-site due to grazing and agriculture. Species was not observed during biological surveys during blooming period.
Robinson's peeper grass *Lepidium virginicum* var. *robinsonii*	CNPS List 1B, MSHCP	Occurs in chaparral and coastal scrub within elevations of 1-500 meters. Blooms January-July.	Not expected to occur because the project site is outside of the elevation range for this species. Not observed during general biological surveys during the appropriate blooming period.
Lemon lily *Lilium parryi*	CNPS List 1B, MSHCP	Occurs in meadows and seeps, lower and upper montane coniferous forests, and riparian scrub within elevations of 1300-2620 meters. Blooms July-August.	Not expected to occur because the project site is outside of the elevation range for this species. Not observed during general biological surveys during the appropriate blooming period.
Parish's bush mallow *Malacothanmus parishii*	CNPS List 1A	Occurs in coastal sage scrub and chaparral from 500 meters.	Not expected to occur. Only known from one occurrence in San Bernardino County. Not observed during general biological surveys during the appropriate blooming period.
Hall's monardella *Monardella macrantha* ssp. *hallii*	SP, CNPS List 1B	Occurs in chaparral, woodlands, and coniferous forests. Blooms June-August.	Moderate potential. Suitable habitat is present, but was not detected on biological surveys during blooming period.
Mud nama *Nama stenocarpum*	CNPS List 2, MSHCP	Occurs in marshes and swamps within elevations of 5-500 meters. Blooms January-July.	Not expected to occur because the project site is outside of the elevation range for this species. Not observed during general biological surveys during the appropriate blooming period.

Common Name Scientific Name	Sensitivity Status[1]	Habitat Requirements	Probability of Occurring On-site
Narrow-leaved cottonwood *Populus angustifolia*	CNPS List 2	Occurs in riparian forest from elevations of 1,200-1,800 meters. Blooms March-April.	Not expected to occur. Obvious deciduous tree not observed during general biological surveys of the project area. Suitable riparian habitat occurs in southern portion of the project area.
Parish's checkerbloom *Sidalcea hickmanii* ssp. *parishii*	CNPS List 1B	Perennial herb found in chaparral, cismontane woodland, lower montane coniferous forest within elevations of 100-2,500 meters. Blooms May-June.	Not expected to occur. Only known from one occurrence in San Bernardino, Santa Barbara, and San Luis Obispo Counties. Not observed during general biological surveys during the appropriate blooming period.
Wright's trichocoronis *Trichocoronis wrightii* var. *wrightii*	SP, CNPS List 2	Alkaline soils of marshes, vernal pools, and grasslands from. Blooms March-September.	Low potential. Alkaline soils are highly disturbed on-site due to grazing and agriculture. Species was not observed during biological surveys during blooming period.
Butterflys			
Quino checkerspot butterfly *Euphydryas editha quino*	FE, SA, MSHCP	Restricted to open grassland and sunny openings within shrubland habits of Riverside and San Diego Counties, where its distribution is defined primarily by that of its larval host plants, *Plantago erecta* and *Castilleja exserta.*	Low potential. Not observed during focused protocol-level surveys. Suitable habitat is highly disturbed, and only consists of three small isolated patches of desired host plants. Habitat throughout the project area does not exhibit common characteristics needed by this species to sustain a population.
Amphibians			
Mountain yellow-legged frog *Rana muscosa*	FPE, SSC, MSHCP	Found along stream courses with rocky, sloping banks and vegetation at the water's edge.	Not expected to occur. The project site is outside of the elevation range for this species. Not observed during focused surveys.
Arroyo toad *Bufo microscaphus californicus*	FE, SSC, MSHCP	Washes and arroyos with open water. For breeding, pools covered with sparse overstory vegetation.	Not expected to occur. Suitable habitat is not present within project area. Not observed during focused surveys in riparian areas, which are not always inundated with water.
Western spadefoot *Scaphiopus hammondii*	SSC, MSHCP	Grasslands and hardwood woodlands. Breeding habitat requires open water for at	Moderate potential. Not observed during focused surveys in project area within suitable habitats.

Common Name Scientific Name	Sensitivity Status[1]	Habitat Requirements	Probability of Occurring On-site
		least 3+ weeks and loose soils for burrowing during the dry season.	
Reptiles			
San Diego horned lizard *Phrynosoma coronatum blainvillei*	SSC	Occurs in loose soils of coastal sage scrub, grasslands, and riparian woodlands. Coastal and inland areas from Ventura to Baja California.	High potential. Not observed during focused surveys in project area within suitable habitats.
Belding's orange-throated whiptail *Cnemidophorus hyperythrus beldingi*	SSC	Prefers washes and other sandy areas with patches of brush and rocks for cover. Habitats include low-elevation coastal sage scrub, chaparral, and valley-foothill hardwood forests.	Present in the project area. Observed during general biological surveys of the project site.
Coastal western whiptail *Aspidoscelis tigris stejnegeri*	SA, SSC	Occurs in openings of chaparral and near riparian habitats in arid and semiarid climates.	Present in the project area. Observed during general biological surveys of the project site.
San Bernardino ringneck snake *Diadophis punctatus modestus*	SSC	Occurs in riparian areas, oak woodlands, chaparral, coastal sage scrub, and grasslands.	Low potential. Not observed during focused surveys in project area.
San Bernardino mountain kingsnake *Lampropeltis zonata parvirubra*	SSC, MSHCP	Occurs in riparian areas, oak woodlands, and chaparral, near the edges of streams and lakes.	Low potential. Not observed during focused surveys in project area. However, suitable habitat occurs in project area.
Two-striped garter snake *Thamnophis hammondii hammondii*	SA	Inhabits areas that are highly aquatic.	Not expected to occur. Suitable habitat is not present within project area. Not observed during focused surveys in riparian areas, which are not always inundated with water.
Fish			
Santa Ana speckled dace *Rhinichthys osculus*	SA	Headwaters of the Santa Ana and San Gabriel River drainages. Found in channel areas with abundant gravel and rock.	Low potential. Not observed during focused surveys in project area. However, suitable habitat occurs in project area.

Common Name Scientific Name	Sensitivity Status[1]	Habitat Requirements	Probability of Occurring On-site
Birds			
White-tailed kite *Elanus leucurus majusculus*	SFP, MSHCP	Inhabits riparian or oak woodland adjacent to grassland or open fields where it hunts rodents.	Present in the project area. Observed during general biological surveys of the project site. No nests were observed on-site.
White-faced ibis *Plegadis chihi*	SSC	Winters in marshes, ponds, lakes and rivers.	Low potential. This species is a migratory transient through the area, but was not detected during wildlife surveys.
Prairie falcon Falco mexicanus	SSC	Nests in cliff faces, rocky outcrops, and forages in arid valleys and agricultural lands.	Low potential. Not observed during focused surveys in project area. However, suitable habitat occurs in project area.
Northern harrier *Circus cyaneus*	SSC	Occurs in grasslands and agricultural fields during migration and in winter.	Present in the project area. Observed during general biological surveys of the project site.
Sharp-shinned hawk *Accipiter striatus*	SSC	Occupies woodlands and a variety of habitats surrounding those wooded areas, and requires a certain amount of dense cover.	Present in the project area. Observed during general biological surveys of the project site.
Cooper's hawk *Accipiter cooperii*	SSC, MSHCP	Uncommon migrant and winter visitor to woodlands, parks, and residential areas.	Present in the project area. Observed during general biological surveys of the project site.
Ferruginous hawk *Buteo regalis*	SSC	Forages in open fields, grasslands, agricultural lands, sagebrush, and desert scrub.	High potential. Not observed during focused surveys in project area within suitable habitats.
Golden eagle *Aquila chrysaetos*	SSC, SFP	Uncommon resident forages over grassland and broken chaparral or sage scrub.	Present in the project area. Observed during general biological surveys of the project site. No nests were observed on-site. Observed migrating through project area.
Bald eagle *Haliaeetus leucocephalus*	FT, SE	Coniferous woodland or forest areas near water. Rocky cliffs.	Present in the project area. Observed during general biological surveys of the project site. No nests were observed on-site. Observed migrating through project area.
Western yellow-billed cuckoo *Coccyzus americanus occidentalis*	FC, SE, MSHCP	Inhabits willow and cottonwood forests along rivers and streams.	Not expected to occur. Not observed during focused surveys in riparian areas.
Burrowing owl *Athene cunicularia*	SSC, MSHCP	Occurs in open, dry annual or perennial grasslands, and	Moderate potential. Not observed during focused surveys for wildlife,

Common Name Scientific Name	Sensitivity Status[1]	Habitat Requirements	Probability of Occurring On-site
		deserts and scrublands with low-growing vegetation. Utilizes the burrows of other fossorial animals.	however, habitat assessment/focused surveys are required to be in compliance with the MSHCP. Preconstruction surveys needed to comply with MSHCP.
Southwestern willow flycatcher *Empidonax traillii extimus*	FE, MSHCP	Typically nests in riparian woodlands that are marshy or at water's edge.	High potential. Not observed during focused protocol-level surveys. However, suitable habitat is present in and adjacent to the project area.
California horned lark *Eremophila alpestris actia*	SSC	Inhabits grasslands and open woodlands with low, sparse vegetation.	Present in the project area. Observed during general biological surveys of the project site.
California gnatcatcher *Polioptila californica californica*	FT, SSC, MSHCP	A permanent resident of coastal sage scrub in arid washes, mesas, and slopes.	High potential. Habitat on-site does not signify characteristics that correlate with this species occurrence. Habitat is highly disturbed with isolated patches. Not observed during focused protocol-level surveys.
Loggerhead shrike *Lanius ludovicianus*	SSC, MSHCP	Inhabits open country, typically lowland plains and gently sloping hillsides with short grass for foraging and scattered trees and shrubs that provide nesting and perching sites.	Present in the project area. Observed during general biological surveys of the project site.
Least Bell's vireo *Vireo bellii pusillus*	FE, SE, MSHCP	Summer resident of low riparian growth in the vicinity of water or in dry river bottoms. Nests are placed along the margins of bushes, usually *Salix*, *Baccharis*, or *Prosopis.*	High potential. Not observed during focused protocol-level surveys. However, suitable habitat is present within and adjacent to the project area.
Yellow warbler *Dendroica petechia*	SSC. MSHCP	Occupies marshes, swamps, streamside groves, willow and alder thickets, open woodlands with thickets, orchards, gardens, and open mangroves.	Present in the project area. Observed during general biological surveys of the project site.

Common Name Scientific Name	Sensitivity Status[1]	Habitat Requirements	Probability of Occurring On-site
Yellow-breasted chat *Icteria virens*	SSC, MSHCP	The breeding population is confined to riparian woodlands in the coastal lowlands.	Present in the project area. Observed during general biological surveys of the project site.
Southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	SSC, MSHCP	Uncommon to fairly common localized resident of sage scrub on steep rocky slopes.	Present in the project area. Observed during general biological surveys of the project site.
Bell's sage sparrow *Amphispiza belli belli*	SSC, MSHCP	Coastal sage scrub and open chaparral habitats.	Low potential. Not observed during focused surveys for wildlife. However, suitable habitat is present.
Grasshopper sparrow *Ammodramus savannarum*	SA	Local summer resident in grasslands, open savannahs, agricultural fields, and prairies.	Present in the project area. Observed during general biological surveys of the project site.
Tricolored blackbird *Agelaius tricolor*	SSC	Localized resident; nests in large, dense colonies in freshwater marsh; forages in agricultural areas, lakeshores and damp lawns.	Present in the project area. Observed during general biological surveys of the project site.
Coastal cactus wren *Campylorhynchus brunneicapillus cousei*	SSC, MSHCP	Non-migrant resident of coastal sage scrub habitat. Occurs exclusively in thickets of cholla and prickly pear cactus.	Low potential. Not observed during focused surveys for wildlife. However, suitable habitat is present.
Mammals			
Los Angeles pocket mouse *Perognathus longimembris brevinasus*	SSC, MSHCP	Sandy soils for burrowing in coastal sage scrub in Los Angeles, Riverside, and San Bernardino Counties.	Low potential. Not observed during focused surveys for wildlife. However, suitable habitat is present.
Northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	SSC	Occurs in sandy soils of foothill and valley grasslands, coastal sage scrub, chaparral, and desert wash scrub.	Present in the project area. Observed during general biological surveys of the project site.
Stephens' kangaroo rat *Dipodomys stephensi*	FE, ST, MSHCP	Occurs in sandy soils of foothill and valley grasslands, coastal sage scrub, and chaparral.	Low potential. Not observed during focused protocol-trapping surveys in 1999 or 2002. Habitat and soils on-site are highly disturbed in the project area.

Common Name Scientific Name	Sensitivity Status[1]	Habitat Requirements	Probability of Occurring On-site
San Bernardino kangaroo rat *Dipodomys merriami parvus*	FE, SSC, MSHCP	Gravelly soils of alluvial fans, river channels, and sandy terraces.	Not expected to occur. Not observed during focused protocol-trapping surveys in 1999 or 2002. Habitat and soils on-site are highly disturbed in the project area.
Southern grasshopper mouse *Onychomys torridus Ramona*	SSC	Occurs in arid regions in a variety of habitats, including desert scrub, wash, and riparian habitats.	Not expected to occur. Suitable habitat does exist on-site, however it is highly disturbed. Not observed during focused protocol-trapping surveys in 1999 and 2002.
Black-tailed jackrabitt *Lepus californicus bennettii*	SSC	Habitats include coastal sage scrub, chaparral, and grasslands.	Present in the project area. Observed during general biological surveys of the project site.
Southern mule deer *Odocoileus hemionus fuliginata*	SG	Occurs in large, undisturbed tracts of coastal sage scrub, chaparral, mixed grassland/scrub vegetation, riparian and oak woodlands, and coniferous forest, especially in areas with a mosaic of vegetation that provide clearings interspersed with dense brush or tree thickets.	Present in the project area. Observed during general biological surveys of the project site.
Mountain lion *Felis concolor*	SG	Occurs in coastal sage scrub, chaparral, riparian and oak woodlands, and coniferous forest.	Moderate potential to occur as a migratory species, using the area as a movement corridor to both San Jacinto and San Bernardino Mountain ranges. Not observed during general wildlife surveys.

[1]**Sensitivity Status Key**

FE Federally endangered
FT Federally threatened
SE State of California endangered
SR State Rare
ST State of California threatened
SFP State of California fully protected
SSC State of California Species of Concern
SG State of California regulated game species
SA State of California Special Animals
SCM Santa Clarita Municipal Code
CNPS: 1A California Native Plant Society List 1A species (considered extinct in California)
CNPS: 1B California Native Plant Society List 1B species (considered rare, threatened, or endangered in California and elsewhere)
CNPS: 2 California Native Plant Society List 2 species (considered rare, threatened, or endangered in California, but more common elsewhere)

Wildlife Corridors

A wildlife corridor can be defined as a linear landscape feature of sufficient width and buffer to allow animal movement between two patches of comparatively undisturbed habitat or between a patch of habitat and vital resources. An adequate wildlife corridor, or habitat linkage, is characterized by having multiple pathways connecting diverse habitats that are sustained by native vegetation and wildlife resources. Because the project site is located in and surrounded by MSHCP designated wildlife habitat and linkage areas, it is considered to be a part of a vital wildlife corridor linking the foothills of San Bernardino Mountains to the Badlands and the San Jacinto Mountains. Located in and adjacent to the project area, the San Timoteo Creek and Garden Air Wash are two important linkages to the surrounding open space mentioned above. The MSHCP specifically proposes conservation through these two areas to preserve this natural wildlife corridor. Wildlife movement will be provided through on-site preservation of Garden Air Wash corridor and the riparian corridor along an existing drainage course north of Cherry Valley Boulevard Interchange.

3.5.2 REGULATORY FRAMEWORK

Federal

Federal Endangered Species Act (ESA) of 1973, PL 93-205 (16 U.S.C. 1531): Purpose is to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth.

Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712): Implements various treaties and convention between the United States and other countries, including Canada, Japan, Mexico, and the former Soviet Union, for the protection of migratory birds. Under the MBTA, taking, killing, or possessing migratory birds or their eggs or nests is unlawful.

Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Bird: Directs each federal agency that is taking actions having or likely to have a negative impact on migratory bird populations to work with the USFWS to develop an agreement to conserve those birds. The protocols developed by this consultation are intended to guide future agency regulatory actions and policy decisions; renewal of permits, contracts or other agreements; and the creation of or revisions to land management plans.

Bald Eagle Protection Act (16 U.S.C. 668-668d): Prohibits the taking or possession of and commerce in bald and golden eagles, with limited exceptions such as for scientific research or for Native American religious purposes. Because a small number of bald eagles reside within foraging distance of the proposed project, some mortality of bald eagles could possibly result.

Federal Clean Water Act, Section 404: Regulates any dredge or fill activities in federally protected wetlands and/or waters. Because the project will affect federally jurisdictional wetlands and waters, a Section 404 Nationwide or Individual Permit will need to be approved by the Corps prior to commencement of grading activities for each phase determined to be a project by the Corps.

Federal Clean Water Act, Section 401: Regulates water quality associated with the California's rivers, lakes, and streambeds. Because the project will affect water quality, a Section 401 Certification will need to be issued by the Santa Ana RWQCB prior to commencement of grading activities.

State

California Endangered Species Act, Fish and Game Code Section 2081, Division 3, Chapter 1.5: Declares that these species of fish, wildlife, and plants are of ecological, educational, historical, recreational, esthetic, economic, and scientific value to the people of this state, and the conservation, protection, and enhancement of these species and their habitat is of statewide concern; provides for a state list of endangered and threatened species by the Fish and Game Commission and restricts activities that may impact these species.

Streambed Alteration Agreement, CFG Code Section 1602: Regulates any activities such as dredge or fill in the state's rivers, lakes, and streambeds. Because the project will affect state-jurisdictional wetlands and waters, a Streambed Alteration Agreement will need to be issued by CDFG prior to commencement of grading in jurisdictional areas.

Regional

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP): This comprehensive regional planning effort, adopted by Riverside County and approved by the resource agencies, provides a strategy for take authorization of listed species in the planning area as long as the project is in compliance with the criteria of the MSHCP. Because the project will affect habitats designated for covered species in the plan, mitigation strategies must be in compliance with the MSHCP.

Local

The City of Calimesa General Plan recognizes that an abundance of wildlife, including sensitive and protected species, exist within the plan area and indicates the intent of the City to promote planning solutions with the goal of conserving and protecting significant wildlife and vegetation habitats (Goal 3, Resource Management Element). To meet this goal, the following policies are included in the general plan:

3.1. Conserve and protect important plant communities and wildlife habitats, such as riparian areas, wetlands, oak woodlands, and other significant tree stands, and rare or endangered plant/animal species by using buffers, creative site planning, revegetation, and open space easements/dedications.

3.2. Encourage the planting of native species of trees and other drought-tolerant vegetation.

3.3. In areas that may contain important plant and animal communities, require developments to prepare biological assessments identifying species types and locations and develop measures to preserve sensitive species to the maximum extent possible.

3.4. Allow new development to remove only the minimum natural vegetation and require the revegetation of graded areas with native plant species.

3.5. Work with state, federal, and local agencies in the preservation of sensitive vegetation and wildlife in the City.

3.6. Protect and maintain sensitive biological habitats by limiting urban development and restricting off-road vehicle use in these areas.

The Resource Management Element specifically mentions the Oak Valley area, stating that dedication of land for open space, provision of wildlife habitat, incorporating native landscaping would be necessary. The City's approach to resource conservation would be geared to the sensitivity of identified resources. High sensitivity lands are those with significant biological resources, steep slopes, or other natural resources that require in-depth study and review prior to approval of any development. In addition, the City is a participant in the Riverside County MSHCP, which was approved subsequent to the adoption of the general plan.

ENVIRONMENTAL IMPACTS

METHODOLOGY

A general reconnaissance level survey was conducted in March of 1999 by LSA throughout the northerly portion of the project area covering approximately 1,500 acres. The entire project area was resurveyed in the spring of 2002 covering the total area of approximately 2,590 acres. The surveys detected existing flora and fauna on-site, delineated existing vegetation communities, assessed possible sensitive plant and wildlife associations within those communities, and searched for sign of sensitive plant and wildlife species on-site. Based on the results of the general reconnaissance surveys, the list of sensitive species with a potential to occur within the project area and the literature review (i.e., MSHCP), focused surveys were conducted in the spring and summer of 1999 and 2002. These focused surveys were conducted for species including Quino checkerspot butterfly, southern willow flycatcher, California gnatcatcher, least Bell's vireo, and Stephens' kangaroo rat.

Prior to initiating field work, a list of sensitive plant and wildlife species with the potential to occur within the vicinity of the project was generated using the California Natural Diversity Database (CNDDB; CDFG 2004) and the California Native Plant Society Checklist (CNPS 2004). In addition, the *Soil Survey*

for Western Riverside County (Soil Conservation Service 1971) and the Western Riverside County MSHCP (Dudek 2003) were also reviewed.

Site survey methodologies associated with each survey type are briefly discussed below.

Vegetation Community and Habitat Assessment

LSA biologists conducted a detailed habitat assessment on foot throughout the project area. Vegetation communities encountered in the field were identified and plotted onto 1"= 200' scale aerial photographic maps for the survey area.

General Wildlife and Raptor Surveys

General wildlife and raptor surveys were conducted concurrently with vegetation community mapping surveys during 1999 and 2002. During these surveys, all wildlife and sign were identified to species, and when appropriate, mapped along with vegetation communities. Additional informal wildlife and raptor surveys were conducted during all focused protocol-level surveys by LSA biologists in the project area.

Jurisdictional Wetland Delineation

A USFWS jurisdictional wetland delineation survey was conducted in the summer of 2002 by LSA in all wetland areas of the project site. All areas were mapped on an aerial photographic map of the project area delineating jurisdictional wetlands and waters.

Rare Plants

Rare plant surveys were conducted on foot throughout the project area for the San Jacinto crownscale and the slender-horned spineflower during the spring and summer of 1999 and 2002 by LSA biologists. No plants were detected.

Quino Checkerspot Butterfly

The habitat assessment conducted in March 1999 identified several locations within the project area that have the potential to support the Quino checkerspot butterfly based on the presence of open coastal sage scrub, chaparral, and grassland habitat with the appropriate host plant species. Areas included in the habitat assessment coincided with areas of potential impact from the proposed project. Each of these areas was surveyed during the focused protocol Quino checkerspot butterfly surveys on March 18, 1999 and May 10, 1999 by LSA certified biologists pursuant to current accepted USFWS protocol.

Southwestern Willow Flycatcher

The habitat assessment conducted in March 1999 identified several locations within the project area that have the potential to support the southwestern willow flycatcher based on the presence of riparian habitat with dense stands of willow species. Areas included in the habitat assessment coincided with areas of potential impact from the proposed project. Each of these areas was surveyed by LSA certified biologists during the focused protocol-level surveys for the southwestern willow flycatcher on March 3, 2002 and July 8, 2002 pursuant to current accepted USFWS protocol.

California Gnatcatcher

The habitat assessment conducted in March 1999 identified several locations within the project area that have the potential to support the California gnatcatcher based on the presence of coastal sage scrub habitat. Areas included in the habitat assessment coincided with areas of potential impact from the proposed project. Each of these areas was surveyed by LSA certified biologists during the focused protocol-level surveys for the California gnatcatcher on March 19, 1999 and May 5, 1999. Additional focused surveys were conducted on May 8, 2002 and June 28, 2002 by LSA certified biologists pursuant to current accepted USFWS protocol.

Least Bell's Vireo

The habitat assessment conducted in March 1999 identified several locations within the project area that have the potential to support the least Bell's vireo based on the presence of riparian habitat. Areas included in the habitat assessment coincided with areas of potential impact from the proposed project. Each of these areas was surveyed by LSA certified biologists during the focused protocol-level surveys for the least Bell's vireo on March 3, 2002 and July 8, 2002 pursuant to current accepted USFWS protocol.

Stephens' Kangaroo Rat

The habitat assessment conducted in March 1999 identified several locations within the project area that have the potential to support the Stephens' kangaroo rat based on the presence of coastal sage scrub, chaparral, and grassland habitat. Areas included in the habitat assessment coincided with areas of potential impact from the proposed project. Each of these areas was surveyed by LSA certified biologists during the focused protocol-level trapping surveys for the Stephens' kangaroo rat which totaled 15 trap nights between May 11 and July 25, 2002 pursuant to current accepted USFWS protocol. In addition, LSA certified biologists conducted trapping surveys during April and May 1999 pursuant to accepted USFWS protocol.

THRESHOLDS OF SIGNIFIGANCE

The significance criteria used in this EIR are defined in the general context of CEQA and NEPA. Significant impacts to biological resources include, but are not restricted to, the following:

- A substantial impact to a sensitive natural community (i.e., community that is especially diverse, regionally uncommon, or of special concern to local, state, and federal agencies) and substantial impacts to plant species considered by the CNPS to be rare, threatened, or endangered in California (CNPS 2001) or with strict habitat requirements and narrow distributions.
- Any impact to wildlife species that are federally or state listed or proposed to be listed and/or their habitats, substantial impact to wildlife species of special concern to CDFG (2002b), candidates for state listing, or animals fully protected in California.
- Substantial impact to habitats that serve as breeding, foraging, nesting, or migrating grounds and are limited in availability, or that serve as core habitats for regional plant and wildlife populations.
- Any impact to important riparian habitats or wetlands and any other "waters of the U.S."
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

In addition, biological resources may be impacted either directly or indirectly by a project. Direct and indirect impacts may furthermore be either permanent or temporary in nature. These impact categories are defined below and are discussed later in this section.

- **Direct:** Any alteration, disturbance, or destruction of biological resources that would result from project-related activities is considered a direct impact. Examples include clearing vegetation, encroaching into wetlands, diverting natural surface water flows, and the loss of individual species and/or their habitats.
- **Indirect:** As a result of project-related activities, biological resources may also be affected in a manner that is not direct. Examples include elevated noise and dust levels, soil compaction, increased human activity, decreased water quality, and the introduction of invasive wildlife (domestic cats and dogs) and plants.
- **Permanent:** All impacts that result in the irreversible removal of biological resources are considered permanent. Examples include constructing a building or permanent road on an area containing biological resources.
- **Temporary:** Any impacts considered to have reversible effects on biological resources can be viewed as temporary. Examples include the generation of fugitive dust during construction; or removing vegetation for underground pipeline trenching activities and either allowing the natural vegetation to recolonize or actively revegetating the impact area.

VEGETATION COMMUNITIES

Potentially significant impacts to vegetation communities within the proposed project area that may result from project construction or operations and maintenance activities are discussed below.

Direct Impacts

The following direct impacts to vegetation communities would be considered significant, unless mitigated to less than significant:

Impact BR1 Construction of the proposed project would directly and permanently impact approximately 99.3 acres of native coastal sage scrub considered sensitive by CDFG.

The habitat impacts would occur primarily as a result of road and housing construction activities. This area of impact is considered adverse and significant, and with compliance with MM-BR1, the potential impact will be reduced to less than significant.

Impact BR2 Construction of the proposed project would directly and permanently impact approximately 20.8 acres of native oak woodland considered sensitive by CDFG. The impact would include direct and permanent impacts on approximately 198 individual trees with potential impacts to an additional 38 individual trees. Thus, 236 oak trees are impacted or potentially impacted by the proposed project.

The habitat impacts would occur primarily as a result of road and housing construction activities within habitat areas. The impacts on individual trees were determined through the LSA inventory and are shown in Table 3.3-3.

Table 3.3-3
Impacted / Potentially Impacted Oak Trees

Phase	Number of Impacted Oak Trees	Number of Potentially Impacted Oak Trees	Total Impacted and Potentially Impacted	Total Preserved Oak Trees
I	70	25	95	331
II	51	2	53	3
III	39	8	47	323
IV	37	3	40	54
V	0	0	0	0
Town Center	1	0	1	0
Riverside Land Conservancy	0	0	0	2,206
Total	***198***	***38***	***236***	***2,917***

Source: LSA, 2004

It is anticipated that as the site plans are further developed, the numbers presented in Table 3.3-3 may fluctuate. The impact of the project on oak woodland and individual oak trees is adverse and significant. However, the impact would be reduced to less than significant with implementation of the proposed oak tree planting and restoration plan (see MM BR2).

Impact BR3 Construction of the proposed project would directly and permanently impact approximately 0.3 acres of native riparian woodland considered sensitive by CDFG. (Of the total, approximately 0.2 acres is delineated as jurisdictional wetlands).

The habitat impacts would occur primarily as a result of road and housing construction activities. This impact is considered adverse and significant, but with compliance with MM-BR3, the potential impact would be reduced to less than significant.

Indirect Impacts

The following indirect impacts to vegetation communities would be considered significant, unless mitigated to less than significant:

Impact BR4 Permanent indirect impacts could occur to coastal sage scrub, oak woodland, and riparian woodland in the future if graded areas are left bare after project construction, thus encouraging exotic species introduction and invasion.

The indirect impacts to these sensitive habitats would potentially occur as a result of grading activities during project construction activities. This indirect impact would be considered adverse and significant, but with compliance with MM-BR4, the potential impact would be reduced to less than significant

WETLANDS AND WATERS

Potentially significant impacts to sensitive jurisdictional wetlands and waters within the proposed project area that may result from project construction or operations and maintenance activities are discussed below.

Direct Impacts

The following direct impacts to sensitive jurisdictional wetlands and waters would be considered significant, unless mitigated to less than significant through the appropriate permitting processes:

Jurisdictional Wetlands

Impact BR5 Construction of the proposed project would directly and permanently impact approximately 0.2 acres of jurisdictional wetland riparian woodland habitat.

The habitat impacts would occur primarily as a result of road and housing construction activities. This impact is considered adverse and significant, but with compliance with MM-BR5, the potential impact would be reduced to less than significant.

Impact BR6 Construction of the proposed project would directly and permanently impact approximately 1.4 acres of jurisdictional wetland meadow habitat.

The habitat impacts would occur primarily as a result of road and housing construction activities. This impact is considered adverse and significant, but with compliance with MM-BR6, the potential impact would be reduced to less than significant.

Jurisdictional Waters

Impact BR7 Construction of the proposed project would directly and permanently impact approximately 2.0 acres of non-wetland waters of the U.S, also considered waters of the state.

These direct and permanent impacts would occur primarily as a result of road and housing construction activities. Impacts to non-wetland waters of the U.S. are not typically considered significant from a federal perspective but are adverse and significant from a state perspective. Compliance with MM-BR7, requiring habitat restoration (in this case through the Fish and Game Code Section 1602), would reduce the potential impact to less than significant.

Indirect Impacts

Impact BR8 Permanent indirect impacts could occur to jurisdictional wetlands and waters in the future if the graded areas are left bare after project construction, thus encouraging exotic species introduction and invasion.

The indirect impacts to these sensitive habitats would potentially occur as a result of grading activities during project construction activities. This indirect impact would be considered adverse and significant, but with compliance with MM-BR8, the potential impact would be reduced to less than significant.

SENSITIVE PLANT SPECIES

Potentially significant impacts to sensitive plant species within the proposed project area that may result from project construction or operations and maintenance activities are discussed below.

Direct and Indirect Impacts

Federally Listed Plant Species

No federally listed plants have the potential to occur within the project study area; therefore, no direct or indirect impacts to federally listed plants are expected to occur as a result of project construction or operations and maintenance activities. As such, no additional avoidance, minimization, or mitigation measures would be required for such species.

State-listed Plant Species

No state-listed plant species were detected within the project area during focused surveys; therefore, no direct or indirect impacts to state-listed plants are expected to occur as a result of project construction or operations and maintenance activities. As such no additional avoidance, minimization, or mitigation measures would be required for such species.

Non-listed, Sensitive Plant Species

No non-listed, sensitive plant species were detected within the project area during two seasons of surveys; therefore, no impacts to non-listed, sensitive plant species are expected to occur from project construction or operations and maintenance activities. With respect to certain species covered by the MSHCP, focused surveys would be conducted prior to each phase of construction in appropriate habitat areas to ensure the plants have not inhabited to project site (see MM-BR12).

SENSITIVE WILDLIFE SPECIES

Potentially significant impacts to sensitive wildlife species within the proposed project area that may result from project construction or operations and maintenance activities are discussed below.

Direct Impacts

Federally Listed Wildlife Species

The following direct impacts to the least Bell's vireo and its habitat would be considered significant, unless mitigated to less than significant.

Impact BR9 Construction of the proposed project would directly and permanently impact approximately 0.3 acres of suitable habitat for the least Bell's vireo and southwestern willow flycatcher, which is coincident with the riparian woodland habitat discussed above.

This direct impact would be considered adverse and significant, but with compliance with MM-BR9-1 and MM-BR9-2, the potential impact would be reduced to less than significant.

State-listed Wildlife Species

No state-listed wildlife species were detected within the project area during focused surveys; therefore, no direct impacts to state-listed wildlife are expected to occur as a result of project construction or operations and maintenance activities. As such, no additional avoidance, minimization, or mitigation measures would be required for such species.

Non-listed, Sensitive Wildlife Species

The following direct impacts to non-listed, sensitive birds would be considered significant unless mitigated to less than significant:

Impact BR10 Permanent and temporary direct impacts to birds listed under the MBTA or BEPA would potentially occur during vegetation clearing and grading, and could occur incidentally during other project phases. These impacts are considered by the USFWS and MSHCP to be a violation of these federal and regional acts. However, because significant impacts associated with project construction or operations would be an unintended or incidental occurrence, it is unlikely that this would be considered a "take" under either the MBTA or BEPA.

Unintended impacts to species covered by the MBTA are mitigated by conducting preconstruction surveys as described in MM-BR10. With implementation of MM-BR10, the potential impact is reduced to less than significant.

Indirect Impacts

Federally Listed Wildlife Species

The following indirect impacts to the least Bell's vireo and southwestern willow flycatcher and their habitats would be considered significant, unless mitigated to less than significant:

Impact BR11 Permanent indirect impacts to the least Bell's vireo and southwestern willow flycatcher could occur from habitat fragmentation resulting from the proposed project within the riparian areas.

With compliance with MM-BR11, the potential impact will be reduced to less than significant.

State-listed Wildlife Species

No state-listed wildlife species were detected within the project area during focused surveys; therefore, no indirect impacts to state-listed wildlife are expected to occur as a result of project construction or operations and maintenance activities. As such no additional avoidance, minimization, or mitigation measures would be required for such species.

Non-listed, Sensitive Wildlife Species

Impact BR12 Permanent indirect impacts to the 16 sensitive species detected on-site could occur from alteration of habitat within the upland and riparian areas.

The 16 sensitive species are "covered species" within the MSHCP and would not require additional specific mitigation measures. The impacts are not significant since the project would comply with the MSHCP. The USFWS's Biological Opinion on the MSHCP indicates that all non-listed species included in the plan are "adequately conserved". Thus, compliance with the MSHCP will sufficiently mitigate any project impacts to non-listed sensitive species. Project compliance with the MSHCP will involve on-site conservation of land, payment of applicable fees, and meeting other requirements and stipulations of the MSHCP, such as preconstruction surveys. Such surveys will be undertaken to insure that various species, including the non-listed burrowing owl, do not inhabit the development area (see MM-BR12).

WILDLIFE CORRIDORS

The following direct impacts to wildlife corridors would be considered significant unless mitigated to less than significant:

Direct Impacts

Impact BR13 Permanent direct impacts to MSHCP-designated wildlife corridor areas, Proposed Linkage 12 and Proposed Constrained Linkage 23 in MSHCP Cell 411, could occur as a result of project construction or operations and maintenance activities.

The project area lies within and adjacent to the linkage corridor identified in the MSHCP and established through other agreements. Though the proposed Oak Valley site could interfere with the existing wildlife movement opportunities afforded by a relatively contiguous stretch of open space, the project accommodates important corridors/linkages for wildlife movement.

Generally, the alignment of Constrained Linkage 23 follows Garden Air Wash. Criteria Cell 411 encompasses about 150 acres of which 95 are within the Summerwind Ranch site. The Summerwind Ranch project proposes to conserve about 15 acres within the cell along a corridor 500 feet wide that encompasses the entire on-site portion of Garden Air Wash and adjoining areas. Although the MSHCP cites conservation of chaparral as an objective for the cell, field mapping found that there is no chaparral within the northern portion of the cell (LSA, 2004). Rather, the northern portion of the cell supports coastal sage scrub, all of which would be conserved under the proposed project as would the adjoining grassland. Thus, the proposed project design supports the objectives of the MSHCP relative to wildlife linkages. Other regional measures would be required to make these linkages function more effectively as wildlife corridors, as provided in MM-BR13.

Indirect Impacts

Impact BR14 Permanent indirect impacts to MSHCP-designated wildlife corridor areas could occur as a result of exotic species introductions, noise, human activity, and nighttime lighting impacts to the adjacent linkage areas.

With compliance with MM-BR14, the potential impact will be reduced to less than significant.

CUMULATIVE IMPACTS

Cumulative impacts are defined as "two or more individual effects that, when considered together, are considerable or which compound or increase other environmental impacts" (*Guidelines for the Implementation of CEQA* Cal Code Regs., Title 14 § 15355). The project's contribution to cumulative impacts in the region would be considered significant unless mitigated to less than significant.

3.5.4 MITIGATION MEASURES

The following is a list of impact avoidance, minimization, and mitigation measures that would apply to all construction-related activities during the construction phase of the project.

GENERAL MITIGATION MEASURES

The following measures are standard practices designed to prevent environmental degradation during project construction or operations and maintenance activities.

- The construction crew and any contractor(s) should be informed of the biological constraints of the project through a contractor education program presented by a project biologist. The construction crews and contractor(s) would be responsible for unauthorized impacts from construction activities to sensitive biological resources that are outside the areas ultimately approved for impacts by the County of Riverside and the resource agencies.

- The anticipated impact zones, including staging areas, equipment access, and disposal or temporary placement of spoils, should be delineated with stakes and flagging prior to construction to avoid impacts to natural resources where possible. Construction-related activities outside of the impact zone should be avoided.

- New and existing roads that are planned for either construction or widening should not extend beyond the planned impact area. All vehicles passing or turning around should do so within the planned impact area or in previously disturbed areas. Where new access is required outside of existing roads or the construction zone, the route should be clearly marked (i.e., flagged and/or staked) prior to the onset of construction.

- Soils should be stockpiled in disturbed areas presently lacking native vegetation. Stockpile areas should be marked to define the limits where stockpiling may occur.

- Best Management Practices (BMPs) should be employed to prevent further loss of habitat resulting from erosion caused by project-related impacts (i.e., grading or clearing for new roads). All detected erosion should be remedied within two days of discovery.

- Fueling of equipment should take place within existing paved roads or in approved containment areas and not within or adjacent to drainages or native desert habitats. Contractor equipment should be checked for leaks prior to operation and repaired as necessary.

RESOURCE SPECIFIC MITIGATION MEASURES

Implementation of the following mitigation measures outlined specifically under the MSHCP (by quadrant number) will reduce the level of impacts to biological resources to less than significant in and adjacent to the project area. Specifically, if a project meets the on-site MSHCP conservation objective, then additional mitigation off-site is not required. The MSHCP conservation objectives by Area Cell are depicted in Table 3.3-4 below and are described in further detail below for each impact expected from the proposed project.

Table 3.3-4
Criteria Area Cell Conservation Requirements of the MSHCP within the Proposed Project

Criteria Area Cell (Quadrant Number)	MSHCP Conservation Amount and Focus Area of Cell	Approx. Percentage of Cell Conserved by Project	Project Meets Conservation Requirements	Explanation
396	55-65% in central portion of cell for upland conservation for assembly of Linkage 23.	95%	Yes	All areas on-site are preserved.
411	30-40% in northern portion of cell for upland conservation (grassland and chaparral) for assembly of Linkage 23.	10%	Yes	Portion of cell is not in the project site. Garden Air Wash corridor (Proposed Constrained Linkage 23) mitigated consistent with MSHCP.
412	35-45% in northern portion of cell for upland s and woodlands conservation for assembly of Linkage 23.	45%	Yes	Garden Air Wash corridor on-site preserved (Proposed Constrained Linkage 23).
417	25-35% in northern portion of cell for upland conservation (grassland and chaparral) for assembly of Linkage 23.	25%	Yes	Garden Air Wash corridor on-site preserved (Proposed Constrained Linkage 23).
479	55-65% in eastern and southern portion of cell for upland s and a small riparian/woodland area conservation associated with San Timoteo Creek for assembly of Linkage 23.	50%	Yes	Portion of cell is not in the project site. Entire project area within cell is preserved.

Criteria Area Cell (Quadrant Number)	MSHCP Conservation Amount and Focus Area of Cell	Approx. Percentage of Cell Conserved by Project	Project Meets Conservation Requirements	Explanation
480	20-30% in northwestern portion of cell for upland conservation for assembly of Linkage 23.	50%	Yes	Garden Air Wash and Riverside Land Conservancy option lands are preserved.
569	30%-40% in central portion of cell for grasslands and riparian woodlands conservation associated with San Timoteo Creek for assembly of Linkage 12.	30%	Yes	Portion of cell is not within the project site.
572	20-30 % in southern portion of cell for grassland conservation for assembly of Linkage 12.	20%	Yes	San Timoteo Wash is preserved.
662	35-45% in northeastern portion of cell for upland conservation (grassland and chaparral) for assembly of Linkage 12.	10%	Yes	Portion of cell is not in the project site. Entire project area within cell is preserved.
663	60-70% in central portion of cell for upland conservation (grassland, coastal sage scrub, and chaparral) for assembly of Linkage 12.	45%	Yes	Portion of cell is not in the project site. Entire project area within cell is preserved.

Vegetation Communities

MM-BR1 Permanent direct impacts to 99.3 acres of coastal sage scrub will be offset by compliance with the mitigation requirements listed under the MSHCP. These requirements include on-site preservation of coastal sage scrub habitat. The proposed plan preserves all of the coastal sage scrub habitat on the project site that is within Criteria Cells, which includes approximately 135.4 acres of costal sage scrub habitat.

MM-BR2 Mitigation requirements to minimize permanent direct impacts to 20.8 acres of oak woodlands would include on-site preservation in compliance with MSHCP standards for Criteria Area Cells and implementation of an oak tree planting and restoration plan. Approximately 129.6 acres of oak woodland habitat would be preserved on-site. Additionally, oak trees would be planted from container stock as well as from acorns collected on the site to ensure that the regenerated oak seedlings will have the best genetic adaptation for the Summerwind Ranch development. The Applicant will plant 976 oak trees using a combination of 50 percent acorns and 50 percent deep one-gallon containers as

mitigation for the removal of up to 236 oak trees, as shown in Table 3.3-5. The planting program reduces the impact of loss of oak woodland and oak trees to less than significant.

Table 3.3-5
Oak Tree Mitigation

DFR	Number of Oak Trees Impacted	Mitigation Ratio	Total Required Planting Spots	*Acorn Planting Spots	Deep 1-gallon Containers
High	162	5:1	810	405 (1,215 acorns)	405
Moderate	46	3:1	138	69 (207 acorns)	69
Low	28	1:1	28	14 (42 acorns)	14
Total	***236***	***NA***	***976***	***488 (1,464 acorns)***	***488***

*Three (3) acorns per planting spot

MM-BR3 Mitigation requirements to offset permanent direct impacts to 0.3 acres of riparian woodlands would include on-site or off-site habitat creation or enhancement. Regulatory agencies will establish appropriate mitigation ratios in accordance with their policy of no net loss of riparian and wetland values.

MM-BR4 Mitigation recommendations for potential permanent indirect impacts to vegetation communities could be satisfied by applying an approved native seed mix in the bare areas after construction is complete to minimize the potential for exotic species introductions. The native seed mix should be approved by the CDFG and MSHCP and should be dispersed in the fall, prior to winter rains.

Wetlands and Waters

MM-BR5 Mitigation requirements to offset permanent direct impacts to jurisdictional wetlands will be met by a combination of wetland creation, restoration, or enhancement. The mitigation site should be preserved at a suitable area near the impact area. Mitigation requirements for permanent impacts to jurisdictional wetlands resulting from project-related construction would be determined during the regulatory agency permit process at mitigation ratios consistent with the policy of no net loss of wetland values.

MM-BR6 Mitigation Measure MM-BR5 is applicable to the wetlands impacts.

MM-BR7 Mitigation requirements for permanent direct impacts to ephemeral and intermittent drainages would require habitat creation, enhancement or restoration, and preservation at a location approved by the resource agencies through the permitting process.

MM-BR8 Mitigation recommendations for potential permanent indirect impacts to wetland habitats could be satisfied by applying an approved native seed mix in the bare areas after construction is complete to minimize the potential for exotic species introductions. The native seed mix should be approved by the CDFG and should be dispersed in the fall, prior to winter rains.

Sensitive Wildlife Species

MM-BR9-1 Mitigation requirements for permanent direct impacts to the least Bell's vireo and southwestern willow flycatcher habitat will be met through on-site preservation in Criteria Area Cells (Quadrant 479) outlined in Table 3.3-4. This habitat preservation is coincident to the riparian habitat preservation listed in MM-BR3.

MM-BR9-2 Preconstruction surveys for least Bell's vireo and southwestern willow flycatcher will be conducted prior to construction in or adjacent to habitat areas in accordance with the applicable protocol. Based on the protocol survey results, appropriate avoidance measures would be determined through consultation with regulatory agencies.

MM-BR10 To avoid or minimize impacts to birds covered under the MBTA and/or BEPA the following will be implemented:

- Clearing and grubbing of vegetation within areas identified as habitat should be conducted outside the March 15 through August 15 nesting season.

- In the event that least Bell's vireo or southwestern willow flycatcher is found on-site during future surveys, ensure that noise from construction activities does not exceed 60 dBA L_{eq} within the habitat of the species during the nesting season.

- Position, direct, and shield lights (streetlights, parking lot lighting, and other project-related illumination sources) so as to avoid "light spill" into the proposed on-site conservation areas or into habitat adjacent to the proposed project site. Night lighting will not be used during the course of construction.

- Provide contractor education and erect fencing or barriers to ensure that contractors do no enter areas of open space or conserved habitat for any purpose.

- If construction must occur within or adjacent to these habitats during the breeding season, preconstruction nest surveys no more than 1 week prior to construction initiation should be conducted by a qualified biologist. During the breeding season, additional nest surveys would be required in areas where a week or more has elapsed between the nest survey and the initiation of construction activities.

- Preconstruction surveys shall be performed in appropriate habitat areas consistent with requirements of the MSHCP, for the western yellow-billed cuckoo and burrowing owl. Mitigation consistent with MSHCP requirements will be implemented if warranted by survey results.

MM-BR11 Indirect impacts to least Bell's vireo and southwestern willow flycatcher habitat will be addressed through on-site preservation coincident to the riparian habitat preservation listed in MM-BR3. This measure will decrease the level of habitat fragmentation and reduce the impact to less than significant.

MM-BR12 Mitigation measures for indirect impacts to the 16 sensitive and covered species present on-site will be met through the extensive in-kind preservation outlined in Table 3.3-4 and through compliance with other requirements of the MSHCP. For instance, Yucaipa onion and many-stemmed dudleya are not expected to occur on the site; however, focused surveys will be conducted in appropriate habitat during proper time of year. If these species are found on-site, appropriate mitigation will be implemented upon concurrence by regulatory agencies.

Wildlife Corridors

MM-BR13 Mitigation requirements to offset project impacts to wildlife corridors, listed under the MSHCP, includes the proposed habitat preservation of open space along Proposed Linkage 12 and Proposed Constrained Linkage 23 within the project Criteria Area Cells. The dedication of land for wildlife conservation, including the Garden Air Wash and other lands, partially achieves this objective. Further enhancement of the corridors and habitat linkages will require installing properly-sized passageways under new on-site roads.

MM-BR14 Indirect impacts are mitigated with implementation of MM-BR13.

Cumulative Impacts

With the implementation of avoidance, minimization, and Mitigation Measures MM-BR1 through MM-BR13, along with required compliance with the MSHCP, potentially significant cumulative impacts would be mitigated to less than significant.

3.5.5 RESIDUAL IMPACT AFTER MITIGATION

The proposed project incorporates an extensive number of features aimed at protecting habitat values, species, and important resources on the site. Incorporation of extensive areas of open space, MSHCP objectives and requirements, oak tree mitigation, and wetlands avoidance are part of the project's resource management plan. These features are largely consistent with both City and regional plans and policy. For the other impacts addressed, mitigation is provided either through direct compensation or restoration, or participation and compliance with the MSHCP program. With implementation of the avoidance, minimization, and mitigation measures discussed above, impacts resulting from the proposed project would be mitigated to less than significant.

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3.4 CULTURAL RESOURCES

3.4.1 INTRODUCTION

Cultural resources (Lawson et al. 2004) and paleontological (Reynolds 2004) investigations within the Oak Valley Specific Plan 1 Amendment project area were conducted by LSA Associates, Inc. The cultural resource investigations (Lawson 2004) included background research and a field inventory designed to identify potentially important cultural resources within the project area. The cultural resources technical report (Lawson et al. 2004) and paleontological report (Reynolds 2004) are provided as Appendices D-1 and D-2 of this EIR. The following discussion is based on the findings presented in the technical reports.

3.4.2 EXISTING CONDITIONS

The cultural resource and paleontological investigations included were conducted under the California Environmental Quality Act (CEQA). CEQA declares the state policy to "take all action necessary to provide the people of this state with…historic environmental qualities," and includes archaeological, historical, and paleontological resources as integral features of the environment. For cultural resources, "historically significant" properties have been defined as those meeting the criteria for listing in the California Register of Historical Resources (Public Resources Code Section 21084.1; CEQA Guidelines Section 15064.5 (a)(1)). These criteria are as follows:

A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; or

B. Is associated with the lives of persons important in our past; or

C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

D. Has yielded, or may be likely to yield, information important in prehistory or history.

CULTURAL RESOURCES

Prior to fieldwork, Lawson et al. (2004) conducted a records search at the Eastern Information Center (EIC) at the University of California, Riverside (UCR). For a one-mile radius around the proposed Oak Valley Specific Plan I Amendment project area, this search included a review of recorded historic and prehistoric archaeological sites, known cultural resources surveys and excavation reports, a review of the National Register of Historic Places, California Historical Landmarks, California Points of Historical Interest, and Inventory of Historic Structures. In addition, historic maps and aerial photographs of the

project area obtained from the Map Collection in the UCR Science Library and historic GLO plat maps obtained from the Bureau of Land Management were also reviewed.

The records search identified 19 cultural resources that were previously recorded within one-half-mile of the project area. Of these resources, three (CA-RIV-790, CA-RIV-794, and CA-RIV-7296) are recorded within the proposed project area.

The subsequent field survey (Lawson et al. 2004) recorded that large areas within the proposed project area have been disturbed by discing, grading, and grazing. Waterworks and earthen dams appear to have altered the landscape. Other disturbances to the proposed project area include: wash cuts, power lines and associated access roads in the southeastern portion, recent fires near the eastern boundary, and a single paved road located near the northern boundary. Additionally, there are numerous dirt roads through the area and modern trash dumping events near San Timoteo Canyon Road. A floodplain bisects the southeastern and northwestern portion of the proposed project area.

Ground surface visibility at the time of the field survey was poor, an estimated less than 5 percent of the ground surface was visible due to the growth of seasonal grasses, manzanita and sage brush, and duff from oak groves.

The field survey found previously recorded sites CA-RIV-794 and CA-RIV-7296; site CA-RIV-780 was not relocated (Lawson et al. 2004). Lawson et al. (2004) identified an additional 16 cultural resources (LSA-SIC-337-S-1 through S-13, and LSA-SIC-337-I-1 through I-3) within the proposed Oak Valley Specific Plan I Amendment project area (Table 3.4-1). These resources were recorded on California Department of Parks and Recreation (DPR) forms and submitted to the ECR for the assignment of Primary numbers. The DPR Records are found in Appendix B of the technical report (Lawson et al. 2004). Primary numbers are not yet available for these resources.

The majority of these resources are associated with historic ranching in the area, including the ranch complex of the Singleton family. The Singleton family, who were among the earliest settlers in the area, had purchased and moved onto the ranch by 1871. The Singletons operated a large cattle and dairy ranch from the 1870s through the 1920s. Site CA-RIV-7296 and five of the newly identified resources are considered to be contributing elements to the proposed Singleton Ranch District. The proposed district consists of two historic ranch/farm complexes (CA-RIV-7296 and LSA-SUC-337-S-6), historic refuse deposits (LSA-SUC-337-S-1 and LSA-SUC-337-S-9), an irrigation system (LSA-SUC-337-S-10), and an isolated piece of farm equipment (LSA-SUC-337-I-2). The prehistoric resources include two artifact scatters (CA-RIV-780 and CA-RIV-794) and an isolated pestle.

Table 3.4-1
Cultural Resources within the Proposed Project Area

Resource	Description	Location	Eligibility
CA-RIV-780	Prehistoric artifact scatter	Preservation area	Potentially eligible
CA-RIV-794	Prehistoric artifact scatter	Preservation area	Potentially eligible
CA-RIV-7296	Historic ranch complex	Preservation area	Potentially eligible
LSA-SIC-337-S-1*	Historic refuse	Impact area	Potentially eligible
LSA-SIC-337-S-2	Historic ranch complex	Preservation area	Not eligible
LSA-SIC-337-S-3	Historic horse ranch complex	Impact area	Not eligible
LSA-SIC-337-S-4	Historic residential complex	Impact area	Not eligible
LSA-SIC-337-S-5	Historic residential complex	Impact area	Not eligible
LSA-SIC-337-S-6*	Will Singleton Farm complex	Impact area	Eligible
LSA-SIC-337-S-7	Historic residential complex (1950)	Impact area	Not eligible
LSA-SIC-337-S-8	Prehistoric pottery scatter	Preservation area	Potentially eligible
LSA-SIC-337-S-9*	Historic refuse deposit	Impact area	Eligible
LSA-SIC-337-S-10*	Historic water conveyance feature	Impact area	Potentially eligible
LSA-SIC-337-S-11	Historic residence (1955)	Impact area	Not eligible
LSA-SIC-337-S-12	Historic residence (1952)	Preservation area	Not eligible
LSA-SIC-337-S-13	Historic residence (1950)	Impact area	Not eligible
LSA-SIC-337-S-14	Historic refuse	Preservation area	Not eligible
LSA-SIC-337-I-1	Historic isolate	Impact area	Not eligible
LSA-SIC-337-I-2*	Historic isolate	Impact area	Not eligible
LSA-SIC-337-I-3	Prehistoric isolate	Preservation area	Not eligible

* Contributing Element to the proposed Singleton Ranch District

PALEONTOLOGICAL RESOURCES

Paleontological investigations within the project area were conducted by LSA Associates, Inc. (Reynolds 2004). A records search and literature review, conducted through the San Bernardino County Museum, in Redlands California, included a variety of published and unpublished documents, reports, and maps relevant to the paleontology of the study area. These revealed that important fossil-bearing formations, particularly the Plio-Pleistocene San Timoteo Formation, are exposed within the study area.

The field survey for paleontological resources was conducted by walking parallel transects spaced approximately 20m apart. Outcrops and exposures were examined and small samples of paleosol sediments were collected, screen washed, and sorted to assess the potential for significant paleontological resources. The field survey identified a total of 52 localities with high potential for paleontological resources.

3.4.3 THRESHOLD OF SIGNIFICANCE

A significant adverse environmental impact would occur if the project results in any of the following:

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines Section 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site; or
- Disturb any human remains, including those interred outside of formal cemeteries.

3.4.4 PROJECT IMPACTS

CULTURAL RESOURCES

Impact CR1 The project would impact four cultural resources sites within the project area.

Under CEQA, preservation in place is the preferred treatment for archaeological/historical resources. Of the 20 cultural resources within the Oak Valley Specific Plan 1 Amendment project area, eight are located within the Preservation Area and 12 are within the Impact Area. The proposed project would have no significant effect to the cultural resources located within the Preservation Area. Four of the 12 cultural resources within the Impact area (LSA-SIC-337-S-1, LSA-SIC-337-S-6, LSA-SIC-337-S-9, and LSA-SIC-337-S-10) were assessed by Lawson et al. (2004) as eligible under CEQA. The proposed project would have significant impacts to these four resources. With compliance with mitigation measures recommended in Table 3.4-2, the potential impact would be reduced to a less than significant level.

PALEONTOLOGICAL RESOURCES

Impact CR2 The project would impact the paelontological resources within the project site.

The paleontological investigation revealed that significant paleontological resources are present within the Oak Valley Specific Plan project area. Adverse impacts to these resources will likely result from excavation, grading, road construction, borrow and fill activity, and changes to erosional patterns. Indirect impacts resulting from increased land use and unauthorized fossil collection are also likely. Finally, the emplacement of overburden on fossil-bearing sediments would render those resources unavailable for future research (Reynolds 2004). With compliance with MM-CR2-1 through MM-CR2-6, the potential impact would be reduced to a less than significant level.

3.4.5 CUMULATIVE IMPACTS

Assessment of cumulative impacts on cultural and paleontological resources focus on whether the proposed project and related projects, substantially diminish the number of resources of the same type and in similar contexts. In this case, such resources would include prehistoric artifact scatters and historic sites that relate to late 19th and early 20th century ranching. It is anticipated that the effects of related projects would be subject to evaluation and mitigation requirements under CEQA. In addition, activities conducted within the preserved areas would be subject to the specifications provided in the Specific Plan. Consequently, cumulative impacts on cultural and paleontological resources are not expected to be considerable.

3.4.6 MITIGATION MEASURES

CULTURAL RESOURCES

Lawson et al. (2004) recommended mitigation measures for six cultural resources within the proposed Oak Valley Specific Plan I Amendment project area. Four of these resources are located within the impact area and were assessed by Lawson et al. (2004) as eligible for the California Register due to their potential significance. Although site CA-RIV-7296, also assessed as eligible by Lawson et al. (2004) is located outside of the Impact Area, mitigation measures were recommended based on its proximity to the Impact area and the potential for future vandalism after development in the area. Although isolates are not considered significant under CEQA, collection and donation was recommended for the isolated pestle (LSA-SIC-337-I-3). Table 3.4-2 and the following discussion present the recommended mitigation measures (Lawson et al. 2004).

Table 3.4-2
Cultural Resources Mitigation Measures

Resource	Description	Location	Mitigation Measure
CA-RIV-7296	Historic ranch complex	Preservation area	Security fencing
LSA-SIC-337-S-1	Historic refuse	Impact area	Phase II test excavations
LSA-SIC-337-S-6	Will Singleton Farm complex	Impact area	Evaluation, including research and oral histories
LSA-SIC-337-S-9	Historic refuse deposit	Impact area	Phase II test excavations
LSA-SIC-337-S-10	Historic water conveyance feature	Impact area	Focused, intensive surveys; possibly HAER documentation

Resource	Description	Location	Mitigation Measure
LSA-SIC-337-I-3	Prehistoric isolated pestle	Preservation area	Collect and donate to a local historical society
Singleton Ranch Historic District			Production of a popular history

Phase II archaeological test excavations would be conducted by means of controlled hand excavations, and collection and analysis of historic artifacts "that may be associated with historic use dating back to the 19th century." Based on the results of the Phase II investigations, Phase III archaeological data recovery excavation and analysis may be required. Curation of all artifacts at a local repository would be required.

Evaluation of the Singleton Ranch complex (LSA-SIC-337-S-6) would include research, including oral interviews, into the land use of this ranch and its association with local agricultural history and persons important in local history. The integrity of each building within the complex would be evaluated. If the resource is determined to be significant, additional mitigation including a Historic American Buildings Survey (HABS) or similar documentation and relocation to a nearby area would be needed.

The focused surveys for (LSA-SIC-337-S-10) would locate and record in detail any associated unrecorded features, including ditches, pipes, and other transportation segments. In addition, historical research, including oral histories, to establish dates of construction and use, land-use patterns. If the resource is determined to be significant, additional mitigation would be needed. This mitigation would include a Historic American Engineering Record (HAER) or similar documentation and donating the important elements to a local historical society.

PALEONTOLOGICAL RESOURCES

Impacts to paleontological resources within the Oak Valley Specific Plan 1 Amendment boundaries will be mitigated by the following measures:

MM-CR2-1 Preconstruction salvage of known exposed paleontological resources shall be conducted.

MM-CR2-2 Preconstruction field examination of fossil soil horizons with high potential for paleontological resources, and salvage of fossils as necessary shall be conducted.

MM-CR2-3 A project-specific sampling plan that will recover standard samples of fossiliferous paleosols in stratigraphic succession within the affected areas shall be developed. The sampling program will include 12 samples from the San Timoteo Formation and three from younger sediments. These samples will be prepared by water-washing through 20 and 30 mesh screens.

Monitoring of excavation in sediments with potential for paleontological resources. Excavation in sediments that are known to contain fossils will be monitored full-time by qualified paleontological crew members under the supervision of a professional paleontologist determined to be significant, additional mitigation including a Historic American Buildings Survey (HABS) or similar document and relocation to a nearby area would be needed.

MM-CR2-4 Excavation in sediments with undetermined potential shall be monitored 50 percent of the time; and if paleontological resources are identified, monitoring shall be changed to full time. Monitors shall be empowered to temporarily redirect earthmoving equipment while fossils are examined and removed. If multiple pieces of earthmoving equipment are working simultaneously or if excavation is conducted in widely separated areas, additional monitors shall be provided as necessary.

MM-CR2-5 Fossils collected during the project shall be prepared to a reasonable point of identification. The samples shall be cleaned of excess sediment or matrix and housed in an accredited museum repository. A written fossil specimen repository agreement shall be arranged in advance of excavation monitoring.

MM-CR2-6 A report documenting the results of the monitoring and salvage shall be prepared.

3.4.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Compliance with the mitigation measures for cultural and paleontological resources as described above would reduce impacts to below a threshold of significance as required by CEQA.

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3.5 GEOLOGY AND SOILS

3.5.1 INTRODUCTION

A Geology and Geotechnical Summary Report was prepared on April 21, 2004 by Pacific Soils Engineering evaluating the site geological and seismic conditions and providing professional opinions and recommendations regarding the proposed development of the site. The report is included in this EIR document as Appendix E.

3.5.2 EXISTING CONDITIONS

GEOLOGIC SETTINGS

The project site is situated within the San Gorgonio Pass area of the Beaumont Plains that are within the San Jacinto Mountain Block of the Peninsular Ranges geomorphic province. Part of the North American Coast Ranges, the Peninsular Ranges stretch approximately 900 miles from southern California to the southern tip of Baja California. The Peninsular Range Province, which is characterized by northwest-trending topographic and structural features, is bound by the Transverse Range province to the north and the Colorado Desert Province to the west. The inland part of the Peninsular Range province consists of numerous mountain ranges that are composed predominantly of igneous and metamorphic rocks of Mesozoic and Paleozoic age. An irregular coastal plain is located on the western edge of the province (including the Los Angeles Coastal Plain and Basin), which is composed predominantly of marine and non-marine clastic deposits of Upper Cretaceous, Tertiary, and Quaternary age (LSA Associates 2002).

Physiographically, the project site elevations range from 2,000 to 2,500 feet above mean sea-level. The area consists of an uplifted area that has been heavily dissected by numerous drainages. The overall topography slopes to the west-southwest, however, the local topography is defined in all directions by the dissected valleys. A hilly area, known as the Badlands, is located to the east and south of the site, and the San Jacinto Mountains are situated approximately 6-miles to the southeast. The San Bernadino Mountains are situated approximately 8-miles to the north and northeast (LSA Associates 2002).

FAULTING AND SEISMICITY

The City of Calimesa is located near the northwestern end of the San Gorgonio Pass. This area is bounded by two of the most active faults in southern California, the San Andreas fault on the northeast, and the San Jacinto fault on the southeast. The project site is located in a structural trough that is bound by the Banning fault, which trends to the southeast, and the San Jacinto and Claremont faults, located approximately 4-miles to the south-southwest. Portions of both the Banning and the San Jacinto faults are components of the San Andreas Fault Zone (LSA Associates 2002). The Beaumont Plains fault system has also been mapped east of the site. These faults are not considered to be active.

The San Andreas Fault Zone extends from Northern California to near the Mexican border, a distance of about 1,000 miles. Based on its geometry, historical seismicity, and data on how it has broken in past earthquakes, the fault zone has been divided into several segments. In southern California, the San Andreas fault consists of three segments: the Mojave, San Bernadino Moutains, and Coachella Valley segments. The project site is located 8 miles to the southwest of the San Bernadino Mountains segment. This segment is the most complex of the three, consisting of a series of braided fault branches that veer off from the predominantly southeast-northwest trend characteristic of the San Andreas, and bend to a more east-west direction.

In addition to numerous historic earthquakes, twelve major earthquakes have been recorded in the past 2,000 years along the San Andreas fault. The interval between these earthquakes ranged from 100 to 200 years, with a large event occurring, on average, each 132 years. The probability of an earthquake of magnitude 7.5 occurring along the Mojave or San Bernadino segments of the San Andreas Fault Zone between 1990 and 2020 is calculated at 44 percent. Such an earthquake would produce strong ground motion throughout the project area.

The Banning fault is a high angle fault that is older than the San Andreas. The Banning fault has been broken into three segments based on their geologic and geomorphic characteristics and their tectonic history during the last two million years. The western segment, which bounds the project site to the southeast, is considered inactive because it does not break Quaternary alluvium. In fact, the fault zone in this area has no surface expression; the location of the fault had been inferred from gravity data and other indirect geologic evidence (Suncal 2004).

The San Jacinto Fault Zone is part of the San Andreas Fault System. The two fault strands separate near the San Gabriel Mountains, where the San Jacinto fault extends southeastward to form the southwestern boundary of the San Jacinto Mountains and the San Timoteo Badlands. The high seismicity on this fault suggests that in this area of southern California, the San Jacinto fault, rather than the San Andreas fault, forms the margin between the Pacific and North American plates. Several magnitude 6.0 and larger earthquakes have occurred on the San Jacinto fault in the last 200 years. There is also microseismic activity on this fault. The San Jacinto fault is also divided into several segments, including the Claremont fault.

The Claremont fault segment bounds the project site to the south-southwest. This northwest segment of the San Jacinto fault is thought capable of generating a maximum credible earthquake of magnitude 7.0.

The Beaumont Plain Fault Zone consists of a series of north-northwest trending fault scarps that offset Quaternary alluvium approximately 0.5 million years old (late Quaternary). The faulting mechanism for these faults is not well understood. However, the faults appear to have formed as normal, dip-slip displacements associated with an extensional regime (Calimesa 1994). The longest of the faults that form the Beaumont Plain zone could cause a maximum credible earthquake of magnitude 6.3.

Based on the report prepared for Suncal Companies, the project site is not underlain by known active faults (i.e., faults that exhibit evidence of ground displacement during the last 11,000 years). The site is not located within an Alquist-Priolo Earthquake Fault Zone.

The project site is located within Seismic Zone 4 of the Uniform Building Code (UBC) (UBC 1997). UBC Seismic Zones are based on the probability of expected intensity of ground shaking due to an earthquake. Seismic Zone 4 corresponds to regions where expected peak acceleration (as a fraction of gravity, g) is greater than 0.3g. A site acceleration of 0.7g has been determined for the project site (Suncal 2004).

SOILS AND STABILITY

The site-specific geologic structure is represented by gently to moderately rolling, Pliocene-Pleistocene-age hills composed of San Timoteo Formation that represents highly dissected, very old alluvial fan deposits. The alluvial fan formation likely originated from erosion of the surrounding mountains. The San Timoteo Formation consists of sandstone, conglomerates, siltstone, and shale. The formation also contains the Burnt Canyon Breccia and Heights Fanglomerate. The valleys are filled with Holocene alluvium which consists of sand, gravel, silt, and mud derived from erosion of the surrounding hills (LSA Associates 2002). Table 4.5-1 identifies the local geologic units and their characteristics.

Table 3.5-1
Geologic Units and Geotechnical Characteristics

Geologic Unit	Age	Lithologic Description	Occurrence
Topsoil	Recent	1-2 ft mantle overlying parent unit. Dark brown silty sand; loose, highly compressible, varies from dry to wet. Where located over San Timoteo Formation is red-brown, clayey sand with gravel, slightly moist, moderately dense, visible porosity, abundant secondary clay development.	Throughout majority of site.
Artificial Fill	Recent	Derived from on-site soils with similar characteristics.	Associated with small earthen dams in many areas.
Alluvium	Recent-Holocene	Silty sands with some gravel and occasional cobbles. Loose to medium dense, porous, slightly moist to wet.	Within streambeds and tributary drainages extending to depths exceeding 48 ft.
Colluvium	Recent-Holocene	Silty sand and gravelly sand with some clay and cobbles. Red-brown to brown, highly porous, dry to slightly moist.	Within streambeds and tributary drainages.

Geologic Unit	Age	Lithologic Description	Occurrence
Older Alluvium	Pleistocene	Reddish brown, silty clayey sands, some sand lenses. Moderately dense to very dense, moist. Base of unit marked by coarsening of clast size.	Up to 30 ft thick overlying San Timoteo Formation.
San Timoteo Formation	Pliocene-Pleistocene	Thickly interbedded to interlensed light yellow-brown to light grey, and light red brown conglomerate, and fine to medium grained clayey sandstone. Some light yellow brown to red brown sandy siltstone beds. Moderately hard and slightly cemented. Gravelly sandstone lenses are friable with low cohesion.	Throughout the project site.

Source: Suncal Companies, Geology and Geotechnical Summary Report, 2004.

The project site generally slopes gently to the southwest toward San Timoteo Creek. The majority of the slopes vary from flat to gently sloping in the canyon bottoms, and from 3:1 to 2:1 slope ratios along the ascending natural slopes. Localized areas of recent erosion have produced near vertical slope faces within some alluvial canyons. Near vertical slopes of up to 20 feet high exist in a portion of a canyon located within the southeast portion of the site. In addition, headword erosion of the major reentrant drainages has produced some slope areas steepened to ratios of approximately 1:1.

Most of the tributaries on-site are filled with loose, unconsolidated deposits that have the potential to liquefy. Various engineering geology and geotechnical studies conducted in Oak Valley have confirmed the presence of liquefiable soils in the canyon bottoms (Calimesa 1994). Where groundwater is within 30 feet of the surface, these soils are considered to have a high to very high liquefaction susceptibility. Areas underlain by loose unconsolidated deposits and where groundwater is between 30 and 50 feet of the ground surface, are considered to have a moderate liquefaction susceptibility. Areas underlain by older alluvium and sediments of the San Timoteo Formation are considered to have a low liquefaction potential, since these deposits are generally consolidated, and typically occur in areas where the groundwater table is 50 feet or more below the ground surface.

Site specific investigations suggest that some soils within the project site may be susceptible to significant consolidation and hydrocompaction. In general, these materials appear to be limited to the younger alluvium on the floors of major drainages. The settlement potential of the San Timoteo Formation and other bedrock materials within the project site is low (Calimesa 1994).

Geologic and engineering reports indicate that soils within the project site generally have a low shrink-swell potential. However, soils developed on older alluvium and the San Timoteo Formation may have well-developed clay-rich horizons that may be expansive within about five feet of the surface.

REGULATORY SETTING

The Safety Element of the City's General Plan identifies several policies pertaining to ground motion, fault rupture, liquefaction, and other geologic hazards. The Safety Element establishes Goal 1 for Seismic

and Geologic Hazards to "Minimize injury and loss of life, property damage, and other impacts caused by seismic shaking, fault rupture, ground failure, and landslides" and establishes policies in accordance with this goal.

The proposed specific plan amendment specifies regulations for hillside development. They address the concerns of seismic sensitivity and soil instability of the hillsides and mountainous areas and provide guidelines and options for development in these areas. The regulations are necessary in order to implement the policies and goals of the City's General Plan and to provide consistency between the General Plan and zoning in the City, as required by State Law.

The regulations include design criteria and requirements for phasing of grading for erosion control, approved haul routes for cut-and-fill materials, contour grading for areas of 16% slope and greater, slope placement and maintenance, landscaping and automatic sprinklers, and curb cuts. The regulations also establish a maximum cut-and-fill slope of 2:1 and 3:1 for fill slopes, define prohibited development/grading locations, and set standards for maximum slope heights. In addition, the regulations for hillside development prohibit grading operations until an erosion control plan has been prepared and submitted to the City Engineer. The plan shall establish best management practices (BMPs) to avoid adverse effects caused by rain, wind, or other weather as defined in the Riverside County Drainage Area Master Plan as required by the National Pollutant Discharge Elimination System (NPDES). Along with the erosion control plan, proof of the completion of required permits and notifications must be submitted to the City Engineer prior to the issuance of a grading permit.

The proposed project would be consistent with these and other relevant policies, plans, and ordinances related to geology and soils.

3.5.3 THRESHOLD OF SIGNIFICANCE

A significant adverse environmental impact would occur if the project results in any of the following:

- Major geologic hazards, including strong seismic groundshaking, ground failure such as liquefaction and landslides;
- Substantial soil erosion or the loss of topsoil;
- Development in an area with a geologic unit or soil that is unstable or could become unstable as a result of the proposed project, potentially resulting in landslides, lateral spreading, subsidence, liquefaction, or collapse;
- Development in an area with expansive soils, creating substantial risks to life or property;
- Disturb or eliminate unique geologic or topographic features; and/or
- Soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available.

3.5.4 PROJECT IMPACTS

Impact GS1 Potential impacts related to faulting and seismicity (including liquefaction) could occur with project implementation.

Faults are fractures or zones of fracture along which displacement of one side occurs, relative to another side. This displacement can take a number of forms, including vertical, horizontal, or a combination of displacement directions. The site is within a seismically active area and is within 6 miles of an active fault. The potential for strong ground motion to affect future project improvements is substantial. However, all structures would be designed in accordance with the prevailing seismic design codes and the requirements of the Uniform or California Building Code and those of the local governing agency would be considered in the project design. Following compliance with design regulations, no significant impacts from ground motion would occur.

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate surface faulting hazards associated with structures intended for human capacity. As discussed above, there are no known or observed active faults within the project site and the project site is not located within an Alquist-Priolo Fault Zone. Therefore, surface rupture is not considered a risk at this site and no significant impacts would occur.

Ground motion can cause a range of ground failures, including liquefaction. Liquefaction is the loss of soil strength from sudden shock (usually earthquake shaking), causing the soil to become a fluid mass. Research and historical data indicate that loose granular soils and non-plastic silts that are saturated by a relatively shallow groundwater table are most susceptible to liquefaction. Ground motion can also cause dry sands to settle and densify. The amount of subsidence is dependant on relative density of the soil, ground motion, and earthquake duration. Areas of topsoil, partially saturated alluvium, colluvium, and highly weathered older alluvium or San Timoteo Formation are unsuitable soils that are susceptible to liquefaction and subsidence. In addition to the goals and policies established in the City's General Plan, complying with MM-GS1-1 through MM-GS1-3 will reduce the potential impact associated with liquefaction to less than significant.

Impact GS2 Potential impacts related to soils and stability (i.e., seismically induced landslides) could occur with project implementation.

Seismically induced landslides can occur when ground motion causes unstable or steeply sloping and loosely aggregated soils and rocks to move downslope under the force of gravity. No evidence for landslides was exhibited during on-site visits or aerial photo review (Suncal 2004); however, steeply sloping alluvium exists in some of the canyons. After complying with MM-GS2-1 and MM-GS2-2, seismically induced landslides would be less than significant.

Expansive soils are soils such as clay, claystone, and shale which will swell when saturated and shrink when dried. The vast majority of the on-site subsurface materials encountered to date are very low to low in expansion. It is anticipated that this condition will likely continue to be the case until the completion of the project (Suncal 2004). No significant impacts are anticipated as a result of expansive soils.

A sewer and drainage study was conducted for Suncal Companies. The project would implement a sewer system in anticipation of site needs. No impact would result from any unsuitability of soils to support a septic tank or alternative wastewater disposal system. No mitigation is required.

Areas of recent erosion exist in the alluvial valleys of the site. The granular silty sands of alluvium and fill material are especially susceptible. Development within the proposed project location would be required to meet or exceed the City's grading and landscaping requirements established in the City's Specific Plan Amendment No. 1. In addition, compliance with NPDES permit and Stormwater Pollution Prevention Plan (SWPPP) requirements and use of construction BMPs would reduce potential impacts related to soil erosion to less than significant. No mitigation is required.

The proposed project would require extensive mass and remedial grading of the site to accommodate the development. The Applicant estimates that mass grading of about 25 million cubic yards of cut and fill would be required. Remediation of poor soil conditions on the site could amount to about 18 million cubic yards of the total. In order to ensure that the project is developed to an adequate factor of safety, all grading shall be accomplished in accordance with engineering geotechnical studies and under the supervision of a certified engineering geologist (as provided in MM-GS2-3).

Impact GS3 Potential impacts to unique geologic or topographic features could occur with project implementation.

The United States Forest Service maintains a list of Special Interest Areas (SIAs). SIAs are managed to protect or enhance their unique characteristics. Typically, they contain unique botanical, geological, historical, scenic, or cultural values. In addition, the National Parks Service maintains a list of National Natural Landmarks. No features within the boundaries of the project site are located on either list. No impact to unique geologic or topographic features would occur.

3.5.5 CUMULATIVE IMPACTS

Impact GS4 Potential cumulative impacts could result with project implementation.

Generally, geology and soils impacts are site-specific and would be limited to within the development boundaries of the proposed project site. Therefore, no cumulative geology and soils impacts are anticipated beyond the site specific impacts noted above.

3.5.6 MITIGATION MEASURES

FAULTING AND SEISMICITY

MM-GS1-1 The removal of all topsoil, partially saturated alluvium, colluvium, and highly weathered older alluvium and San Timoteo Formation shall be required under all structural fill areas from an estimated range of 1 to 40 feet.

MM-GS1-2 Unsuitable soils shall be excavated and compacted using conventional grading techniques.

MM-GS1-3 Post-Tensioned slab/foundation systems shall be used for all structures to be constructed over areas of shallow groundwater and left-in-place alluvium.

SOILS AND STABILITY

MM-GS2-1 Proper grading in accordance with the State of California Special Publication 117 shall be required of all sloped terrain.

MM-GS2-2 Conventional shallow foundations and slab-on-grade or post-tensioned slab/foundations shall be utilized for single-family residential structures.

MM-GS2-3 Project mass grading and rough grading for individual development projects shall be done in conformance with a detailed Geotechnical and Soils Engineering Study. The study shall be approved by the City Engineer prior to issuance of grading permits and shall address potential hazards associated with groundshaking, secondary seismic hazards, slope stability, and public safety. Such studies shall:

- Conform to code requirements, standards and guidelines of the City of Calimesa;
- Fully and accurately reflect site conditions and hazards; and
- Include all mitigation measures necessary for reducing risks posed by geologic hazards on the project site.

MM-GS2-4 All site grading shall be accomplished under the supervision of certified engineering geologist.

3.5.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The mitigation measures would require that appropriate design features would be incorporated into the proposed project plans and specifications. Adherence to applicable regulations and BMPs would prevent significant impacts associated with ground motion and erosion. Compliance with the mitigation measures would reduce impacts from secondary seismic hazards and landslides to a less than significant level. Impacts related to fault rupture, expansive soils, and unique geologic or topographic features would be less than significant; therefore, no additional measures would be required. Overall, impacts to geology and soils would be less than significant after mitigation.

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3.6 HYDROLOGY AND WATER QUALITY

3.6.1 INTRODUCTION

The proposed project consists of primarily residential uses, with a limited amount of commercial uses. In addition to residential and commercial structures and associated infrastructure, the project's improvements would include channel protection measures, erosion control, various outlet structures, storm drain structures, and slope stabilization. In addition to water quality control measures that comply with current federal, state, and local storm water quality requirements, the project would include site design, source control and treatment, and best management practices (BMPs) as design features incorporated into the project.

3.6.2 EXISTING CONDITIONS

HYDROLOGICAL SETTING

The proposed project site lies within the watershed of the Santa Ana River and its tributaries, defined as the Santa Ana Region. The Santa Ana River and its tributaries drain the southern portions of the eastern San Gabriel Mountains and the southern parts of the San Bernardino Mountains over an area of approximately 2,700 square miles. The proposed project site is situated within the largest underground water basin in the region, the Upper Santa Ana River Basin. Surface and groundwaters in the upper basin eventually flow through Prado Dam, at the head of the Santa Ana River Canyon, and down into the Orange County Coastal Basin, or lower basin (Olson Associates, 1987).

The site is within the San Timoteo Subbasin of the Upper Santa Ana Region. The San Timoteo Subbasin underlies Cherry Valley and the City of Beaumont and covers an area of 73,100 acres. The San Timoteo Subbasin is drained by Little San Gorgonio Creek and San Timoteo Canyon to the Santa Ana River.

SURFACE DRAINAGE

Several natural streambeds are located throughout the proposed project site. The broad flat alluvial plateaus are divided by steep sides and wide bottom ravines that serve as regional and sub-regional drainage courses. A detailed jurisdictional delineation for waters of the U.S. was conducted during the summer and November of 2002.

The Garden Air Wash is the most prominent surface drainage feature located in the northern portion of the project site and ranges from 20 to 40-feet wide. The Garden Air Wash has been classified as an intermittent wetland by the jurisdictional delineation. The Garden Air Wash flows to the southwestern boundary of the project site where there is riparian woodland. The northwestern-most portion of the project site contains two small ephemeral non-wetlands of between 1 to 2-feet wide. Two non-wetlands

waters originate near the eastern boundary of the site and include intermittent non-wetlands and ephemeral non-wetlands. These non-wetlands range from 2 to 20-feet wide and flow west towards a wet meadow located along the southwestern boundary of the project site. An additional ephemeral non-wetland originates near the center of the project site and flows south towards a riparian woodland.

The proposed project site is impacted by several large natural watercourses which originate offsite east of I-10 and traverse the site from east to west. Two of the basins are not located within the proposed project's developed area. The four basins located within the proposed developed area are designated A through D (Keith Companies, 2004). Basins A and C are large watershed areas which extend easterly of I-10. The flow originating in these basins crosses I-10 through existing culverts as it flows from east to west. Basin B originates offsite just west of I-10 at the southeast corner of the project. Basin D has its origin offsite at the southeast corner of the project and discharges southerly into the Oak Valley and SCPGA Golf Course development area (Keith Companies, 2004).

Basin A has a watershed area of 2,823 acres extending to I-10, and a total watershed area of 3,008 acres extending to the project site westerly boundary. Basin C has a watershed area of 1,312 acres extending to I-10, and a total watershed area of 1,578 acres extending to the project site westerly boundary. Basin B, in the developed condition, has a watershed area of 223 acres extending to the project site westerly boundary. Basin D has a watershed area of 83.7 acres extending to the southerly boundary (Keith Companies, 2004).

GROUNDWATER

The groundwater in this area occurs in the 114-square-mile San Timoteo Subbasin, Riverside County (California Department of Water Resources (CDWR), Basin No. 8-2.08). The surface of this subbasin is drained by Little San Gorgonio Creek and San Timoteo Canyon to the Santa Ana River. Groundwater is found in Holocene alluvium and Pliocene-Pleistocene age San Timoteo Formation. Groundwater is replenished by subsurface inflow and percolation of precipitation, runoff, and imported water. Average annual precipitation ranges from 12 to 14 inches in the western part to 16 to 18 inches in the eastern part of the subbasin. Runoff and imported water are delivered to streambeds and spreading grounds for percolation (DWR, 2003).

Depth to groundwater information was obtained from the San Gorgonio Pass Water Agency (SGPWA) for numerous domestic and agricultural wells located within or near the project site. Data from these wells indicates groundwater depths to occur between 50 and 100 feet below ground surface (bgs) across the site. Perched groundwater has occurred at shallow depths in the southwest area of the project site, ranging in depth from three to eight feet bgs. Groundwater flow in the shallow area has been mapped in a west-northwest direction. Groundwater flow in the San Timoteo Subbasin is towards San Timoteo Canyon, then northwesterly along the canyon to Bunker Hill Subbasin (DWR, 2003).

FLOODING

A portion of the project site is located within the 100-year flood zone as established by the Federal Emergency Management Agency (FEMA). This portion is the Garden Air Wash located in the northern area of the project site, running east-west along the northern boundary. There are no major reservoirs in the City or upstream of the City that may be subject to failure; however, there are several small reservoirs, or ponds, used for stock water and/or wildlife management. The estimated maximum height of the waves generated in these small reservoirs due to seismic activities would be approximately 1.5 feet.

REGULATORY SETTING

Storm runoff from the proposed project site, and discharges of runoff into and/or encroachment upon natural drainages, wetlands, and/or flood plains are subject to the requirements of the federal Clean Water Act (CWA) and associated regulations, and to the requirements established by the EPA, SWRCB, RWQCB, and the City of Calimesa. In addition, intrusions into jurisdictional areas are subject to the requirements of the Clean Water Act, Sections 1600-1607 of the State Fish and Game Code, and to requirements established by the Army Corps of Engineers (ACOE) and California Department of Fish and Game (CDFG).

The CWA prohibits discharge of pollutants by municipal facilities and construction activities to waters of the U.S. unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) Permit. Section 402 requires that municipal separate storm sewer system (MS4) discharges to surface waters be regulated by a NPDES permit. The State of California has authority for an NPDES program and the SWRCB, through the RWQCB, Santa Ana Region (Region 8) has the authority to regulate and control the discharge of pollutants.

The SWRCB issues General Construction Activity Storm water Permits for construction sites with a disturbed area of one or more acres. Under the General Construction Activity Storm water Permit, a Storm Water Pollution Prevention Plan (SWPPP) must be prepared which relies on best management practices (BMPs) to control pollutants.

The project would also be subject to federal permit requirements under Section 404 of the CWA. Section 404 of the CWA regulates activities that result in the location of a structure, excavation, or discharge of dredged or fill material into waters of the U.S., which include wetlands along with non-wetland habitats, such as streams (including intermittent streams), rivers, lakes, ponds, over which the ACOE has jurisdiction. Drainages being altered, crossed, or discharged to, are subject to ACOE permits and requirements.

Drainages on-site and associated vegetation are potentially subject to regulation by the California Department of Fish and Game (CDFG) under Sections 1600-1616 of the California Fish and Game Code. The CDFG regulates activities that would alter the flows, beds, channels, or banks of streams and lakes.

This includes intermittent and ephemeral streams, rivers, creeks, dry washes, sloughs, blueline streams, and watercourses with subsurface flows.

PROJECT DESIGN FEATURES

The project is proposed for development into primarily residential uses. The proposed project has incorporated design criteria and architectural standards for grading (discussed in Section 4.5 Geology and Soils) and drainage components to mitigate potential impacts to hydrology and water quality. These design features, established by the Regulations for Hillside Development in the Specific Plan Amendment No. 1, include permanently irrigated slopes, natural slope restoration, slope maintenance, debris basins, rip-rap, energy dissipating devices, drainage channels, and natural drainage preservation (T & B 2004). The regulations also require that significant natural drainage courses shall be protected from grading and man-made facilities, except where necessary for flood control facilities.

3.6.3 THRESHOLD OF SIGNIFICANCE

A significant adverse environmental impact would occur if the project results in any of the following:

- Violate any water quality standards or waste discharge requirements;
- 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);
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner that would result in substantial erosion or siltation on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site;
- 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;
- Otherwise substantially degrade water quality;
- 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;
- Place within a 100-year flood hazard area structures that would impede or redirect flood flows;
- 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; or
- Inundation by seiche, tsunami, or mudflow.

3.6.4 PROJECT IMPACTS

Impact HW1 The construction and operation of the proposed project would increase the potential for impacts to surface drainage.

Several drainage courses are present within the limits of the proposed project site. Implementation of the proposed project will introduce impermeable surfaces in an area where such surfaces are nearly absent. The installation of impermeable surfaces generally increases the volume, rate, and course of surface flows. Any such alteration of surface flows may increase the potential for on-site and/or off-site erosion or flooding. Grading during construction also would increase the potential for erosion and sedimentation of water courses. The proposed project is required to address prevention of deleterious effects of erosion and runoff through preparation and implementation of an NPDES permit under Section 402 of the Clean Water Act (including preparation of a SWPPP and implementation of BMPs). The Summerwind Specific Plan has developed an approach to development of the site that includes specific design criteria and regulations for Hillside Development. The implementation of specific plan hillside grading requirements will ensure that grading and runoff or handled in a manner that prevents significant impacts. Mitingation of potential erosion and sedimentation during construction through implementation of BMPs for storm water management are to be addressed in the required SWPPP (MM HW1).

The proposed project includes the extension of Singleton Road through the project site to the southwestern boundary of the site. The road would cross an area of wet meadow along the southwestern portion of the site. Construction affecting the wet meadow would be subject to permitting by the ACOE under Section 404, the Regional Water Quality Control Board under Section 401, and the CDFG under Section 1600. These permits regulate discharges to waters of the U.S. and alteration of drainages or habitats. Adherence to the regulations established in these permits would be required for the proposed project.

The proposed project may include the extension of Roberts Road to continue to the northern portion of the project site, crossing the Garden Air Wash. Because the Garden Air Wash is classified as an Intermittent Wetland, should developers extend Roberts Road over the Garden Air Wash, a Section 404 permit would need to be obtained from the ACOE. However, the feasibility of this crossing and the ability to obtain the proper permit is not known. Garden Air Wash is a key feature of the critical wildlife linkage in the MSHCP, which could be adversely affected by structures through the wash. In addition, any alteration of the Garden Air Wash would be subject to a Section 401 certification from the RWQCB and a CDFG Section 1600 permit. Adherence to the regulations in these permits would be required of the proposed project should construction cross the Garden Air Wash.

Implementation of the proposed project would result in the modification of the existing topography of the project site and the replacement of existing permeable surfaces with impermeable surfaces on a significant portion of the project site. These actions would alter the direction, rate, and quantity of surface flows. A storm drain system would be incorporated as part of the proposed project and would be

designed to the capacity of the anticipated amount of runoff. It is a stated purpose of the drainage concept for the specific plan that No significant impacts associated with exceeding existing or planned storm water drainage capacity are anticipated.

Impact HW2 The proposed project could potentially result in impacts to water quality.

The proposed project would generate pollutants typical of urban residential and small commercial areas both during construction, and after the site is built and occupied. Storm water discharges consist of surface runoff generated from various land uses in the hydrologic drainage basins that discharge into water bodies of the state. The quality of these discharges varies considerably and is affected by the hydrology, geology, land use, season, and sequence and duration of hydrologic events. Pollutants in storm water can have damaging effects on both human health and aquatic ecosystems. Absent special measures, development and urbanization typically increase pollutant loads for certain pollutants, volume, and discharge velocity of storm water runoff. First, natural vegetated pervious ground cover is converted to impervious surfaces such as paved highways, streets, rooftops, and parking lots. Second, urban development can create new storm water pollution sources as the increases density of human population brings proportionately higher levels of vehicle emissions, vehicle maintenance wastes, pesticides, household hazardous wastes, trash and other anthropogenic pollutants.

The proposed specific plan drainage concept provides for protection of natural drainage features on site and protection of water quality. Garden Air Wash will be preserved as open space and would not incur grading or streambed alteration except for possible improvement of Roberts Road. The two major drainages on the interior of the site would include detention basins that would retain and reduce the effect of first flush storm water runoff. In the central portion of the site, the detention basin would also be developed with a natural streambed near the lower end of the area to encourage adsorption of pollutants prior to discharge to San Timeteo Creek. In the southern portion of the site, a second basin would intercept flows from developed areas and utilize a natural stream bed to reduce first flush water quality impacts prior to discharge to San Timeteo Creek. The two detention basins would be sized to be compatible with the natural drainage course

The Regional Water Quality Control Board (RWQCB) issues National Pollutant Discharge Elimination System (NPDES) permits under the Clean Water Act to regulate waste discharge to waters of the nation. Waste discharge includes discharge of storm water and construction project discharges. The proposed project would be required to prepare and implement a SWPPP and apply for a NPDES permit. Adherence to the regulations and requirements established by the SWPPP and the NPDES permit would reduce the impacts to water quality and discharge requirements to a less than significant level.

Impact HW3 The project could potentially result in impacts to groundwater.

Implementation of the proposed project would add impervious surfaces to a site where uncovered soils currently allow the infiltration and percolation of surface water into groundwater reservoirs. A minimum

of approximately 358 acres, with an additional 581 acres if the Riverside Land Conservancy option land is exercised, would be utilized as natural open space. Additionally, varying amounts of land dedicated for residential, park, and school uses would be covered with permeable surface areas that allow for the movement of surface water to groundwater tables.

Existing drainage courses would generally be maintained as riparian corridors, thereby retaining an important infiltration path. Because the project would incorporate features that limit the flow of surface water to pre-development levels, such as retention/detention basins, and/or hasten the on-site absorption of water, the discharge of surface flows from the project site would not exceed that which currently exists. While a portion of the project site would be covered with impermeable surfaces, the combination of open space, golf course, park, school, and residential areas covered in permeable surfaces would reduce potential impacts to groundwater supply and recharge rate to less than significant.

Impact HW4 The project could potentially result in impacts from flooding.

The Federal Emergency Management Agency (FEMA) prepares Flood Insurance Maps that depict designated 100-year flood zones. Flood maps indicate where the flood risks are based on local hydrology, topography, precipitation, flood protection measures such as levees, and other scientific data. The developed area of the proposed project site is not located on a Flood Hazard Zone map as designated by FEMA. Because the developed area would not be located within a 100-year flood hazard area, no housing or structures would be located within a flood hazard zone. No significant impact to housing or from structures redirecting flood flows would occur. No mitigation is needed.

A seiche is an underwater, irregular fluctuation or rhythmic rocking of the water level of a lake often caused by earthquakes, wind, or underwater landslides. Small rhythmic seiches are almost always present on larger lakes, and the frequency of the oscillation is determined by the size of the body, its depth and contours, and the water temperature. Seiches can cause flooding if the level of water oscillates higher than the level of the lake. No major reservoirs are located within the City or upstream of the City; therefore, no impacts associated with inundation would occur. In addition, the design, construction, placement, and maintenance of any water retention/detention facility would be required to adhere to applicable City, County, and UBC standards and requirements to reduce potential impacts associated with inundation from a seiche, mudflow, or dam failure to a less than significant level.

3.6.5 CUMULATIVE IMPACTS

Impact HW5 Potential cumulative impacts could result with project implementation.

Impacts to hydrology and water quality are specific to the site and its waters. Impacts resulting from the proposed project are less than significant and due to their localized nature, would not have any cumulative impacts to hydrology and water quality.

3.6.6 MITIGATION MEASURES

MM HW1-1 Construction and development of all phases shall comply with the National Pollutant Discharge Elimination System (NPDES) regulations. Prior to the issuance of a grading permit, applicants shall demonstrate compliance with NPDES Storm water Permit requirements to the satisfaction of the City of Calimesa. Applicable BMP provisions as developed through the specific plan drainage concept and City requirements shall be incorporated into the NPDES Permit.

MM HW1-2 Individual projects within the specific plan area shall be reviewed by the City of Calimesa for the inclusion of appropriate structural and non-structural Best Management Practices (BMPs) to control storm water discharges and protect water quality. Structural controls may include, but are not limited to filtration, common area efficient irrigation, common area runoff-minimizing landscape design, velocity dissipation devices, oil/grease separators, inlet trash racks, and catch basin stenciling. Non-structural BMPs can include education for property owners, tenants and occupants, activity restrictions, common area landscape management, litter control, and catch basin inspection, BMP maintenance; and street sweeping.

The following are examples of BMPs that may be included within NPDES permit requirements for individual projects:

- Use of sand bags and temporary desilting basins during project grading and construction during the rainy season (October through April) to prevent discharge of sediment-laden runoff into storm water facilities.
- Installation of landscaping as soon as practicable after completion of grading to reduce sediment transport during storms. Or application of approved soil binders on graded building pads if they are not built upon before the onset of the rainy season.
- Incorporation of structural BMPs (e.g., grease traps, debris screens, continuous deflection separators, oil/water separators, drain inlet inserts) into the project design to provide detention and filtering of contaminants in urban runoff from the developed site prior to discharge to storm water facilities.

The City shall review subsequent development projects within the specific plan area for the application of Best Management Practices (BMPs) to reduce water pollution from urban runoff. The specific measures to be applied shall be determined in conjunction with review of required project hydrology and hydraulic studies, and shall conform to City standards and any Drainage Area Management Plan under the NPDES program.

3.6.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Taking into account the project's non-structural and structural (treatment) BMPs, design features, and mitigation measures, the following analysis concludes that project hydrology and water quality impacts would be less than significant. The project would meet all applicable regional and local water quality requirements of the State Water Resources Control Board (SWRCB), the RWQCB, the NPDES, the County of Riverside, and the City of Calimesa during both construction and operation of the project.

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3.7 LAND USE AND PLANNING

3.7.1 INTRODUCTION

This section of the EIR analyzes land use compatibility between the proposed project and the City's land use policies. The analysis also addresses on-site and off-site land uses that surround the project site and their relationship with the proposed project.

3.7.2 EXISTING CONDITIONS

ON-SITE LAND USES

The approximately 2,590.7-acre Summerwind Ranch at Oak Valley project site is generally undeveloped, with a small portion of the project site used for agricultural and rural residential uses. The site is characterized by moderately rolling hills and ridgelines, traversed by broad valleys and narrow ravines, and scattered with oak trees and scrub vegetation. The site slopes generally toward the southwest, with natural streambeds and drainage basins throughout. The project site contains 167 wildlife species, as observed on field surveys, and approximately 83 acres of jurisdictional "Waters of the U.S." including wetlands. The project area is categorized by the City in the General Plan as "V," Vacant, on the Existing Land Use Map (City of Calimesa 1994).

SURROUNDING LAND USES

The Summerwind Ranch at Oak Valley site is surrounded by undeveloped open space to the north, west, and southwest. The Norton Younglove Reserve is located to the southwest, and San Timoteo Canyon State Park is located to the west of the project site. Future development is planned within the City of Calimesa adjacent to the northerly boundary of the Specific Plan Amendment area. To the north of the project site and west of I-10 is a community of approximately 100 mobile homes. East of I-10 and northeast of the project site are single family homes and a golf course. Directly east of the project site and I-10 are modular homes, mobile homes, and single family homes in varying densities. Oak Valley Champions Area in the City of Beaumont is located to the south and southeast of the project site. Oak Valley Champions Area is a master planned golf course community that, when completed, will contain a mix of open space, residential, golf course, and commercial uses (refer to Figure 2-5 in Section 2.0).

REGULATORY FRAMEWORK

The Oak Valley Specific Plan 216 was adopted by the Riverside County Board of Supervisors in 1988 for over 6,405.5 acres of land in areas that have since been incorporated into the Cities of Calimesa and Beaumont. Subsequently, Oak Valley Specific Plan Amendment 216A was approved by the Riverside County Board of Supervisors on May 22, 1990 for Phases 2 through 5 of the original Oak Valley Specific Plan 216. Upon incorporation of the City of Calimesa in 1990, those portions of the Specific Plan 216

and 216A and its accompanying EIR that were situated within the newly incorporated city limits, were adopted by the City of Calimesa City Council and renamed as "Oak Valley SP 1." SP1 was included as a Specific Plan in the City's General Plan, which was adopted on April 4, 1994.

City of Calimesa General Plan

The City of Calimesa General Plan is the primary policy document providing framework for management and utilization of the City's physical, economic, and human resources. The General Plan consists of seven elements: Land Use, Transportation, Housing, Resource Management, Public Safety, Noise, and Air Quality. Each element contains goals and policies which provide guidelines for development within the City. The General Plan Land Use Element provides goals, policies, and objectives for the long-term physical development of the City. The Land Use Element is implemented by the City Zoning Ordinance and Zoning Map. These documents reflect SP1 for the Summerwind Ranch at Oak Valley project area.

SP1 is included in the General Plan and provides the applicable zoning and land use designations for the project site. As described in Section 2.0, Project Description, SP1 designated twelve land use types for the Summerwind Ranch project site including Low Residential, Medium Residential, Medium High Residential, High Residential, Commercial, Parks, Golf Course, Open Space, and Public Facilities/Fire Station.

The Summerwind Ranch at Oak Valley Specific Plan would serve as the updated Specific Plan for the project site, overriding the zoning and land use designations of the previously approved SP1. The proposed Summerwind Ranch at Oak Valley Specific Plan alterations are described in detail in Section 2.0, Project Description. The impacts of the proposed alterations are addressed below in the impacts section.

City of Calimesa Oak Tree, Oak Woodlands Preservation and Protection Ordinance

As part of the City of Calimesa planning and zoning regulations, the Tree Preservation Guidelines (Section 9.14.12 of Title 9 Planning and Zoning) of the Calimesa Municipal Code was adopted in 1994. The guidelines provide for the preservation of trees and particularly certain oak trees in conjunction with the issuance of a development or construction permit.

The City Council of the City of Calimesa has determined that oak trees are an asset to the community, providing shade and aesthetic quality and benefiting the air quality in the City. The City Council has further made the finding that the City's oak tree preservation regulations are not as stringent as they could be; therefore, the guidelines are currently being revised to include additional restrictions that would deter removal and destruction of the City's oak trees.

Recognizing the significance of the oak trees in the City and within the proposed project site, the proposed Amendment No. 1 includes an oak tree protection plan (Section VII of the Specific Plan

document), which seeks to protect the trees and provide measures to mitigate adverse impacts to native oak trees. An oak tree inventory was also prepared as part of the project initiative to protect the oak trees on-site. For additional information on project impacts and mitigation, please refer to Section 3.3, Biological Resources.

3.7.3 THRESHOLD OF SIGNIFICANCE

A significant adverse environmental impact would occur if the project would:

- Physically divide an established community;
- 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;
- Conflict with adopted environmental plans and goals of the community where it is located;
- Conflict with established recreational, educational, religious, or scientific uses of the area; and/or
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

3.7.4 PROJECT IMPACTS

Impact LU1 Implementation of the proposed project has the potential to affect the surrounding land uses during construction and operations.

The proposed project site is generally undeveloped, but it is surrounded by a variety of uses, including open space, a golf course, and residential neighborhoods. The proposed development includes ample natural open space within and along the perimeter of the site interfacing with the adjacent uses. Additionally, the specific plan document includes detailed and comprehensive guidelines and standards, in line with the natural and rural theme of the project that will ensure compatibility with the surrounding uses. Therefore, development of the proposed project would not interfere with or divide any established communities. Additionally, the proposed project includes the development of a water reclamation facility, which would serve the project area and surrounding land uses. This would result in a beneficial impact to surrounding land uses. The proposed project would have a less than significant environmental impact related to the surrounding uses.

Impact LU2 The proposed project would require amendment of the City's General Plan.

The proposed Summerwind Ranch at Oak Valley Specific Plan Amendment No. 1 would involve amending the General Plan Land Use Element, in response to the existing environmental constraints of the project site. Additionally, the project includes an amendment to the Circulation Element of the General Plan to implement the improvements and alignments proposed.

The proposed plan would develop a compatible set of residential, commercial, public, and open space uses that are consistent with the existing landscape features and constraints of the site. The Summerwind Ranch at Oak Valley project includes revisions to Specific Plan Area No. 1 regarding 1) the distribution, extent and/or residential density; 2) the amount, type and distribution of non-residential land (commercial, business park, schools, and public facilities); 3) the amount and distribution of parks and open space; and 4) the alignment of the internal roadway network with the project site. As shown in Table 3-1, in Section 3.0, Project Description, the Summerwind Ranch at Oak Valley project would result in an overall decrease of developed land and an overall increase in open space as compared to the Specific Plan Area No. 1.

Summerwind Ranch at Oak Valley would include a decrease in the number of residential dwelling units from 5,935 dwelling units on 1,662 acres to 3,683 dwelling units on 677.0 residential acres. Should the school district decide to not locate facilities within the community, an additional 46.2 acres (158 dwelling units) would become available for residential uses (for a total of 3,841 residential units). The Town Center, which would contain commercial and business park uses, would comprise 129.5 acres of commercial uses and 130.1 acres of business park uses. Overall open space acreage would increase from 1,046.8 acres to 1,493.1 acres. Consistent with Specific Plan Area No. 1, Summerwind Ranch at Oak Valley includes a Wastewater Treatment Plant, to be located near the western boundary of the project site. As discussed in section III.A.1(c) of the Summerwind Ranch at Oak Valley Specific Plan, the Land Use Development Standards of the proposed Specific Plan would be implemented through the Summerwind Ranch at Oak Valley Zoning Ordinance, which may meet or exceed the requirements of the City's Zoning Ordinance (T&B Planning Consultants 2004). Because the Summerwind Ranch at Oak Valley Specific Plan has been prepared in accordance with existing General Plan policies, the proposed project would be consistent with the City's General Plan. Therefore, environmental impacts related to land use are less than significant.

Impact LU3 The proposed project would require amendment of the adopted specific plan for the project site, SP1.

Zoning and land use designations for the project site, are currently implemented by SP1, which includes a variety of land uses. The proposed project would take the place of the existing SP1, thus creating new zoning and land use designations for the Summerwind Ranch at Oak Valley project site. The proposed project would include land use designations that are generally consistent with SP1. The proposed Town Center, which includes all of the site's proposed commercial and business park uses, would continue to be located along the I-10 corridor and near main circulation nodes. The Town Center's footprint would remain generally the same, with the exception of a potential wildlife corridor near the southeastern end of the project site (Figure ES-3, Site Plan). The site's residential footprint would be substantially reduced, creating additional open space, particularly along the northern east-west corridor of the site and the southern portion of the site, bordering the Oak Valley Champions Area. As a consequence of the changes to the layout of development, the project's circulation system has been updated. The updated system, discussed in Section 3.10, Transportation/Traffic, would more effectively serve the project's updated land use layout.

As stated above, the Summerwind Ranch at Oak Valley Specific Plan would serve as the updated Specific Plan for the project site, thus overriding the existing SP1 zoning and land use designations. The proposed Summerwind Ranch at Oak Valley project has been designed to improve compatibility with the natural conditions of the project site, including topography, drainage, hillsides, and biological resources, as compared to the existing SP1. Environmental impacts related to consistency with the General Plan and associated land use plans would be less than significant.

Impact LU4 The proposed project would substantially add to the City's dedicated open space inventory but would provide land use development within the area covered by the Western Riverside Multi-species Habitat Conservation Plan.

The Summerwind Ranch at Oak Valley project would be developed in five phases over a total of approximately 15 years. Project phasing corresponds with the development of each residential village, with portions of the Town Center being developed concurrently with each residential phase. Phasing allows for the Specific Plan to be built-out in an effective order, ensuring that appropriate infrastructure is provided in accordance with housing development, in preparation for subsequent population inducement. As stated above, the proposed project is consistent with applicable land use plans. Additionally, the phasing of the project would allow for the modification of applicable environmental plans and goals over time, as necessary. As such, environmental impacts are considered less than significant.

The project site is generally undeveloped, with the exception of scattered agricultural and ranching structures and homes. There are no established recreational, educational, religious, or scientific uses on the project site. Therefore, the proposed project would not conflict with such established uses.

The Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) applies to the project site. The Summerwind Ranch at Oak Valley Specific Plan has been developed in accordance with nine of the ten criteria cells of the MSHCP, with a substantial contribution towards conservation of the tenth cell (Cell 411). The MSHCP aims to conserve 30 to 40 percent of the Cell 411 area, located at the northern portion of the project site in what is referred to as Garden Air Wash. The project site includes 22 acres of Cell 411, and the proposed project would preserve approximately 17 acres (77.2 percent) of this area. Further discussion of the proposed project's consistency with this plan is provided in Section 4.3, Biological Resources. The proposed project would be consistent with the MSHCP, and would not conflict with any adopted or established land use plan. The proposed project would have a less than significant environmental impact regarding established uses and applicable conservation plans.

3.7.5 CUMULATIVE IMPACTS

Impact LU5 The proposed project has the potential to result in cumulative land use impacts.

The proposed Summerwind Ranch at Oak Valley project is a Specific Plan amendment, designed to update the current SP1 as the primary planning document for the project site. As a Specific Plan, the area

would be developed as a comprehensive community, including residential, commercial, business, open space, and public facility uses, all associated circulation elements and infrastructure. The objective of the Specific Plan is to minimize potential impacts to other areas within and outside the City by thorough planning and provision of resources for a plan area. The proposed project is consistent with applicable land use plans for the project site, the City, and the surrounding area, and would implement new land use plans and design standards upon project approval through the adoption of the updated Specific Plan.

Additionally, the City's adopted land use plan for the site proposes a development which has a higher density and utilizes more acreage for development. The proposed project introduces a scenario that is less dense, more compatible with the uses within the area, and maintains more open space. Therefore, the overall impacts of this project to the cumulative growth within the region would be less compared to the adopted land use plan. As the land uses of the proposed project would not conflict with any existing land use plans, would not adversely affect development around the project site or within the region, and would introduce a less dense development, cumulative impacts are considered less than significant.

3.7.6 MITIGATION MEASURES

Environmental impacts related to land use would be less than significant; therefore, no mitigation measures are required.

3.7.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Environmental impacts related to land use remain less than significant.

3.8 NOISE

3.8.1 INTRODUCTION

This noise study has been completed to determine the noise impacts associated with the development of the proposed Summerwind Ranch at Oak Valley development. A noise analysis was prepared by Urban Crossroads, Inc. on November 12, 2004 to evaluate the noise impacts for the project study area and to recommend noise mitigation measures to minimize the identified potential project impacts. The analysis in its entirety is contained in Appendix G of this EIR document, and the findings are summarized in this section.

3.8.2 EXISTING CONDITIONS

NOISE FUNDAMENTALS

Noise can be considered primarily as "unwanted sound." Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm, or when it has adverse effects on health. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise sources by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear.

Noise Descriptors

Equivalent sound levels are not measured directly but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The equivalent sound level (Leq) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period. The peak hour Leq is the noise metric used to collect short-term noise level measurement samples and to calculate the Community Noise Equivalent Level (CNEL). This descriptor is listed here for reference only; as identified in the City of Calimesa General Plan Noise Element, the City relies on the CNEL to assess transportation related impacts on noise sensitive land uses.

The CNEL is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time of day corrections require the addition of five decibels to dBA Leq sound levels in the evening from 7 p.m. to 10 p.m., and the addition of ten decibels to dBA Leq sound levels at night between 10 p.m. and 7 a.m. These additions are made to account for the noise sensitive time periods during the evening and night hours when sound appears louder. CNEL does not represent the actual sound level heard at any particular time, but rather represents the total sound exposure.

Traffic Noise Prediction

The level of traffic noise depends on three primary factors: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the number of trucks in the flow of traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and greater number of trucks. A doubling of the traffic volume (assuming that the speed and truck mix do not change), results in a noise level increase of 3 dBA. The truck mix on a given roadway also has a significant effect on community noise levels. As the number of heavy trucks increases and becomes a larger percentage of the vehicle mix, adjacent noise levels increase. Vehicle noise is a combination of the noise produced by the engine, exhaust, and tires.

Because of the logarithmic nature of traffic noise levels, a doubling of the traffic noise (acoustic energy) results in a noise level increase of 3 dBA. Based on the Federal Highway Administration (FHWA) community noise assessment criteria, this change is considered "barely perceptible."

Noise Control

Noise control is the process of obtaining an acceptable noise environment for a particular observation point or receiver by controlling the noise source, transmission path, receiver, or all three. This concept is known as the source-path-receiver concept. In general, noise control measures can be applied to any and all of these three elements and a noise barrier is most effective when placed close to the noise source or receiver.

Ground Absorption

To account for the ground-effect attenuation (absorption), two types of site conditions are commonly used in traffic noise models, soft site and hard site conditions. Soft site conditions account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. A drop-off rate of 4.5 dBA per doubling of distance is typically observed over soft ground with landscaping, as compared with a 3.0 dBA drop-off rate over hard ground such as asphalt, concrete, stone, and very hard packed earth. Based on our experience, soft site conditions better reflect the predicted noise levels. In addition, Caltrans' research has shown that the use of soft site conditions is more appropriate for the application of the FHWA traffic noise prediction model used in this analysis.

Noise Barrier Attenuation

Effective noise barriers can reduce noise levels by 10 to 15 dBA, cutting the loudness of traffic noise in half. Noise barriers however, do have limitations. For a noise barrier to work, it must be high enough and long enough to block the view of a road. Noise barriers do little good for homes on a hillside overlooking a road or for buildings which rise above the barrier. A noise barrier can achieve a 5 dBA noise level reduction when it is high enough to break the line-of-sight.

NOISE STANDARDS

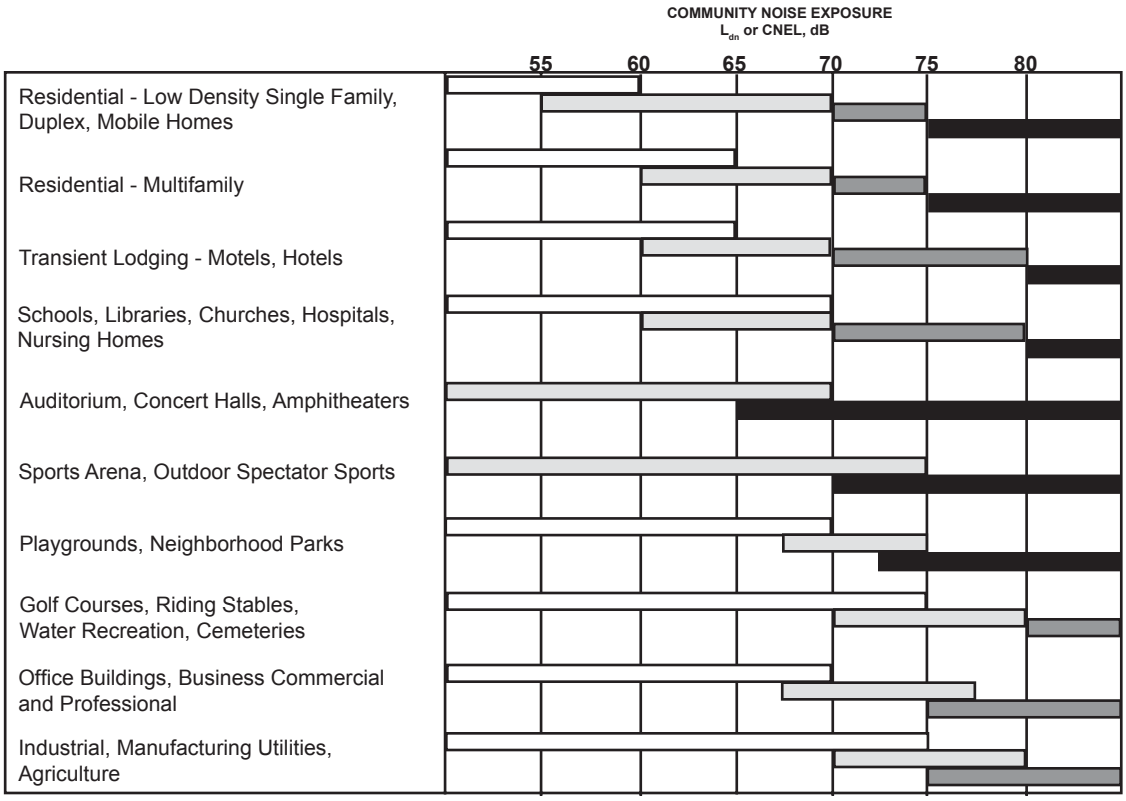
Noise standards for the City of Calimesa are established primarily by the Noise Element of the City of Calimesa General Plan. The Noise Element includes standards for land use compatibility for community noise exposure. Figure 3.8-1 presents the General Plan land use and noise compatibility matrix. This provides a guide for land use compatibility of noise sensitive land uses. Residential uses are normally unacceptable in areas exceeding 70 dBA CNEL and conditionally acceptable between 55 to 70 dBA CNEL for single family and 60 to 70 dBA CNEL for multi-family units. Commercial/office buildings are normally unacceptable in areas exceeding 75 dBA CNEL and conditionally acceptable within 67 to 78 dBA CNEL. The City General Plan standards are derived from standards contained in the *General Plan Guidelines*, a publication of the California Office of Planning and Research. These standards are used by many California cities and counties.

In addition, the Noise Element specifies the maximum noise levels allowable for new developments impacted by transportation noise sources. For residential areas the noise levels in interior areas should remain below 45 dBA CNEL. This noise analysis is based on these General Plan policies and standards. The City of Calimesa General Plan Noise Element is included in Appendix "A."

In community noise assessment, changes in noise levels greater than 3 dBA are often identified as "barely perceptible," while changes of 5 dBA are "readily perceptible." In the range of 1 dBA to 3 dBA people who are very sensitive to noise may perceive a slight change in noise level. Conclusive scientific evidence is unavailable to support the use of 3 dBA as a significant threshold. In laboratory testing situations, humans are able to detect noise level changes of slightly less than 1 dBA. However, in a community situation, the noise exposure is extended over a long time period, and changes in noise levels occur over years, rather than the immediate comparison made in a laboratory situation. Therefore, the level at which changes in community noise levels become discernible is likely to be some value greater than 1 dBA, and 3 dBA appears to be appropriate for most people.

Based on the analysis of the proposed project for the preparation of the Initial Study consistent with CEQA and the CEQA Guidelines, it was determined that the proposed project would have the potential to result in significant impacts related to noise. For the purposes of this analysis, a significant impact related to noise would occur if the proposed project is determined to produce:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- A substantial permanent increase in ambient noise levels in the project vicinity above existing levels without the proposed project; or
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above noise levels existing without the proposed project.



LEGEND:

NORMALLY ACCEPTABLE
Specified land use is satisfactory, based upon the assumption that any building involved are of normal conventional construction, without any special noise insulation requirements.

CONDITIONALLY ACCEPTABLE
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made.

Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

NORMALLY UNACCEPTABLE
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

CLEARLY UNACCEPTABLE
New construction or development should generally not be undertaken.

SOURCE: California Department of Health. Guidelines for the Preparation and Content of Noise Elements of the General Plan. November 1990.

Figure 3.8-1
Land Use and Noise Compatibilty Matrix

For purposes of this study, roadway noise impacts would be considered significant if the project increases noise levels for a noise sensitive land use by 3 dBA CNEL and if: (1) the existing noise levels already exceed the 65 dBA CNEL residential standard or (2) the project increases noise levels from below the 65 dBA CNEL standard to above 65 dBA CNEL.

On-site Interior Noise Standard

The City of Calimesa requires 45 dBA CNEL for interior residential uses. The required interior noise level reduction is the difference between predicted exterior noise levels and the building façade and the 45 dBA interior noise level standard.

On-site Exterior Non-Transportation Related Noise Standard

The City of Calimesa noise ordinance limits the noise levels from non-transportation sources at residential uses to 55 dBA from the hours of 10:00 p.m. to 7:00 a.m. and to 65 dBA from the hours of 7:00 a.m. to 10:00 p.m.

NOISE MEASUREMENT

Noise measurements for the existing condition were recorded on October 21 through October 22, 2004. Noise monitoring locations were selected based on the impact potential. Currently, the project site does not experience significant traffic noise impacts, except for areas near the I-10 Freeway.

Table 3.8-1 below presents the results of the noise level measurements.

Table 3.8-1
Existing (ambient) Noise Level Measurements[1]

Observer Location[2]	Description[3]	Time of Measurement[4]	Primary Noise Source	Noise Levels
A	Located approximately 800 feet from San Timoteo Canyon Road centerline and 870 feet from the Union Pacific Railroad in the southeast corner of the project site.	4:00 PM (24-hour)	Freight train noise from Union Pacific Railroad	62.5 dBA CNEL
B	Located approximately 450 feet from the property line adjacent to the I-10 Freeway in the northeast corner of the project site.	4:00 PM (24-hour)	Traffic noise from I-10 Freeway	55.4 dBA CNEL
1	Located approximately 50 feet from the	4:15 PM	Traffic noise from	75.4 dBA Leq

[1] Noise measurements were taken by Urban Crossroads, Inc. on October 21-22, 2004.
[2] See the Noise Impact Analysis (Appendix G of this EIR) for the monitoring site and Study Area Photos.
[3] Weather conditions: cloudy, temperature = 58°F, pressure = 29.85 in HG, wind = 8 mph.
[4] Locations A and B were monitored for a period of 24 hours, locations 1, 2, and 5 were monitored for a minimum period of 10 minutes. Locations 3 and 4 were monitored for a period of approximately 2 minutes.

Observer Location[2]	Description[3]	Time of Measurement[4]	Primary Noise Source	Noise Levels
	property line adjacent to the I-10 Freeway in the northeast corner of the project site.		I-10 Freeway	
2	Located approximately 220 feet from the property line adjacent to the I-10 Freeway in the northeast corner of the project site.	4:25 PM	Traffic noise from I-10 Freeway	70.7 dBA Leq
3	Located near Location A and measured the noise of a passing freight train on the Union Pacific Railroad.	4:15 PM	Freight train noise from Union Pacific Railroad	68.9 dBA Leq
4	Located near Location A and measured the noise of San Timoteo Road without any passing freight trains.	4:20 PM	Traffic noise from San Timoteo Road	40.3 dBA Leq
5	Located approximately 25 feet southeast of Singleton Road near residential development northeast of I-10 Freeway.	4:45 PM	Traffic noise from Singleton Road	50.7 dBA Leq

In terms of the existing noise related to the Union Pacific Railroad, the noise measurement range has no particular part of the day quieter than any other and completely dependent on when trains pass the project site. It takes between 2 and 5 minutes for a train to pass the site. Currently, there are approximately 42 trains passing the project site per day, so the majority of the time the trains are not present. The measurements show that only the portions of the project site within 300 feet of the I-10 Freeway currently experience significant traffic noise impacts. The remaining areas within the project site do not experience significant traffic noise.

OFF-SITE NOISE ANALYSIS

To assess the off-site noise level impacts associated with development of the proposed project, noise contours were developed for the following traffic scenarios:

Existing. This scenario refers to the existing present-day noise conditions, without construction of the proposed project.

Build-out (2050) Contributions with /without Project. This scenario refers to the background noise conditions at City of Calimesa General Plan Build-out conditions with and without the proposed project. This scenario would be reflective of the cumulative noise condition or exposure.

Traffic Noise Contours

Noise contours represent the distance to noise levels of a constant value and are measured from the center of the roadway. CNEL noise contours are determined for the 55, 60, 65, and 70 dBA noise levels. The noise contours do not take into account the effect of any existing noise barriers or topography that may affect ambient noise levels.

Existing Roadway Noise Levels

Table 3.8-2 presents the existing noise contours. Currently, there is little development immediately adjacent to the project site. The existing roadway noise levels in the project area consist primarily of traffic noise from the I-10 Freeway on the east side of the project. The I-10 Freeway is a divided 6-lane freeway with a posted speed limit ranging from 55 to 65 miles per hour near the project site. The noise levels at the right-of-way currently exceed 65 dBA CNEL.

Table 3.8-2
Existing Conditions Noise Contours

Road	Segment	CNEL at 100 feet (dBA)	Distance to Contour (feet)[1]			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
San Timoteo Canyon Road	n/o Singleton Road	54.5	RW	RW	43	93
San Timoteo Canyon Road	s/o Singleton Road	54.6	RW	RW	44	94
San Timoteo Canyon Road	n/o "J" Street	54.6	RW	RW	44	94
Roberts Road	s/o Sandalwood Drive	-	-	-	-	-
Roberts Road	s/o "A" Street	-	-	-	-	-
Roberts Road	s/o "C" Street	-	-	-	-	-
Roberts Road	s/o Singleton Road	42.2	RW	RW	RW	RW
Roberts Road	n/o Cherry Valley Boulevard	45.2	RW	RW	RW	RW
Calimesa Boulevard	s/o Sandalwood Drive	61.1	RW	55	118	254
Potrero Boulevard	s/o Oak Valley Parkway	-	-	-	-	-
Singleton Road	w/o "E" Street	-	-	-	-	-
Singleton Road	w/o Roberts Road	-	-	-	-	-
Singleton Road	e/o Calimesa Boulevard	51.7	RW	RW	RW	60
"G" Street	e/o San Timoteo Canyon Road	-	-	-	-	-
Desert Lawn Drive	e/o "J" Street	54.7	RW	RW	44	96
Desert Lawn Drive	w/o Brookside Avenue	54.7	RW	RW	44	96
"J" Street	e/o San Timoteo Cyn Road	-	-	-	-	-
"J" Street	e/o Champions Drive	-	-	-	-	-
"J" Street	e/o "G" Street	-	-	-	-	-
"J" Street	e/o Roberts Road	55.0	RW	RW	RW	101

[1] RW: Noise contour located within the right-of-way of the roadway.

Road	Segment	CNEL at 100 feet (dBA)	Distance to Contour (feet)[1]			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
Oak Valley Parkway	e/o "J" Street	54.7	RW	RW	44	96
Oak Valley Parkway	e/o Potrero Boulevard	55.0	RW	RW	RW	101

3.8.3 THRESHOLD OF SIGNIFICANCE

A significant adverse environmental impact would occur if the project results in any of the following:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Noise levels exceeding the City of Calimesa General Plan Noise Standards would be considered significant.
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

The term “substantial increase” is not defined by any responsible agency. The limits of perceptibility by ambient grade instrumentation (sound meters) or by humans in a laboratory environment is around 1.5 dB. Under ambient conditions, people generally do not perceive that noise has clearly changed until there is a 3 dB difference. Changes in community noise levels of less than 3 dB are normally not noticeable, and are therefore considered less than significant.[1] A threshold of 3 dB or greater is commonly used to define “substantial increase” and is utilized to define a significant traffic noise impact in the following analysis.

3.8.4 PROJECT IMPACTS

METHODOLOGY

FHWA Traffic Noise Prediction Model

The projected roadway noise impacts from vehicular traffic were projected using a computer program that replicates the FHWA Traffic Noise Prediction Model- FHWA-RD-77-108 (the "FHWA Model”). The FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). Adjustments are then made to the reference energy mean emission level to account for: the roadway classification (e.g., collector, secondary, major or arterial), the roadway active width

[1] Assessment of noise with respect to community response, ISDN 1996, International Standardization, Switzerland.

(i.e., the distance between the center of the outermost travel lanes on each side of the roadway), the total average daily traffic (ADT), the travel speed, the percentages of automobiles, medium trucks and heavy trucks in the traffic volume, the roadway grade, the angle of view (e.g., whether the roadway view is blocked), the site conditions ("hard" or "soft" relates to the absorption of the ground, pavement or landscaping) and the percentage of total ADT which flows each hour throughout a 24-hour period.

Traffic Noise Prediction Model Inputs

Table 3.8-3 presents the FHWA Traffic Noise Prediction Model roadway parameters used in this analysis. Soft site conditions were used to develop noise contours and analyze noise impacts to the project site. The average daily traffic volumes used for this study presented in Table 3.8-4 were provided by the SunCal Oak Valley Traffic Impact Analysis Report prepared by Urban Crossroads, Inc. on November 8, 2004.

Table 3.8-5 presents the hourly traffic flow distribution (vehicle mix) used for this analysis based on a typical average axle traffic count observed in cities in Southern California. The vehicle mix provides the hourly distribution percentages of automobile, medium trucks and heavy trucks for input into the FHWA Model.

Table 3.8-3
Roadway Parameters

Roadway	Segment	Roadway Classificatio[1]n	Vehicle Speed (MPH)	Site Conditions
San Timoteo Canyon Road	n/o Singleton Road	Divided Collector	45	Soft
San Timoteo Canyon Road	s/o Singleton Road	Secondary Frontage	45	Soft
San Timoteo Canyon Road	n/o "J" Street	Secondary Frontage	45	Soft
Roberts Road	s/o Sandalwood Drive	Arterial	45	Soft
Roberts Road	s/o "A" Street	Arterial	45	Soft
Roberts Road	s/o "C" Street	Arterial	45	Soft
Roberts Road	s/o Singleton Road	Arterial	45	Soft
Roberts Road	n/o Cherry Valley Boulevard	Arterial	45	Soft
Calimesa Boulevard	s/o Sandalwood Drive	Major	45	Soft
Potrero Boulevard	s/o Oak Valley Parkway	Urban Arterial	45	Soft
Singleton Road	w/o "E" Street	Secondary	45	Soft
Singleton Road	w/o Roberts Road	Arterial	45	Soft
Singleton Road	e/o Calimesa Boulevard	Secondary	45	Soft

[1] According to the Preliminary Roadway Classifications Recommendations in the Summerwind Ranch Traffic Impact Analysis from Urban Crossroads, Inc., on November 8, 2004.

Roadway	Segment	Roadway Classificatio[1]n	Vehicle Speed (MPH)	Site Conditions
"G" Street	e/o San Timoteo Cyn Road	Divided Collector	45	Soft
Desert Lawn Drive	e/o "J" Street	Secondary	45	Soft
Desert Lawn Drive	w/o Brookside Avenue	Secondary	45	Soft
"J" Street	e/o San Timoteo Canyon Road	Divided Collector	45	Soft
"J" Street	e/o Champions Drive	Secondary	45	Soft
"J" Street	e/o "G" Street	Urban Arterial	45	Soft
"J" Street	e/o Roberts Road	Urban Arterial	45	Soft
Oak Valley Parkway	e/o "J" Street	Major Frontage	45	Soft
Oak Valley Parkway	e/o Potrero Boulevard	Urban Arterial	45	Soft

Table 3.8-4
Average Daily Traffic (1000's)[1]

Roadway	Segment	Average Daily Traffic (in 1000's)		
		Existing	Build-out Year No Project	Build-out Year with Project
San Timoteo Canyon Road	n/o Singleton Road	1.8	18.2	20.0
San Timoteo Canyon Road	s/o Singleton Road	1.8	20.0	24.0
San Timoteo Canyon Road	n/o "J" Street	1.8	22.4	26.0
Roberts Road	s/o Sandalwood Drive	-	26.9	33.0
Roberts Road	s/o "A" Street	-	28.4	35.0
Roberts Road	s/o "C" Street	-	24.3	34.0
Roberts Road	s/o Singleton Road	0.1	24.6	27.0
Roberts Road	n/o Cherry Valley Boulevard	0.2	34.6	37.0
Calimesa Boulevard	s/o Sandalwood Drive	7.8	44.0	47.0
Portrero Boulevard	s/o Oak Valley Parkway	-	71.6	74.0
Singleton Road	w/o "E" Street	-	11.9	17.0
Singleton Road	w/o Roberts Road	-	22.7	29.0
Singleton Road	e/o Calimesa Boulevard	0.9	34.9	38.0
"G" Street	e/o San Timoteo Cyn Road	-	7.6	11.0
Desert Lawn Drive	e/o "J" Street	1.8	22.1	23.0

[1] According to the Summerwind Ranch Traffic Impact Analysis by Urban Crossroads, Inc., on November 8, 2004.

Roadway	Segment	Average Daily Traffic (in 1000's)		
		Existing	Build-out Year No Project	Build-out Year with Project
Desert Lawn Drive	w/o Brookside Avenue	1.8	20.5	21.0
"J" Street	e/o San Timoteo Canyon Road	-	20.3	21.0
"J" Street	e/o Champions Drive	-	18.7	20.0
"J" Street	e/o "G" Street	-	40.6	43.0
"J" Street	e/o Roberts Road	1.8	46.7	50.0
Oak Valley Parkway	e/o "J" Street	1.8	40.7	45.0
Oak Valley Parkway	e/o Potrero Boulevard	1.8	58.0	60.0

Table 3.8-5
Hourly Traffic Flow Distribution[1]

Motor-Vehicle Type	Daytime (7 am to 7 pm)	Evening (7 pm to 10 pm)	Night (10 pm to 7 am)	Total % Traffic Flow
I-10 Freeway[1]				
Automobiles	69.2%	14.2%	16.6%	85.7%
Medium Trucks	70.1%	10.7%	19.2%	4.5%
Heavy Trucks	60.6%	5.2%	34.2%	9.8%
City Roads[2]				
Automobiles	77.5%	12.9%	9.6%	97.42%
Medium Trucks	84.8%	4.9%	10.3%	1.84%
Heavy Trucks	86.5%	2.7%	10.8%	0.74%

[1] Total percent of traffic flow for the I-10 Freeway was detained from the 2002 Annual Average Daily Truck Traffic on the California State Highway System, by Caltrans on February 2004.
[2] Based on a typical average vehicle axle traffic count observed in cities in Southern California.

SHORT-TERM CONSTRUCTION NOISE IMPACTS

Impact N1 The proposed project would create a significant short-term construction noise impact.

Construction noise represents a short-term impact on the ambient noise levels. Noise generated by construction equipment, including trucks, graders, bulldozers, concrete mixers, and portable generators can reach high levels. Grading activities typically represent one of the highest potential sources for noise impacts. The most effective method of controlling construction noise is by limiting the hours of construction to normal weekday working hours.

The U.S. Environmental Protection Agency has complied data regarding the noise generating characteristics of specific types of construction equipment. These data are shown on Figure 3.8-2. As shown, noise levels generated by heavy construction equipment can range from approximately 68 dBA to noise levels in excess of 100 dBA when measured at 50 feet. However, these noise levels would diminish rapidly with distance from the construction site at a rate of approximately 6 dBA per doubling of distance. A noise level of 68 dBA measured at 50 feet from the noise source to the receptor would be reduced to 62 dBA at 100 feet from the source to the receptor, and would be further reduced by another 6 dBA to 56 dBA at 200 feet from the source to the receptor.

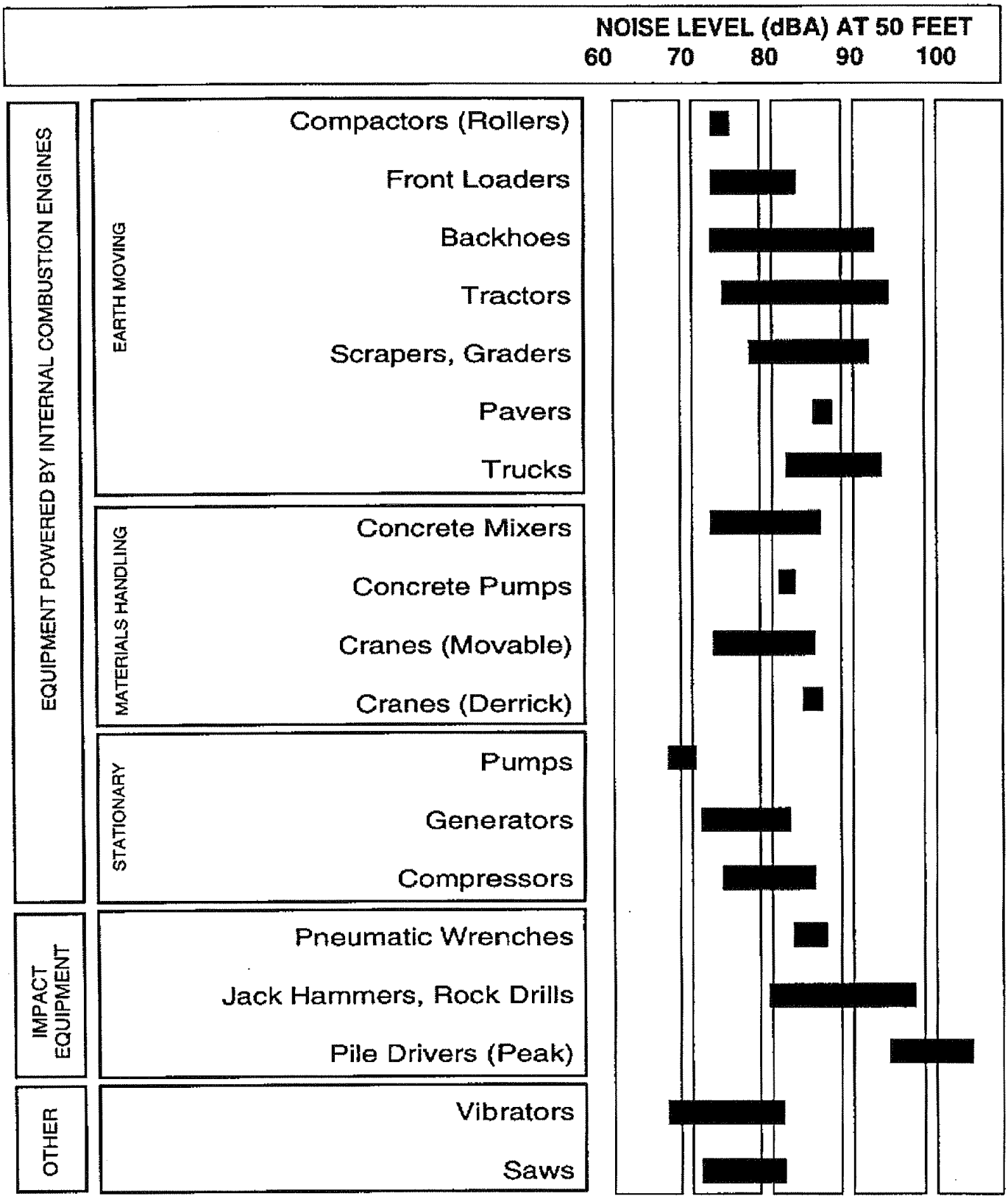
Field measurements show that construction noise levels generated by commonly used grading equipment (i.e., loaders, graders, and trucks) generate noise levels that typically do not exceed the middle of the ranges shown on Figure 3.8-2. For the purpose of this analysis, an overall grading noise level of 89 dBA at 50 feet will be used as the worst case maximum exterior noise levels. Using a drop-off rate of 6 dBA per doubling of distance noise levels at 100 feet and 200 feet are estimated at 83 dBA and 77 dBA, respectively.

The project site is currently vacant and is located in a relatively undeveloped area. Construction noise is of short-term duration and will not present any long-term impacts on the project site or the surrounding area. With compliance with MM-N1-1 through MM-N1-4, the potential impact will be reduced to a less than significant level.

OFF-SITE NOISE ANALYSIS

Impact N2 The project has the potential to create a significant increase in traffic noise at build-out (cumulative conditions).

Tables 3.8-6 and 3.8-7 present the build-out conditions without and with proposed project noise contours. They show a significant increase in traffic noise for build-out conditions that is caused by the development of other projects and regional growth in addition to the proposed project. For reference purposes, the CNEL level at a distance of 100 feet from the highway centerline is also included in the tables.



NOTE: Based on limited available data samples.

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Figure 3.8-2
Typical Construction Noise

Table 3.8-8 presents a comparison of the build-out conditions with proposed project and without project noise levels. With the development of the proposed project the noise levels on Singleton Road west of "E" Street will increase by 3.5 dBA CNEL, levels on Singleton Road west of Roberts Road will increase by 4.4 dBA CNEL and levels on Roberts Road south of Singleton Road will increase by 5.6 dBA CNEL. The roadway noise impacts on all other segments will increase from 0.4 dBA CNEL to 2.6 dBA CNEL with the development of the proposed project.

Table 3.8-6
Build-out Year without Project Noise Contours

Road	Segment	CNEL at 100 feet (dBA)	Distance to Contour (feet)[1]			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
San Timoteo Canyon Road	n/o Singleton Road	64.0	40	85	183	395
San Timoteo Canyon Road	s/o Singleton Road	64.5	43	93	200	431
San Timoteo Canyon Road	n/o "J" Street	65.1	47	102	220	474
Roberts Road	s/o Sandalwood Drive	66.3	56	121	262	564
Roberts Road	s/o "A" Street	66.3	56	121	262	564
Roberts Road	s/o "C" Street	64.9	RW	99	213	459
Roberts Road	s/o Singleton Road	60.9	RW	53	114	246
Roberts Road	n/o Cherry Valley Boulevard	66.5	59	126	273	587
Calimesa Boulevard	s/o Sandalwood Drive	68.5	80	172	371	800
Potrero Boulevard	s/o Oak Valley Parkway	70.8	113	244	525	1131
Singleton Road	w/o "E" Street	61.0	RW	54	116	250
Singleton Road	w/o Roberts Road	62.5	RW	68	146	316
Singleton Road	e/o Calimesa Boulevard	66.9	62	133	287	619
"G" Street	e/o San Timoteo Canyon Road	60.6	RW	51	110	237
Desert Lawn Drive	e/o "J" Street	65.5	50	107	231	498
Desert Lawn Drive	w/o Brookside Avenue	65.0	46	100	214	462
"J" Street	e/o San Timoteo Cyn Road	64.7	44	96	206	444
"J" Street	e/o Champions Drive	64.5	RW	92	199	429
"J" Street	e/o "G" Street	68.4	78	167	360	776
"J" Street	e/o Roberts Road	68.2	75	163	350	755
Oak Valley Parkway	e/o "J" Street	67.8	72	154	333	717
Oak Valley Parkway	e/o Potrero Boulevard	70.1	101	219	471	1015

[1] RW: Noise contour located within the right-of-way of the roadway.

Table 3.8-7
Build-out Year with Project Noise Contours

Road	Segment	CNEL at 100 feet (dBA)	Distance to Contour (feet)[1]			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
San Timoteo Canyon Road	n/o Singleton Road	65.0	46	100	216	465
San Timoteo Canyon Road	s/o Singleton Road	65.9	53	114	246	530
San Timoteo Canyon Road	n/o "J" Street	66.2	56	120	259	559
Roberts Road	s/o Sandalwood Drive	67.4	67	145	312	673
Roberts Road	s/o "A" Street	67.7	70	151	325	700
Roberts Road	s/o "C" Street	67.5	69	148	319	686
Roberts Road	s/o Singleton Road	66.5	59	127	273	589
Roberts Road	n/o Cherry Valley Boulevard	67.9	73	156	337	726
Calimesa Boulevard	s/o Sandalwood Drive	68.9	84	181	390	840
Potrero Boulevard	s/o Oak Valley Parkway	71.2	120	258	556	1198
Singleton Road	w/o "E" Street	64.5	RW	92	198	427
Singleton Road	w/o Roberts Road	66.9	62	133	287	617
Singleton Road	e/o Calimesa Boulevard	68.0	73	157	339	731
"G" Street	e/o San Timoteo Canyon Road	62.4	RW	67	145	312
Desert Lawn Drive	e/o "J" Street	65.8	52	113	243	523
Desert Lawn Drive	w/o Brookside Avenue	65.4	49	106	228	492
"J" Street	e/o San Timoteo Cyn Road	65.2	48	103	223	480
"J" Street	e/o Champions Drive	65.2	48	103	221	476
"J" Street	e/o "G" Street	68.8	83	180	387	834
"J" Street	e/o Roberts Road	69.5	92	199	428	922
Oak Valley Parkway	e/o "J" Street	68.7	82	176	379	817
Oak Valley Parkway	e/o Potrero Boulevard	70.3	104	224	483	1042

[1] RW: Noise contour located within the right-of-way of the roadway.

Table 3.8-8
Build-out Year Project Contributions

Road	Segment	CNEL at 100 feet (dBA)			
		No Project	With Project	Project Contribution	Potential Significant Impact?
San Timoteo Canyon Road	n/o Singleton Road	64.0	65.0	1.0	NO
San Timoteo Canyon Road	s/o Singleton Road	64.5	65.9	1.4	NO
San Timoteo Canyon Road	n/o "J" Street	65.1	66.2	1.1	NO
Roberts Road	s/o Sandalwood Drive	66.3	67.4	1.1	NO
Roberts Road	s/o "A" Street	66.3	67.7	1.4	NO
Roberts Road	s/o "C" Street	64.9	67.5	2.6	NO
Roberts Road	s/o Singleton Road	60.9	66.5	5.6	YES
Roberts Road	n/o Cherry Valley Boulevard	66.5	67.9	1.4	NO
Calimesa Boulevard	s/o Sandalwood Drive	68.5	68.9	0.4	NO
Potrero Boulevard	s/o Oak Valley Parkway	70.8	71.2	0.4	NO
Singleton Road	w/o "E" Street	61.0	64.5	3.5	NO
Singleton Road	w/o Roberts Road	62.5	66.9	4.4	YES
Singleton Road	e/o Calimesa Boulevard	66.9	68.0	1.1	NO
"G" Street	e/o San Timoteo Canyon Road	60.6	62.4	1.8	NO
Desert Lawn Drive	e/o "J" Street	65.5	65.8	0.3	NO
Desert Lawn Drive	w/o Brookside Avenue	65.0	65.4	0.4	NO
"J" Street	e/o San Timoteo Cyn Road	64.7	65.2	0.5	NO
"J" Street	e/o Champions Drive	64.5	65.2	0.7	NO
"J" Street	e/o "G" Street	68.4	68.8	0.4	NO
"J" Street	e/o Roberts Road	68.2	69.5	1.3	NO
Oak Valley Parkway	e/o "J" Street	67.8	68.7	0.9	NO
Oak Valley Parkway	e/o Potrero Boulevard	70.1	70.3	0.2	NO

The increases in noise will potentially impact land uses adjacent to the roadway segments of Roberts Road south of Singleton Road, and Singleton Road west of Roberts Road. These roads are future roads within the project site, and the noise impacts will be limited to the proposed project site. Noise barriers for the residential uses adjacent to these roads will ensure that the noise levels will remain below the City of Calimesa 65 dBA CNEL exterior and 45 dBA CNEL interior noise level standard.

For all other segments an increase of less than 3.0 dBA CNEL is not considered significant in terms of community noise impacts. Therefore, the proposed project's contributions to off-site roadway noise increases will not cause any significant impacts to any existing or future sensitive noise receptors.

The project will not generate a substantial permanent increase in ambient noise levels or expose persons to noise levels in excess of the standards established in the City of Calimesa General Plan or noise ordinance.

ON-SITE EXTERIOR TRANSPORTATION NOISE ANALYSIS

Vehicular Noise

The major sources of transportation noise are the I-10 Freeway, San Timoteo Canyon Road, the railroad line, and the project's major internal roads that include Singleton Road, Roberts Road, "C" Street, "G" Street, and "J" Street.

Impact N3 The project has the potential to create noise impacts to multi-family homes, adjacent to the I-10 Freeway.

Existing noise measurements of the I-10 freeway were taken at three locations in the northeast corner of the project site. Three measurements were taken near the I-10 Freeway (Table 3.8-1). These noise levels near the I-10 Freeway are compatible with office and commercial uses but are normally unacceptable with multi-family residential land uses planned along the I-10 Freeway. However, with sufficient building insulation, the multi-family residential buildings facing the I-10 Freeway will meet the City of Calimesa 45 dBA CNEL interior noise level standards for residential development.

Railroad Noise

Impact N4 Train noise has the potential to significantly affect the project site.

Train noise is a combination of different noise sources such as propulsion mechanisms, machinery and auxiliary equipment, wheel-rail interaction, and vehicle-body vibrations. Train noise is a unique noise source that constitutes a single pass by event per train. Field observations of several passenger and freight railroad activity show that, a typical train pass by event ranges from 30 seconds to 4 minutes depending on the train length and speed. Heavy diesel trains operate in intervals of a few minutes due to the operational limitations, so the pass-by events occur in larger time intervals of at least five minutes per event. Heavy diesel freight trains and the Amtrak passenger trains that operate within diesel locomotives operate at relatively low speeds. At low speeds such as 40 miles per hour, propulsion machinery and mechanisms that are part of the propulsion system are the dominant source of noise. During the train pass by event, the noise levels increase significantly, especially during 30 seconds when the locomotives approach. The locomotives use warning horns approximately 200 feet from approaching at-grade intersections.

The Union Pacific Railroad maintains a two-line railroad that runs parallel to San Timoteo Canyon Road southwest of the proposed project. Between October 21 and 22, 2004 Urban Crossroads, Inc. collection 24-hour noise measurements of the Union Pacific Railroad from the nearest point on the proposed project site, approximately 940 feet from the railroad. The noise level at the boundary of the proposed residential development was measured at 55.4 dBA CNEL, which is significantly less than the City of Calimesa's 65 dBA CNEL exterior noise standard. According to field observations and the Southern California Association of Governments (SCAG), this rail line currently averages 42 freight trains and two passenger trains per day. In 2050, the projected train traffic is expected to increase to 87 freight trains and eight passenger trains per day. Even with the projected more than doubling of trains per day by build-out (2050), the railroad noise is not anticipated to significantly impact the project site; therefore, no mitigation is required.

Internal Project Site Roads

Impact N5 The project has the potential impact to create significant exterior noise, exceeding the City of Calimesa standards for exterior residential areas.

The noise contours presented in this section for build-out conditions show that the exterior noise levels for the residential lots located on the edge of the right-of-way of Roberts Road, Singleton Road, "G" Street and "J" Street will exceed the City of Calimesa 65 dBA CNEL standard for exterior residential areas. With the construction of a minimum six-foot high sound attenuation wall, the exterior noise levels at the residential lots adjacent to these roads will remain below the City of Calimesa 65 dBA CNEL exterior noise level standards.

3.8.5 CUMULATIVE IMPACTS

As discussed under Impact N2 above, the increases in noise from build-out (cumulative) traffic conditions would potentially affect land uses adjacent to the roadway segments of Roberts Road south of Singleton Road, and Singleton Road west of Roberts Road. These roads are within the project site and noise barriers for the residential uses adjacent to these roads will be provided to keep resulting noise levels below the City of Calimesa 65 dBA CNEL exterior and 45 dBA CNEL interior noise level standard.

For all other road segments an increase of less than 3.0 dBA CNEL is not considered significant in terms of community noise impacts. Therefore, no cumulative noise impacts would occur.

3.8.6 MITIGATION MEASURES

SHORT-TERM CONSTRUCTION NOISE

MM-N1-1 During all project site excavation and grading, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site.

MM-N1-2 The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction related noise sources and noise sensitive receptors nearest the project site during all project construction.

MM-N1-3 The construction contractor shall limit all construction related activities that would result in high noise levels according to the construction hours to be determined by City staff.

MM-N1-4 The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment. To the extent feasible, haul routes shall not pass sensitive land uses or residential dwellings.

3.8.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the proposed project would create construction noise; however, construction noise is of short-term duration and will not present any long-term impacts on the project site or the surrounding area. Mitigation measures are proposed to mitigate any potentially significant short-term construction impacts to a less than significant level.

Additionally, the project would significantly increase the traffic noise for build-out (cumulative) conditions, specifically the roadway segments of Roberts Road south of Singleton Road, and Singleton Road west of Roberts Road. For all other segments an increase of less than 3.0 dBA CNEL is not considered significant in terms of community noise impacts. Therefore, the proposed project's contributions to off-site roadway noise increases will not cause any significant impacts to any existing or future sensitive noise receptors.

The project would not generate a substantial permanent increase in ambient noise levels or expose persons to noise levels in excess of the standards established in the City of Calimesa General Plan or noise ordinance.

Although the Summerwind Ranch at Oak Valley has the potential to be impacted by on-site exterior transportation noise related to I-10 Freeway and the railroad, even with the projected more than doubling

of trains per day by build-out (2050), the railroad noise is not anticipated to significantly impact the project site, and therefore, no mitigation is required.

The exterior noise levels for the residential lots located on the edge of the right-of-way of Roberts Road, Singleton Road, "G" Street and "J" Street will exceed the City of Calimesa 65 dBA CNEL standard for exterior residential areas. With the construction of a six-foot high sound wall, the exterior noise levels at the residential lots adjacent to these roads will remain below the City of Calimesa 65 dBA CNEL exterior noise level standards.

3.9 PUBLIC SERVICES

3.9.1 INTRODUCTION

This section describes the environmental setting, significance criteria, impacts, mitigation measures, and significance after mitigation for public services. Specifically, the following issues are discussed: fire protection, police protection, schools, parks, and libraries.

3.9.2 EXISTING CONDITIONS

FIRE PROTECTION

The Riverside County Fire Department (RCFD) provides fire protection services on a contract basis to the City of Calimesa. The RCFD has one station in Calimesa, located at 906 Park Avenue. The Calimesa Fire Station provides immediate response to the jurisdictional area from County Line Road to Cherry Valley Boulevard. The station's target response time is five to six minutes. Table 3.9-1 summarizes the location and distance to Calimesa and the available staff and equipment at the four RCFD stations nearest to Calimesa.

Table 3.9-1
Riverside County Fire Department Information

Station Number	Address (Distance from Project Site)[1]	Staff	Equipment
21	906 Park Avenue, Calimesa (2 miles)	1 full-time employee 1 part-time employee	15 volunteers 2 engines
22	10055 Miravilla, Cherry Valley (5.05 miles)	3 personnel 12 volunteers	1 rescue squad 2 engines
66	628 Maple Street, Beaumont (6.02 miles)	1 full-time employee 1 part-time employee 25 volunteers	1 rescue unit 1 attach vehicle 1 water tanker
20	1550 East 6th Street, Beaumont (7.68 miles)	4 full-time employees during fire season 1 full-time employee during winter months 10 volunteers	2 engines 1 bulldozer

[1] Distances are approximate and based on distance from the fire station to the approximate center of western property boundary.
Source: City of Calimesa General Plan, Land Use Profile Report, 1994.

RCFD maintains mutual aid agreements with the Cherry Valley, Beaumont, and Yucaipa Fire Departments, which would provide backup assistance to Calimesa when necessary. Additionally, portions of the project site are located in areas designated by the City as "Approximate Areas of Moderate to High Wildfire Risk" (City of Calimesa 1994). According to the General Plan, the City's open space and canyons are covered with chaparral, coastal sage scrub, deciduous woodlands, grasslands, and introduced vegetation. Chaparral and coastal sage scrub are particularly susceptible to burning, particularly during the dry summer months. The project site's open and vegetated condition makes it prone to wildfires.

POLICE PROTECTION

The Riverside County Sheriff's Department (RCSD) provides law enforcement and police protection services on a contract basis to the City of Calimesa. The Cabazon Sheriff's Station, located at 50290 Main Street in the City of Cabazon, is the primary response facility for the Summerwind Ranch at Oak Valley project area. The Cabazon Station is approximately 20 miles from the project site. RCSD is contracted to provide one deputy patrolling the City of Calimesa 24 hours a day.

RCSD patrol coverage includes preventive patrol, responses to reported calls, and traffic collision reports. Typically, Sheriff's units are continuously mobile, and service calls are responded to by the nearest available mobile unit. Other law enforcement services provided by RCSD include criminal investigation, laboratory services, crime prevention programs, school programs, search and rescue, non-criminal public service programs, and traffic enforcement. According to the RCSD, current facilities, equipment, and staffing are meeting the needs of the department, and no expansions of existing facilities or construction of new facilities are planned (Riverside County Sheriff's Department 2004). RCSD maintains mutual aid agreements with the Beaumont Police Department and with county and state agencies.

SCHOOLS

The City of Calimesa is served by the Yucaipa-Calimesa Joint Unified School District and the Beaumont Unified School District (BUSD). The Summerwind Ranch at Oak Valley project site is located within the jurisdiction of BUSD. BUSD currently operates a state preschool center, five elementary schools (K-5), two middle schools (6-8), a comprehensive high school (9-12), two alternative secondary schools, a community day school, independent study services, and a large adult education program.

PARKS

The City has two recreational facilities, the Norton Younglove Multipurpose Senior Center (Senior Center) and the Calimesa Golf and Country Club. Combined, these two facilities occupy approximately 109.3 acres. The Senior Center is located at 908 Park Avenue and provides a conference room, arts and crafts room, and a recreation room and kitchen. The Calimesa Library Station is also located within the Senior Center. The Calimesa Golf and Country Club is a 108-acre semi-private facility, located on Third

Street between the Sandalwood and Buena Mesa residential neighborhoods. The City also maintains three connecting trails within the City; two walking trails and one multi-purpose trail, which can accommodate horses and mountain bikes. There are no other park or recreation facilities within the City. The City aims to provide a ratio of 5 acres per 1,000 population of dedicated parkland. The City is not meeting this standard and therefore lacks parkland and recreational facilities (City of Calimesa 1994).

According to the City's General Plan, three park sites have been approved for development in the City, and three additional sites are being considered. Those park sites and their proposed features are provided in Table 3.9-2. The Quimby Act of California allows the City to require dedication or payment of in-lieu fees sufficient to buy and provide off-site improvements for a maximum of 3 acres per 1,000 new residents if existing parks are at or below this standard and up to 5 acres if a higher standard has been maintained. Accordingly, as the City is not meeting its goal of 5 acres per 1,000 population, the City may require Quimby fees or dedication sufficient to provide up to 3 acres of parkland per 1,000 population.

Table 3.9-2
Approved and Considered Park Sites in Calimesa

Site Name	Location	Features
Approved Sites		
Oak Valley Specific Plan 216/216A	West of I-10, within the Oak Valley Specific Plan area	199 acres of developed parkland, 837 acres containing 4 championship golf courses.
Hansberger-Country Club Ridge (Tract 26811)	Southeast of Avenue L and 2nd Avenue	39.8 acres of parkland, incorporating scenic and natural open space linked by a system of equestrian and hiking trails. Picnic and play areas are planned for community use.
Hansberger-Country Club Estates (Tract 25151)	Southeast of Avenue L and 2nd Avenue	Nearly 40 acres of parkland dedicated to Tract 26811
Considered Sites		
Poon Project (Tentative Tract 26925)	Southeast corner of Avenue L and 2nd Avenue	Proposed dedication of 3.68 acres of natural open space.
Perisits Project	South of Avenue L, between 2nd Avenue and Douglas Street	Proposed dedication of 10 acres of parkland.
ABS Development	East of I-10, North of Cherry Valley Boulevard	Project in planning stage.

Source: City of Calimesa General Plan, Resource Management Profile Report, 1994.

LIBRARIES

The Riverside County Library System supports 33 libraries and book mobiles throughout Riverside County, including the Calimesa branch library. The 2,400-square-foot Calimesa Library is located at 974 Calimesa Boulevard and houses approximately 8,000 volumes. The Riverside County Library System aims to 1.5 library items, at minimum, per capita (County of Riverside 2004). Currently, the Calimesa Library provides approximately 0.9 volumes per capita and 0.3 square feet per capita, below the County's goals. Patrons of Calimesa Library also have access to a variety of materials in all branches of the Riverside County Library System.

3.9.3 THRESHOLD OF SIGNIFICANCE

A significant adverse environmental impact would occur if the project would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
  - Fire Protection
  - Police Protection
  - Schools
  - Parks
  - Libraries

3.9.4 PROJECT IMPACTS

FIRE PROTECTION

Impact PS1 The proposed project would increase demand for fire protection services.

Build-out of the Summerwind Ranch at Oak Valley project is anticipated to result in an increase of 10,128 residents on the project site.[1] This population increase would increase demand for fire protection services. The Summerwind Ranch at Oak Valley Specific Plan states that RCFD has indicated a need for additional fire facilities to serve the project. The proposed project would designate a site for a future City Hall/Public Safety facility within the Town Center portion of the project site which could be used to house fire facilities. Three potential locations are shown in Figure 2-15, Public Facilities. At the time of this EIR a preferred location had not been chosen.

[1] The anticipated build out population is based on a 2.75 persons per household, which is the average household size of Riverside County (2.64) and San Bernardino County (2.84) identified in the 2000 U.S. Census.

The EIR prepared for the previously approved Oak Valley Specific Plan stated that fire protection services for the Specific Plan area would require "substantial additions to the staffing, facilities and equipment which currently exists in the project vicinity" (County of Riverside 1988). The Summerwind Ranch at Oak Valley project would result in 2,252 fewer dwelling units than the previously adopted Specific Plan Area No. 1 (Oak Valley SP1). This decrease in residential units as proposed by the Summerwind Ranch at Oak Valley project would therefore result in a decrease in demand on fire services as compared to Oak Valley SP1. The General Plan accounts for future development in the City including Oak Valley SP1 build-out. The General Plan concluded that adjustments in fire department facilities, staffing, and equipment would be necessary as new development occurs throughout the City. This need would be mitigated through programs proposed in the General Plan, including the provision of public services concurrent with new development. As the proposed project would designate a site for public facility use, and would comply with all other applicable developer fees and taxes, the proposed project would have a less than significant environmental impact related to the provision of fire protection facilities. Mitigation measures are included in this section to ensure a less than significant impact.

POLICE PROTECTION

Impact PS2 The proposed project would increase demand for police protection services.

The population increase induced by the proposed project would increase demand for police protection services. The EIR prepared for the previously approved Oak Valley Specific Plan stated that police protection services for the Specific Plan area would require additional officers, civilian personnel, and patrol vehicles, and potentially the expansion of the existing Banning Station and/or development of new RCSD stations (County of Riverside 1988). As stated above in Fire Protection, the proposed project would designate a site for a future City Hall/Public Safety facility within the Town Center portion of the project site which could be used to house police facilities.

RCSD has stated that the proposed Summerwind Ranch at Oak Valley project would significantly impact police protection services. According to RCSD, the current level of service provided to the City of Calimesa would not be adequate to serve the induced population. The project would result in a need for an increase in the number of contracted patrol hours to approximately 60 hours per day and approximately 8 additional Cabazon Station staff (Riverside County Sheriff Department 2004). RCSD has stated that there are no budgeted funds to facilitate this required increase in staff.

However, the Summerwind Ranch at Oak Valley project would result in 2,252 fewer dwelling units than Oak Valley SP1, the Calimesa portion of the Oak Valley Specific Plan. This decrease in residential units as proposed by the Summerwind Ranch at Oak Valley project would result in a decrease in demand for police protection services as compared to the previously approved Oak Valley SP1. The General Plan, which accounts for future development in the City including Oak Valley SP1 build-out, concluded that adjustments in sheriff's department facilities, staffing, and equipment would be necessary as new development occurs throughout the City. This need would be mitigated through programs proposed in

the General Plan, including the provision of public services concurrent with new development. Applicable General Plan policies include:

Policy 2.1 Require that development pay its "fair share" of the cost of providing adequate public services, infrastructure, and facilities.

Policy 12.2 The City shall reserve future sites for public facilities through purchase, eminent domain, dedication, donation, or a combination of these procedures.

The long-term demand for additional police services and facilities would be met in part by project development revenues accruing to the General Fund. However, short-term demand for additional police resources in the plan area may occur faster than development revenues accrue. This impact could be offset by collecting a development impact fee prior to issuance of building permits. With the imposition of such fees to provide adequate police services, impact of the project would be less than significant.

Pursuant to City requirements and standard conditions, RCSD will be consulted during site planning and design to ensure that adequate provisions for law enforcement protection/prevention are designed into the project. Mitigation measures are included in this section to ensure a less than significant impact.

SCHOOLS

Impact PS3 The proposed project would result in an increase of students attending local schools.

The proposed project would designate three school sites within the project site, to be acquired by BUSD. A 22.2-acre middle school site would be designated within residential neighborhoods in Village A. Two additional 12-acre school sites would be designated in Villages C and D. These school sites are shown in Figure 2-13, Public Facilities.

Based on the BUSD student generation factor of 0.443 students per dwelling unit, the proposed project would be expected to generate between 1,632 and 1,702 students upon project build-out.[2] California Education Code Section 17620(a)(1) states that the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district, for the purpose of funding the construction or reconstruction of any school facilities. Section 65996 of the California Government Code states that payment of such fees fully mitigates the impacts of new developments on schools.

The project applicant has elected to dedicate portions of the project site to BUSD for development of three schools. Payment of the required developer fees, as outlined above, would help facilitate the acquisition and construction of these schools. In lieu of the payment of school fees, the developer may

[2] If the three school sites are acquired by BUSD, 3,683 dwelling units would be developed. If the school sites are not acquired, up to 3,841 dwelling units would be developed.

construct the schools in exchange for credits against the required school fee. Through project phasing, appropriate public services and facilities, including schools, would be developed in coordination with the development of the residential and Town Center uses of the project site. This would facilitate logical and orderly development, so that the induced population is provided with necessary services over the anticipated 15-year project development period. If the school district decides that any or all three of the school sites are not required, each school site may be developed with single-family residential units.

Dedication of the above-mentioned school sites or payment of applicable developer fees would result in less than significant environmental impacts to schools. Mitigation measures are included in this section to ensure a less than significant impact.

PARKS

Impact PS4 The proposed project would increase demand for local and regional parkland.

As stated in the City's General Plan, Calimesa lacks park and recreational facilities. The proposed project would provide 1,493.1 acres of open space, including 89.6 acres of dedicated parkland. The adopted Oak Valley SP1 designates 1,046.9 acres of open space, 86.4 acres of which would be dedicated parkland. The proposed Summerwind at Oak Valley project would increase the amount of dedicated parkland by 3.2 acres and open space by 446.2 acres compared to existing plans.

The proposed project would provide five active parks (including a private community recreation center that may include such features as a gym, swimming pool, spa, cabana, tot lots, a lawn and garden area, etc.), two passive parks, two linear parks, and a nature park. Active parks may include such features as basketball courts, baseball and athletic fields, tot lots, parking areas, and restrooms. The passive parks may include open play areas, shade structures, sidewalks, and tot lots. The linear parks would provide a link for residents to walk and bike to activity centers throughout the development (for example a link within Village B between the village and the school site). A Nature Park would be located centrally in Village C, which will allow the residents within the Summerwind Ranch at Oak Valley an opportunity to walk though and observe natural areas.

The residential component of Summerwind Ranch at Oak Valley would consist of approximately 3,683 to 3,841 dwelling units and would be expected to generate a population of approximately 10,128 residents at build out[3]. Using 10,128 persons as the anticipated build out population, the Summerwind Ranch at Oak Valley would require 50.64 acres of parkland to meet the City's requirement of five acres of parkland per 1,000 residents. As described in Section 3.0, Project Description, the project will include approximately 73.8 acres in net useable park/recreation land. Therefore, the proposed project would provide approximately 7.29 acres of parkland per 1,000 population, exceeding the City's goal of 5 acres per 1,000, through the provision of the above discussed park and recreation features. Additionally, the

[3] The anticipated build out population is based on a 2.75 persons per household, which is the average household size of Riverside County (2.64) and San Bernardino County (2.84) identified in the 2000 U.S. Census.

proposed project would increase the amount of open space and dedicated park land as compared to Oak Valley SP1, the adopted Specific Plan for the project site.

The proposed project would have a beneficial, and consequently, less than significant environmental impact on parks.

LIBRARIES

Impact PS5 The proposed project would increase demand for library services.

The increase in residential population created by the proposed project would increase demand for library services. The EIR prepared for the previously approved Oak Valley Specific Plan stated that library services for the Specific Plan area would require an additional facility and associated staff and volumes (County of Riverside 1988).

There are no library facilities planned for the Summerwind Ranch at Oak Valley project. As such, it would be assumed that residents of the proposed project would use the existing 2,400-square-foot Calimesa Library, which houses approximately 8,000 volumes (County of Riverside 2004). Assuming an anticipated population of 10,128 at project build-out, the proposed project would require approximately 15,192 library items based on the County's minimum goal of 1.5 library items per capita.

The Summerwind Ranch at Oak Valley project would result in a decrease in residential units and a subsequent decrease in demand for library services as compared to the previously approved Oak Valley SP1. However, as existing library resources and services do not meet current residential demands, build-out of the proposed project would exacerbate the problem. Although the project's community core would include a site civic-related uses, such as space for a potential branch library, funding for such a facility is undetermined. Therefore, the proposed project has the potential to place significant demands upon library facilities and services (County of Riverside 2004).

The General Plan accounts for future development in the City including Oak Valley SP1 build-out. The General Plan concluded that impacts of new development on public services may be reduced through programs proposed in the General Plan. Applicable General Plan policies include:

Policy 2.1 Require that development pay its "fair share" of the cost of providing adequate public services, infrastructure, and facilities.

Policy 12.1 Cooperate with the Riverside City and County Public Library System in providing needed library services and facilities to Calimesa residents.

Policy 12.2 The City shall reserve future sites for public facilities through purchase, eminent domain, dedication, donation, or a combination of these procedures.

For the reasons stated above, impacts to library services would be potentially significant. A mitigation measure is included in this section to reduce the impacts.

3.9.5 CUMULATIVE IMPACTS

FIRE PROTECTION

Impact PS6 The proposed project has the potential to result in cumulative fire protection impacts.

Development of the proposed project and the related projects discussed in Section 2.0, Project Description, would increase demand for fire protection services. As many of the related projects would increase the residential population of the region, fire protection services would likely require the expansion of existing facilities or the creation of new facilities and an increase in the number of fire protection staff. Each individual project would contribute applicable developer fees and taxes, and may dedicate land in lieu of fees for public services. Provided that impact fees are paid to cover fire protection facilities and improvement costs and adequate funding is made available to increase existing fire protection services in the City, the proposed project would not have a cumulatively considerable impact.

POLICE PROTECTION

Impact PS7 The proposed project has the potential to result in cumulative police protection impacts.

Development of the proposed project and the related projects discussed in Section 2.0, Project Description, would increase demand for police protection services. As many of the related projects would increase the residential population of the region, the jurisdictional police protection units for each area may require the expansion of existing facilities or the creation of new facilities and an increase in the number of police protection staff. Each individual project would contribute applicable developer fees and taxes, and may dedicate land in lieu of fees for public services. As discussed above, RCSD concluded that the proposed project would have a significant impact on police protection services. However, the proposed project's payment of applicable fees and taxes in coordination with applicable General Plan policies, would mitigate the project's impacts to less than significant levels. Similarly, the related projects would be subject to applicable fees and taxes and the policies of their jurisdictions. Provided that impact fees are paid to cover police facilities and improvement costs and adequate funding is made available to increase existing law enforcement services in the City, the proposed project would not have a cumulatively considerable impact.

SCHOOLS

Impact PS8 The proposed project has the potential to result in cumulative impacts to nearby schools.

Development of the proposed project and the related projects discussed in Section 2.0, Project Description, would increase demand for schools in the region. The related projects are expected to result in approximately 9,500 new students in the area. As discussed above, the proposed project would dedicate portions of the project site to BUSD for development of three school sites. Additionally, California Education Code Section 17620(a)(1) states that the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district, for the purpose of funding the construction or reconstruction of any school facilities. Section 65996 of the California Government Code states that payment of such fees fully mitigates the impacts of new developments on schools. Therefore, designation of the above-mentioned school sites or payment of applicable developer fees would result in less than significant environmental impacts to schools. The three sites dedicated by the proposed project for development as school sites would likely serve related projects as well as the proposed project area. These sites, if acquired and developed by BUSD, would help to accommodate additional demand on BUSD by these projects. Additionally, the related projects would be responsible for applicable fees to mitigate individual project impacts to schools. With payment of applicable fees, cumulative impacts on schools would be fully mitigated and therefore less than significant. The proposed project would not have a cumulatively considerable impact.

PARKS

The proposed project would provide 1,493.1 acres of open space, including 89.6 acres of dedicated park land. In total, the related projects would result in approximately 283.9 acres of parkland. The development of the proposed project and the related projects would increase demand for parks. However, the proposed project's designation of open space would result in a beneficial impact to the City, as it would exceed the City's goal ratio of open space per population. Consequently, as the proposed project would have a beneficial impact on parks, cumulative impacts would be less than significant.

LIBRARIES

The increase in residential population created by the proposed project and related projects would increase demand for library services. As stated above, the proposed project would result in a deficiency in library items per capita in Calimesa. The related projects would further increase demand, and this demand would not be met by the existing library facilities in Calimesa. As stated by the County of Riverside, there is no revenue available to address this increase in demand through the provision of additional facilities or services. However, provided that funding is provided to address the need for additional library facilities and/or services in the City, build-out of the proposed project would result in a less than significant impact to library services. Similarly, the related projects would be subject to applicable fees and taxes and the

policies of their jurisdictions. Provided that funding is made available to increase library services in the City, the proposed project would not have a cumulatively considerable impact.

4.9.6 MITIGATION MEASURES

FIRE PROTECTION

MM-PS1-1 Developer impact fees shall be paid to contribute to the cost of new fire facilities, and equipment to offset the increase in fire services demand.

MM-PS1-2 The City shall coordinate with the Fire District to evaluate potential new station sites within the area of the proposed project to provide adequate response times for emergency services.

MM-PS1-3 Prior to construction, the developer shall contact the Fire District for verification of current fire protection development requirements. All new construction shall comply with all applicable statutes, codes, ordinances, and/or Fire District standards.

MM-PS1-4 Water lines within the project site shall be designed to meet the fire requirements.

MM-PS1-5 Fire hydrants shall be designed and placement specified by the Fire District at the time water lines to the project area are built or as a condition of development project approval.

POLICE PROTECTION

MM-PS2 Police impact fees shall be paid to cover capital costs associated with the creation of additional facilities and improvements to service at the Summerwind at Oak Valley project site.

SCHOOLS

MM-PS3-1 Developers/builders within the plan area shall work with Beaumont Unified School District (BUSD) to plan school service for the proposed development.

MM-PS3-2 Prior to issuance of a building permit, project developers shall pay statutory developer fees to the BUSD and/or provide land and improvements pursuant to the requirements established in SB 50. The amount of fees or special taxes to be paid or land and improvements to be provided will be determined based on the established state formula for determining construction costs.

PARKS

Environmental impacts associated with the provision of parkland would be beneficial and less than significant; therefore, no mitigation measures are required.

LIBRARIES

MM-PS5 Project developers should contribute impact fees either toward expansion of existing library facilities or construction of new facilities.

3.9.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

FIRE PROTECTION

With implementation of the mitigation measures, the proposed project's impacts on fire protection services would be less than significant.

POLICE PROTECTION

Provided that impact fees are paid to cover police facilities and improvement costs and adequate funding is made available to increase existing law enforcement services in the City, build-out of the proposed project would result in a less than significant impact to police services.

SCHOOLS

The project design provides for three potential school sites, subject to acceptance by the school district. The mitigation measures provide for development of a plan for providing sufficient capacity and funding to the extent provided by SB 50. With implementation of the mitigation measures, the proposed project's impacts on schools would be reduced to less than significant levels.

PARKS

Environmental impacts related to parks would be beneficial and consequently less than significant; therefore, no mitigation measures are required.

LIBRARIES

Provided that funding is provided to address the need for additional library facilities and/or services in the City, build-out of the proposed project would result in a less than significant impact to library services.

3.10 TRANSPORTATION/TRAFFIC

3.10.1 INTRODUCTION

A traffic study was prepared by the Urban Crossroads on November 5, 2004 to analyze the potential traffic and circulation impacts of the proposed project. The traffic study in its entirety is contained in Appendix H of this EIR. For purposes of the analysis, the study area is divided into two distinct project areas, the residential portion and the town center development area. The objectives of the study include: documentation of existing traffic conditions in the vicinity of the site; evaluation of intersection levels of service for Phase 1 (2007), Phase 2 (2009), Phase 3 (2011), Phases 4 and 5 (assumes project build-out in 2015 with growth to 2030), and General Plan build-out traffic conditions; and recommendations of roadway improvements for the proposed project for Phase 1, Phase 2, Phase 3, 2030, and General Plan build-out traffic conditions. It is noted that the traffic analysis combines Phases 4 and 5 of the specific plan together with growth occurring between 2015 and 2030 into one development phase hereafter referred to "2030". The interim years' traffic projections (Phase 1, Phase 2, Phase 3, and 2030) are based upon incremental overlays of project traffic distributions from proposed land uses. The long range traffic projections (General Plan build-out) are based on the Pass Area Traffic Model.

3.10.2 EXISTING CONDITIONS

STUDY AREA

The study area includes the following existing intersections:

Desert Lawn Drive (NS) at:
- Cherry Valley Boulevard (EW)
- Brookside Avenue (EW)
- Oak Valley Parkway (EW)

Woodhouse Road (NS) at:
- Singleton Road (EW)

I-10 Freeway Southbound Ramps (NS) at:
- County Line Road (EW)
- Sandalwood Drive (EW)
- Singleton Road (EW)
- Cherry Valley Boulevard (EW)
- Oak Valley Parkway (EW)

I-10 Freeway Northbound Ramps (NS) at:
- County Line Road (EW)
- Calimesa Boulevard / 5th Street (EW)
- Singleton Road (EW)
- Cherry Valley Boulevard (EW)
- Oak Valley Parkway (EW)

Calimesa Boulevard (NS) at:
- County Line Road (EW)
- 5th Street (EW)
- I-10 Northbound Off-Ramps (EW)
- Singleton Road (EW)
- Cherry Valley Boulevard (EW)

AREA ROADWAY SYSTEM

Figure 3.10-1 identifies the existing roadway conditions for study area roadways. The number of through traffic lanes for existing roadways and the existing intersection controls area identified.

The City of Calimesa General Plan Circulation Element is shown on Figure 3.10-2, and the County of Riverside General Plan Circulation Element is shown on Figure 3.10-3. The transportation Uniform Mitigation Fee (TUMP) Regional System of Highways and Arterials is presented on Figure 3.10-4, and the TUMF Backbone Network is on Figure 3.10-5.

FREEWAY INTERCHANGES

Singleton Road / I-10 Interchange. This interchange is currently a half-diamond configuration with connections to and from the east and a two-lane over-crossing. Original freeway construction grading and right-of-way acquisition provided for the future construction of the two west connecting ramps required to complete the tight diamond configuration. The future street designation for Singleton Road requires four to six through traffic lanes. With Phase 3 of the Summerwind Ranch project (2011), the missing interchange service connections should be completed, the over-crossing should be widened to at least six lanes, ramps should be widened, and intersections should be signalized.

Cherry Valley Road / I-10 Interchange. This interchange is currently a tight-diamond configuration with a two-lane over-crossing and frontage road intersections closely spaced on both sides of the freeway. Initially, the ramp intersections need to be signalized and the frontage road on the south side of the freeway needs to be signalized and the frontage road on the south side of the freeway needs to be aligned away from the freeway. With Phase 2 of the project, the over-crossing needs to be widened, ramps need to be widened, and a new frontage road configuration constructed on the north side of the freeway.

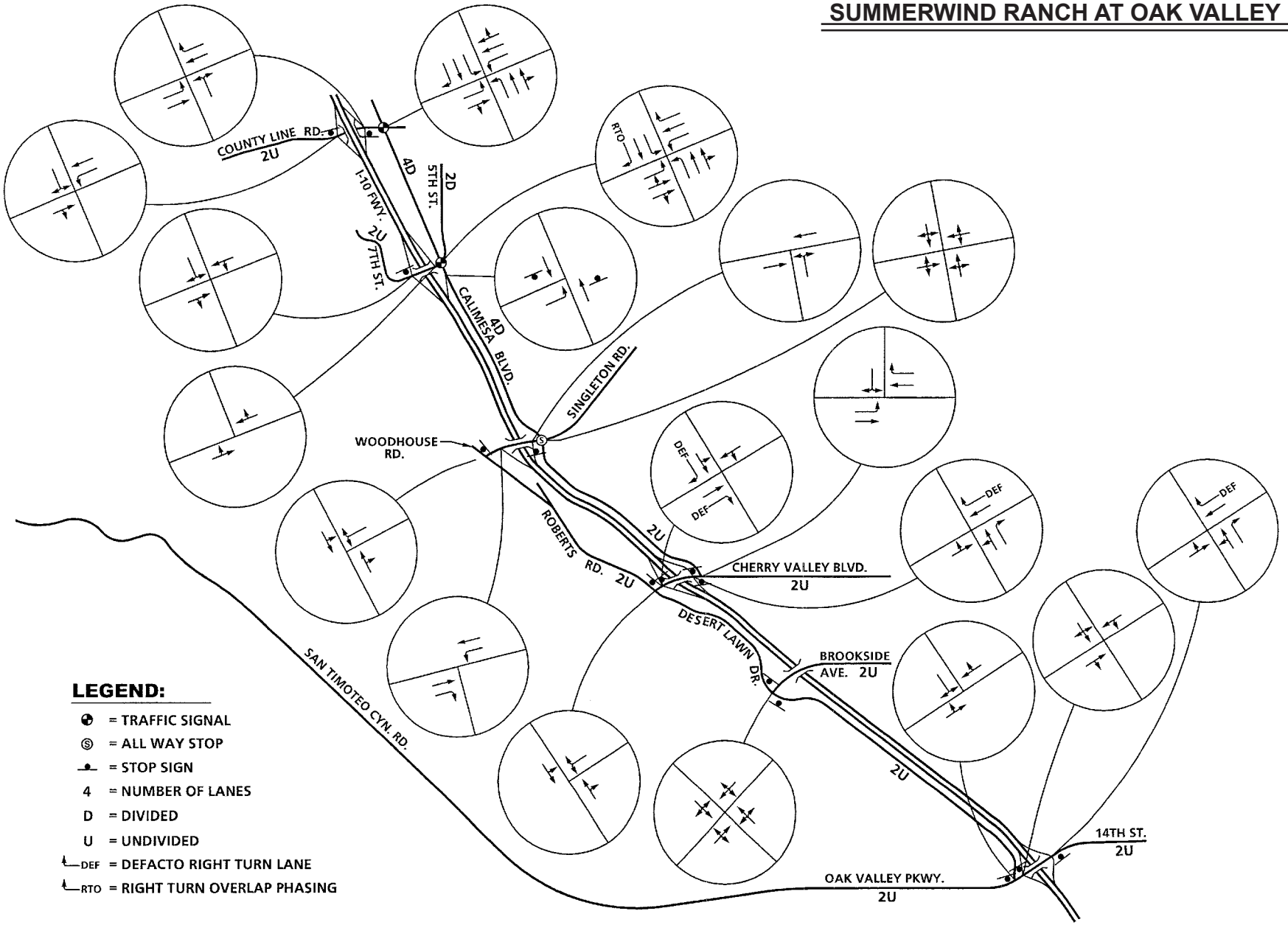
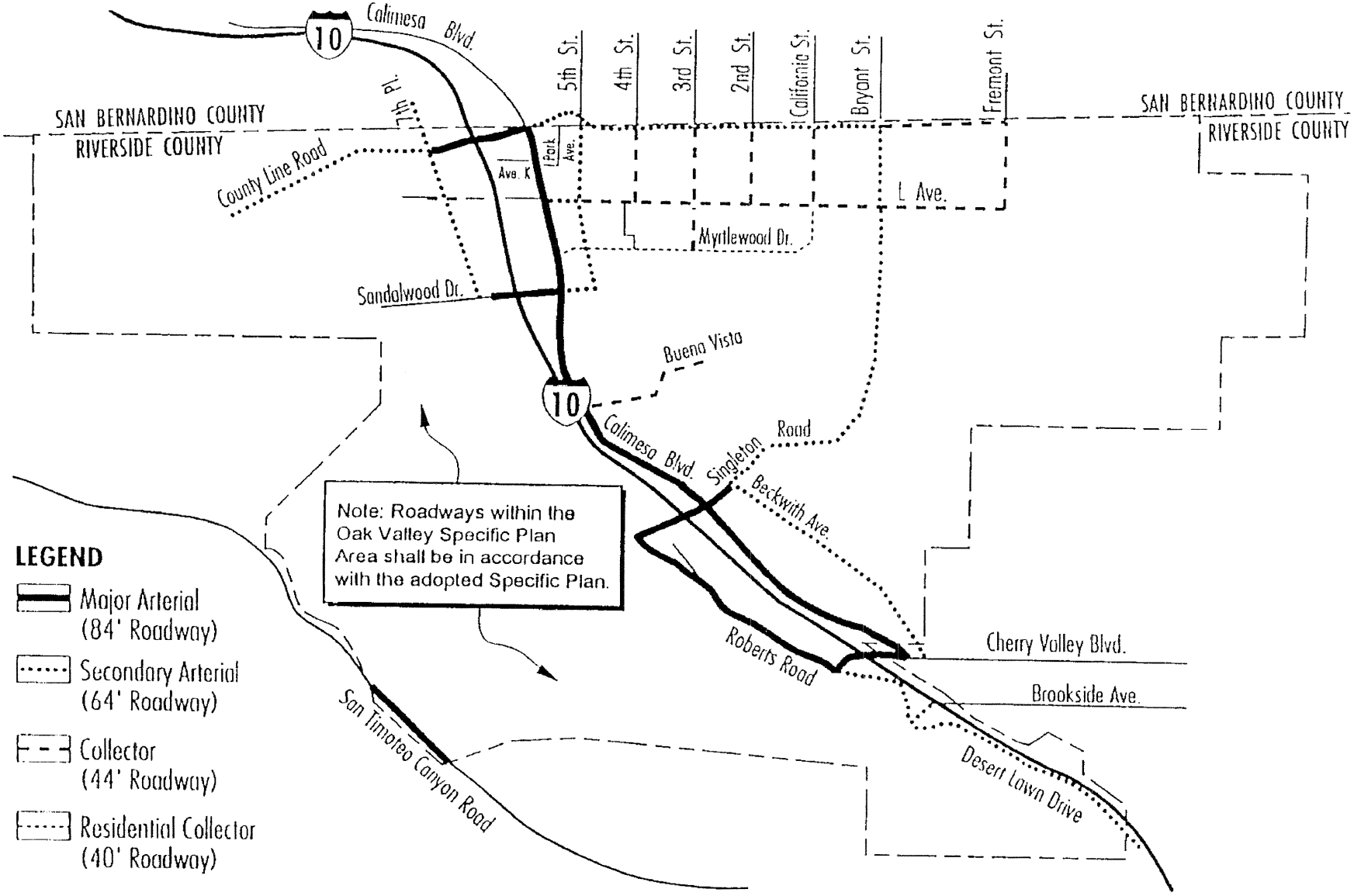


Figure 3.10-1
Existing Number of Through Lanes and Intersection Controls

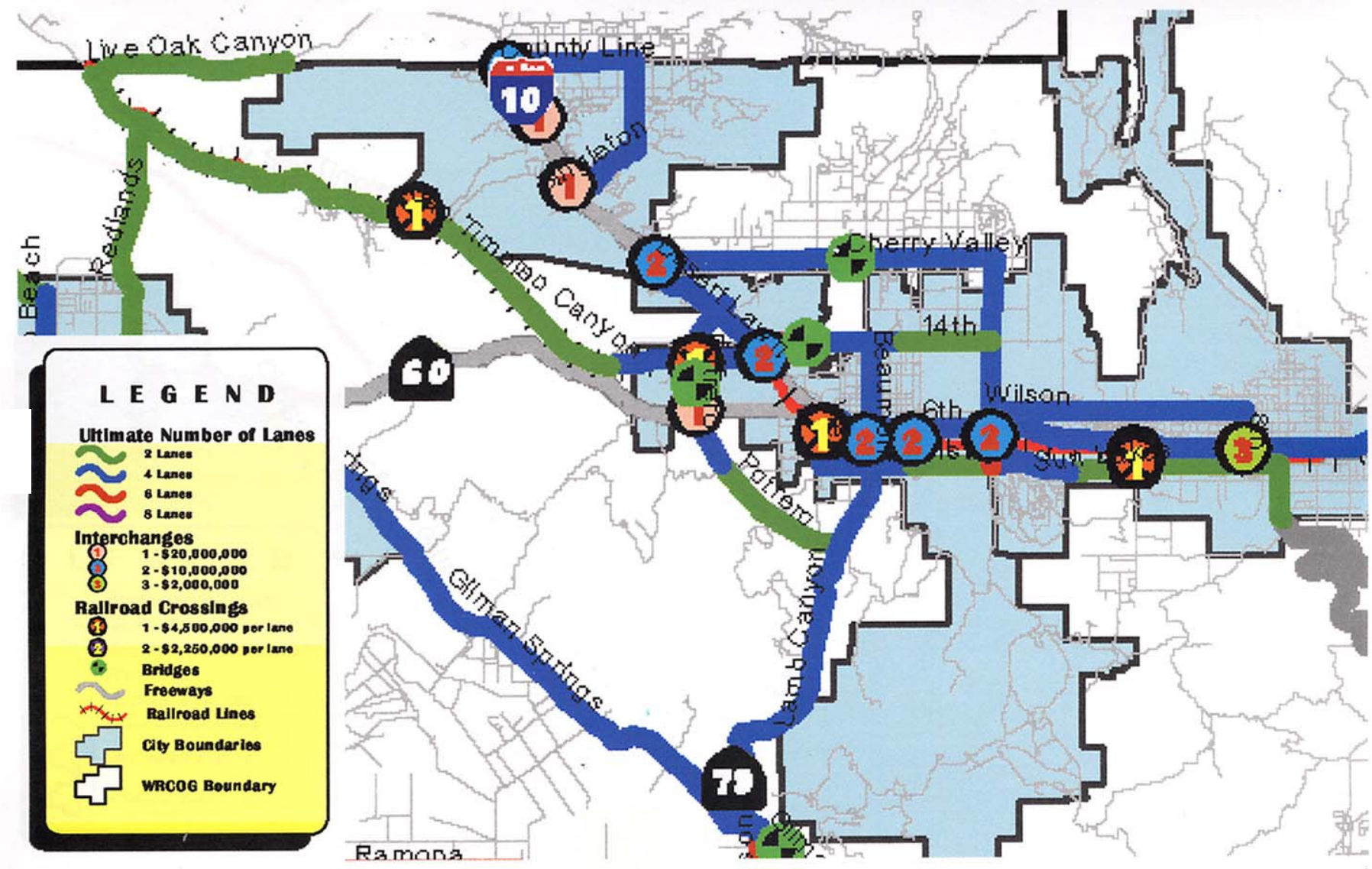


EDAW URBAN CROSSROADS

Figure 3.10-2
City of Calimesa General Plan Circulation Element

EDAW URBAN CROSSROADS

Figure 3.10-3
Riverside County General Plan Circulation Element



EDAW URBAN CROSSROADS

Figure 3.10-4
Transportation Uniform Mitigation Fee (TUMF) Regional System of Highways and Arterials

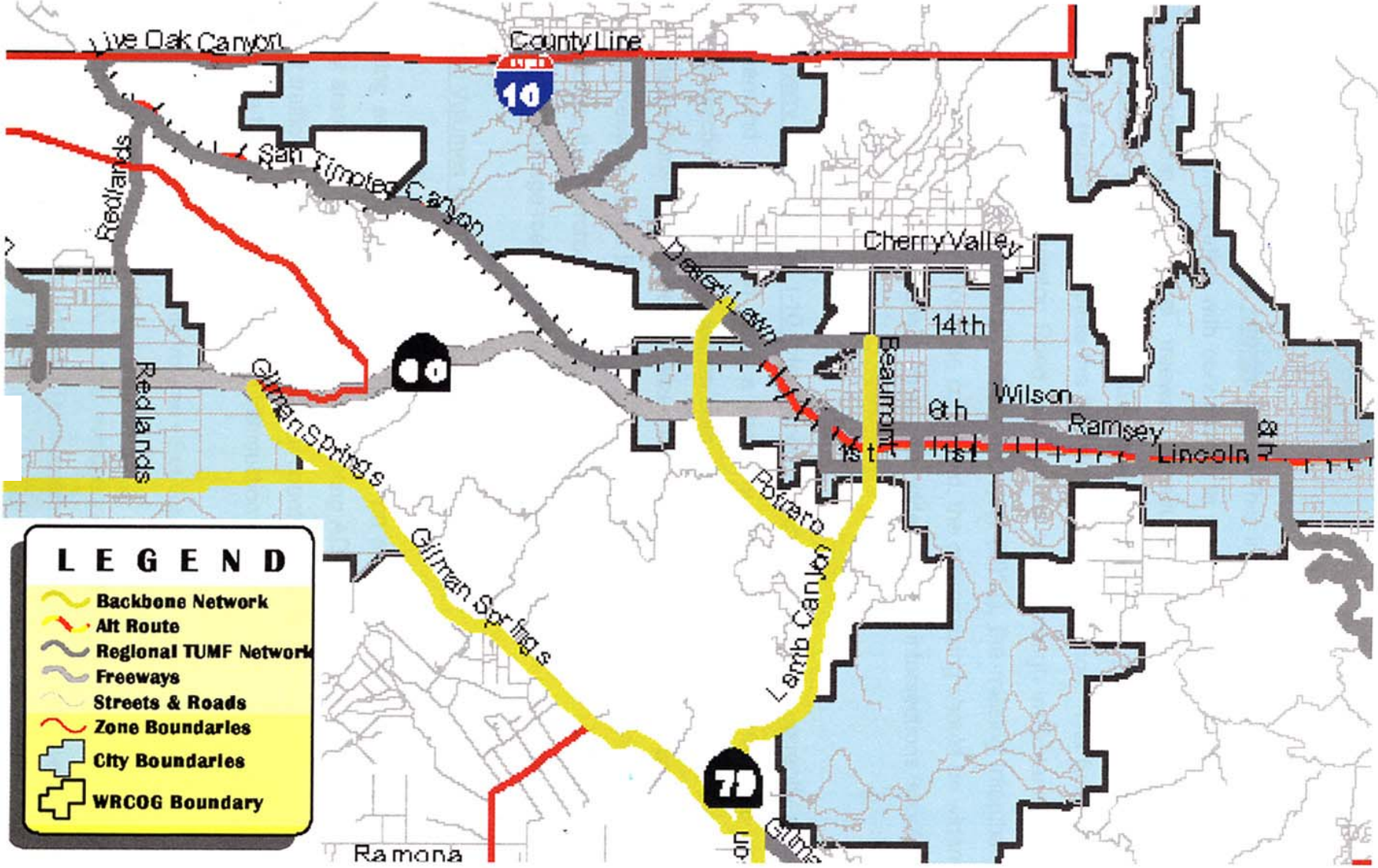


Figure 3.10-5
Transportation Uniform Mitigation Fee (TUMF) Backbone Network

TRAFFIC VOLUMES AND CONDITIONS

Existing average daily traffic (ADT) volumes on arterial highways throughout the study area are shown on Figure 3.10-6. Existing ADT volumes are based upon the latest traffic data factored from peak hour counts, using the following formula fro each intersection leg:

PM Peak Hour (Approach Volume + Exit Volume) x 12 = Leg Volume

The current technical guide to the evaluation of the traffic operations is the 2000 Highway Capacity Manual (HCM). The HCM defines level of service as a qualitative measure, which describes operational conditions within a traffic stream, generally in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. The criteria used to evaluate level of service (LOS) conditions vary based on the type of roadway and whether the traffic flow is considered interrupted or uninterrupted. For a detailed description, please refer to the traffic study in Appendix H of this EIR. The levels of service are defined for the various analysis methodologies as follows:

Level of Service	Average Total Delay Per Vehicle (seconds)	
	Signalized	Un-signalized
A	0 to 10.00	0 to 10.00
B	10.01 to 20.00	10.01 to 15.00
C	20.01 to 35.00	15.01 to 25.00
D	35.01 to 55.00	25.01 to 35.00
E	55.01 to 80.00	35.01 to 50.00
F	80.01 and up	50.01 and up

Existing peak hour traffic operations have been evaluated for the study area intersections. The results of this analysis are summarized in Table 3.10-1, along with the existing intersection geometrics and traffic control devices at the analysis locations. Existing intersection level of service calculations are based upon manual AM and PM peak hour turning movement counts made in June 2003. Traffic count worksheets are included in Appendix A of the traffic study contained in Appendix H of this EIR.

For existing traffic conditions, the study area intersections are currently operating at an acceptable LOS (LOS "D" or better) during the peak hours, except the I-10 Southbound Ramps at County Line Road, which operates at LOS F in the PM peak hour. Existing HCM calculation worksheets are provided in Appendix B of the traffic study (Appendix H of this EIR).

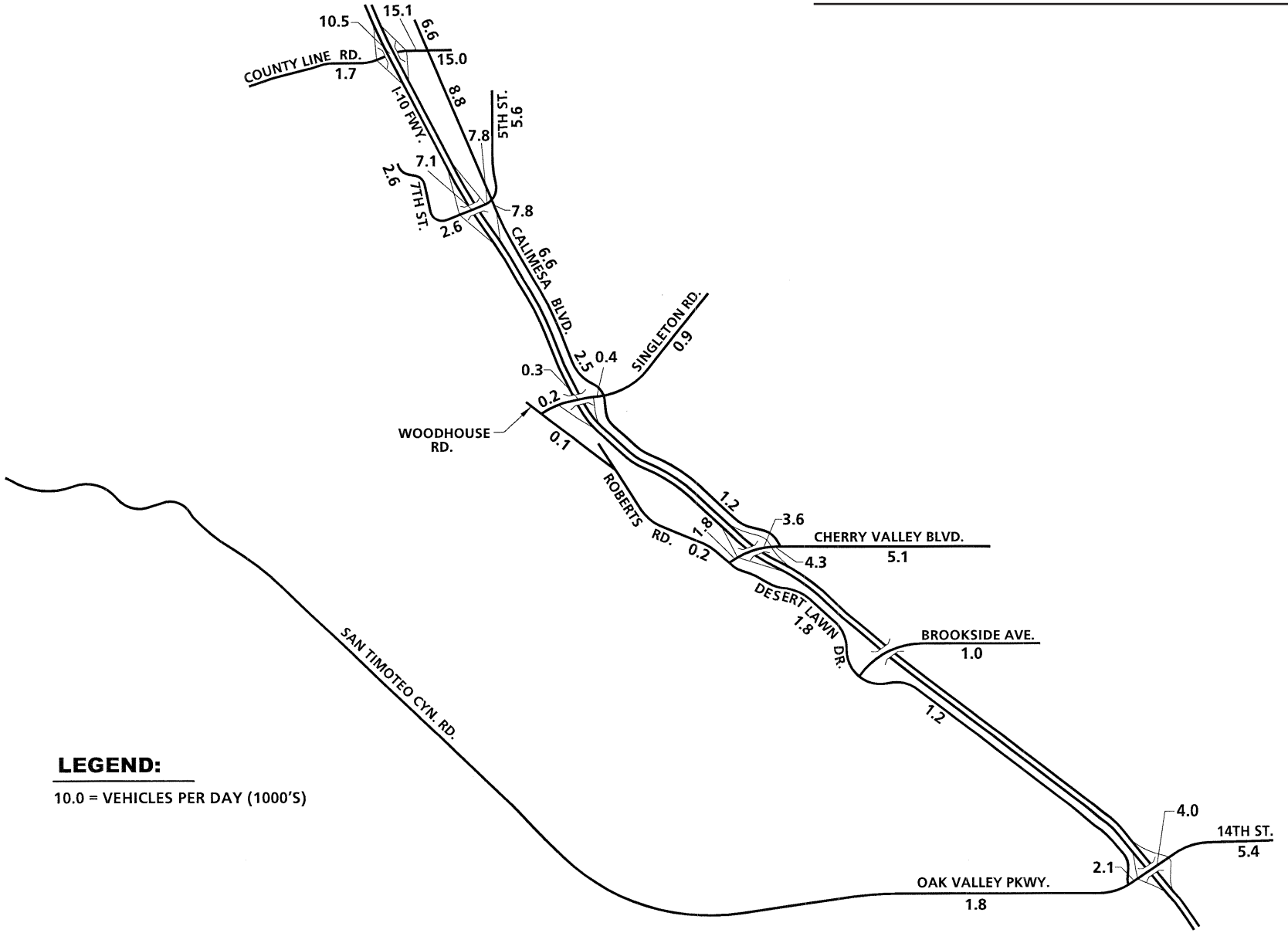


Figure 3.10-6
Existing Average Daily Traffic (ADT)

Table 3.10-1
Intersection Analysis for Existing Traffic Conditions

Intersection	Traffic Control	Intersection Approach Lanes[1]												Peak Hour			
		Northbound			Southbound			Eastbound			Westbound			Delay[2]		LOS[3]	
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
Desert Lawn Dr. (NS) at:																	
▪ Cherry Valley Blvd. (EW)	CSS[4]	0	1	0	0	1	0	0	0	0	0	1	0	8.8	9.0	A	A
▪ Brookside Ave. (EW)	CSS	0	1	0	0	1	0	0	1	0	0	1	0	9.0	9.2	A	A
▪ Oak Valley Pkwy. (EW)	CSS	0	0	0	0	1	0	0	1	0	0	1	0	9.1	9.4	A	A
Woodhouse Rd. (NS) at:																	
▪ Singleton Rd. (EW)	AWS	0	1	0	0	1	0	0	0	0	0	1	0	608	6.8	A	A
I-10 SB Ramps (NS) at:																	
▪ County Line Rd. (EW)	CSS	0	0	0	0	1	0	0	1	0	1	1	0	23.3	--[5]	C	F
▪ Sandalwood Dr. (EW)	CSS	0	0	0	0	1	0	0	1	0	0	1	0	13.1	25.7	B	C
▪ Singleton Rd. (EW)	None	0	0	0	0	0	0	0	1	1	1	1	0	7.2	7.2	A	A
▪ Cherry Valley Blvd. (EW)	CSS	0	0	0	1	0	1	0	1	1	0	1	0	9.3	10.1	A	B
▪ Oak Valley Pkwy. (EW)	CSS	0	0	0	0	1	0	0	1	0	0	1	0	10.6	11.7	B	B
I-10 NB Ramps (NS) at:																	
▪ County Line Rd. (EW)	CSS	0	1	0	0	0	0	1	1	0	0	1	1	10.9	16.5	B	C
▪ 5th St. (EW)	UC	0	0	0	0	0	0	0	1	0	0	1	0	8.2	7.9	A	A
▪ Singleton Rd. (EW)	CSS	0	1	0	0	0	0	0	1	0	0	1	0	8.4	8.5	A	A
▪ Cherry Valley Blvd. (EW)	CSS	1	0	1	0	0	0	0	1	0	0	1	1	10.5	10.8	B	B
▪ 14th St. (EW)	CSS	1	0	1	0	0	0	0	1	0	0	1	1	10.8	10.9	B	B

[1] When a right turn is designed, the lane can either be striped or unstriped. A curb side through lane 19 feet or greater in width is assumed to provide an unstriped right turn lane.
L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing
[2] Highway Capacity Manual (HCM) 2000 Operations Method (Delay in seconds)
[3] Level of Service (LOS)
[4] CSS = Cross Street Stop; AWS = All-Way Stop; TS = Traffic Signal; UC = Uncontrolled
[5] -- = Intersection unstable; high delay; Level of Service "F"

Intersection	Traffic Control	Intersection Approach Lanes[1]												Peak Hour			
		Northbound			Southbound			Eastbound			Westbound			Delay[2]		LOS[3]	
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
Calimesa Blvd. (NS) at:																	
▪ County Line Rd. (EW)	TS	1	2	0	1	1	1	1	1	0	1	2	0	9.2	10.3	A	B
▪ 5th St. (EW)	TS	1	2	0	1	1	1>	1.5	1.5	0	1	1	1	20.0	20.5	B	C
▪ I-10 NB Off-Ramp (EW)	CSS	0	1	0	0	1	0	1	0	0	0	0	0	12.4	15.9	B	C
▪ Singleton Rd. (EW)	AWS	0	1	0	0	1	0	0	1	0	0	1	0	7.1	7.5	A	A
▪ Cherry Valley Blvd. (EW)	CSS	0	0	0	0	1	0	1	1	0	0	1	1	10.2	10.2	B	B

TRAFFIC SIGNAL WARRANT

Based on the existing traffic volumes, traffic signals appear to currently be warranted at the following intersections:

I-10 Freeway Southbound Ramps (NS) at:
- Sandalwood Drive (EW)

I-10 Freeway Northbound Ramps (NS) at:
- County Line Road (EW)

3.10.3 THRESHOLD OF SIGNIFICANCE

A significant adverse environmental impact would occur if the project results in any of the following:

- An increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersection).
- Exceeding, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highway.
- Inadequate emergency access.
- Inadequate parking capacity.

3.10.4 PROJECT IMPACTS

TRIP GENERATION

Trip generation represents the amount of traffic, which is attracted and produced by a development. Trip generation rates utilized in this analysis are shown in Table 3.10-2. The trip generation rates are based upon data collected by the Institute of Transportation Engineers (ITE). The trip generation rates used for "Active Park" are based on data specifically prepared for a sports park in the City of Claremont. It is based on projected assumptions of number of patrons using the park facilities.

A portion of the commercial retail trips are anticipated to be comprised of "pass-by" and internal (within the Oak Valley Calimesa development area) traffic. These "pass-by/internal" trips are defined as trips that do not leave the development area which is the focus of this analysis. The project area land uses include commercial retail, light industrial, business park, and residential uses, and the assumptions regarding internal/pass-by interactions between these uses are reasonable. Many business park patrons will use the commercial retail area facilities (which typically includes merchandise, service station, and restaurant land uses), and area residents will also use the retail sites. The total internal/pass-by trip ends are appropriately removed at the trip generation level before assigning external "new" trips to the surrounding roadway network.

Table 3.10-2
Trip Generation Rates

LAND USE	UNITS	PEAK HOUR				DAILY
		AM		PM		
		IN	OUT	IN	OUT	
SF[1] Detached	DU[2]	0.19	0.56	0.64	0.37	9.57
MF Attached	DU	0.10	0.41	0.40	0.22	6.72
Elementary School	STU	0.23	0.19	0.03	0.06	1.29
Middle School	STU	0.29	0.24	0.08	0.07	1.62
High School	STU	0.28	0.13	0.07	0.07	1.71
Neighborhood Park	AC	0.01	0.01	0.02	0.04	2.28
Active Park[3]	AC	0.88	0.74	2.35	2.35	41.76
Recreation Community Center	TSF	0.99	0.63	0.48	1.16	22.88
Community Recreation	TSF	0.96	0.96	2.89	2.88	90.88
Light Industrial	TSF	0.81	0.11	0.12	0.86	6.97
BP (90 TSF)	TSF	1.21	0.23	0.34	1.15	19.05
BP (91 TSF)	TSF	1.21	0.23	0.34	1.15	18.96
BP (173 TSF)	TSF	1.20	0.23	0.32	0.09	15.07
BP (200 TSF)	TSF	1.20	0.23	0.32	1.07	14.48
BP (228 TSF)	TSF	1.19	0.23	0.32	1.06	14.02
BP (238 TSF)	TSF	1.19	0.23	0.32	1.06	13.89
BP (353 TSF)	TSF	1.19	0.23	0.31	1.02	12.86
BP (387 TSF)	TSF	1.18	0.23	0.30	1.01	12.68
BP (419 TSF)	TSF	1.18	0.23	0.30	1.01	12.53
BP (469 TSF)	TSF	1.18	0.22	0.30	1.00	12.34
BP (547 TSF)	TSF	1.18	0.22	0.29	0.98	12.11
BP (691 TSF)	TSF	1.17	0.22	0.29	0.97	11.83
BP (703 TSF)	TSF	1.17	0.22	0.29	0.96	11.81
CR (8 TSF)	TSF	2.62	1.68	7.09	7.68	164.38
CR (26 TSF)	TSF	1.64	1.05	4.75	5.15	108.82
CR (38 TSF)	TSF	1.41	0.90	4.18	4.52	95.28
CR (74 TSF)	TSF	1.08	0.69	3.33	3.61	75.46
CR (78 TSF)	TSF	1.05	0.67	3.27	3.54	74.08
CR (86 TSF)	TSF	1.01	0.65	3.16	3.43	71.59
CR (98 TSF)	TSF	0.96	0.62	3.03	3.28	68.39
CR (100 TSF)	TSF	0.95	0.61	3.00	3.26	67.91
CR (127 TSF)	TSF	0.87	0.55	2.77	3.00	62.46
CR (151 TSF)	TSF	0.81	0.52	2.61	2.83	58.79

[1] SF = Single-Family; MF = Multi-Family; BP = Business Park; CR = Commercial Retail; PO = Professional Office
[2] DU = Dwelling Unit; STU = students; AC = acre; TSF = thousand square feet
[3] The trip generation rates used for "Active Park" are based on data specifically prepared for a sports park in the City of Claremont. It is based on projected assumptions of number of patrons using the park facilities.

LAND USE	UNITS	PEAK HOUR				DAILY
		AM		PM		
		IN	OUT	IN	OUT	
CR (166 TSF)	TSF	0.78	0.50	2.53	2.74	56.87
CR (196 TSF)	TSF	0.73	0.47	2.39	2.59	53.66
CR (260 TSF)	TSF	0.65	0.42	2.17	2.35	48.61
CR (261 TSF)	TSF	0.65	0.42	2.17	2.35	48.54
CR (401 TSF)	TSF	0.55	0.35	1.87	2.03	41.77
CR (455 TSF)	TSF	0.52	0.33	1.80	1.94	39.96
PO (237 TSF)	TSF	1.39	0.19	0.25	1.21	10.94
PO (428 TSF)	TSF	1.23	0.17	0.22	1.08	9.55

Source: Institute of Transportation Engineers (ITE), Trip Generation, Seventh Edition, 2003.

Summerwind Ranch Residential

The residential area is divided into 14 TAZs (TAZ "A," "B," "D," "E," "G" through "O" and "V"), and consists of single-family detached residential, multi-family attached residential, elementary school and middle school land uses. Both daily and peak hour trip generation for the proposed residential project area are shown in Table 3.10-3.

For Phase 1 conditions, the residential area is projected to generate a total of approximately 6,086 trip-ends per day with 477 vehicles per hour during the AM peak hour and 643 vehicles per hour during the PM peak hour.

For Phase 2 conditions, the residential project area is projected to generate a total of approximately 12,764 trip-ends per day with 1,192 vehicles per hour during the AM peak hour and 1,321 vehicles per hour during the PM peak hour.

For Phase 3 conditions, the residential project area is projected to generate a total of approximately 22,399 trip-ends per day with 2,398 vehicles per hour during the AM peak hour and 2,248 vehicles per hour during the PM peak hour.

For 2030 conditions, the residential project area is projected to generate a total of approximately 35,414 trip-ends per day with 3,597 vehicles per hour during the AM peak hour and 3,527 vehicles per hour during the PM peak hour.

Summerwind Town Center

The Town Center project area, located west of the I-10 Freeway adjacent to Singleton Road and Cherry Valley Boulevard, is divided into eight TAZs (TAZ "C," "F," "P," "Q," "S," "T" and "U"), and consists of commercial retail and business park land uses. Both daily and peak hour trip generation for the town center project area are shown in Table 3.10-4.

For Phase 2 conditions, the town center project area is projected to generate a total of approximately 9,537 trip-ends per day with 316 vehicles per hour during the AM peak hour and 899 vehicles per hour during the PM peak hour.

For Phase 3 conditions, the town center project area is projected to generate a total of approximately 36,451 trip-ends per day with 1,825 vehicles per hour during the AM peak hour and 3,514 vehicles per hour during the PM peak hour.

Table 3.10-3
Residential Project Trip Generation

Project Phasing	Traffic Analysis Zones	Planning Area	Land Use	Proposed Quantity	Peak Hour				Daily
					AM		PM		
					In	Out	In	Out	
Phase 1	A	A-4	SF[1] Detached	169 DU[2]	32	95	108	63	1,617
		A-7	SF Detached	93 DU	18	52	60	34	890
		SUBTOTAL			50	147	168	97	2,507
	D	A-3	SF Detached	79 DU	15	44	51	29	756
	E	A-2	SF Detached	58DU	11	32	37	21	555
	G	A-1	SF Detached	134 DU	25	75	86	50	1,282
	H	A-8	SF Detached	103 DU	20	58	66	38	986
	SUBTOTAL - PHASE 1				**121**	**356**	**408**	**235**	**6,086**
Phase 2	M	C-2	Elementary School	600 STU	138	114	18	36	774
	N	B-7	SF Detached	64 DU	12	36	41	24	612
		B-9	SF Detached	51DU	10	29	33	19	488
		B-11	SF Detached	87 DU	17	49	56	32	833
		B-12	SF Detached	81 DU	15	45	52	30	775
		B-13	SF Detached	95 DU	18	53	61	35	909
		SUBTOTAL			72	212	243	140	3,617
	O	B-4	SF Detached	118 DU	22	66	76	44	1,129
		B-5	SF Detached	66 DU	13	37	42	24	632
		B-6	SF Detached	55 DU	10	31	35	20	526
		SUBTOTAL			45	134	153	88	2,287
	SUBTOTAL – PHASE 2				**255**	**460**	**414**	**264**	**6,678**
	CUMULATIVE TOTAL – PHASE 2				**376**	**816**	**822**	**499**	**12,764**

[1] SF = Single-Family; MF = Multi-Family
[2] DU = Dwelling Unit; TSF = thousand square feet; AC = acre; STU = students

Project Phasing	Traffic Analysis Zones	Planning Area	Land Use	Proposed Quantity	Peak Hour				Daily
					AM		PM		
					In	Out	In	Out	
Phase 3	B	A-6	Middle School	1,200 STU	348	288	96	84	1,944
	I	C-3	SF Detached	75 DU	14	42	48	28	718
		C-4	SF Detached	120 DU	23	67	77	44	1,148
		C-9	SF Detached	75 DU	14	42	48	28	718
		SUBTOTAL			51	151	173	100	2,584
	V	B-1	Community Recreation	4.3 TSF	4	4	12	12	389
		B-2	MF Attached	212 DU	21	87	85	47	1,425
		B-3	SF Detached	111 DU	21	62	71	41	1,062
		D-1	MF Attached	332 DU	33	136	133	73	2,231
		SUBTOTAL			79	289	301	173	5,107
	SUBTOTAL – PHASE 3				**478**	**728**	**570**	**357**	**9,635**
	CUMULATIVE TOTAL – PHASE 3				**854**	**1,544**	**1,392**	**856**	**22,399**
2030	J	C-7	SF Detached	114 DU	22	64	73	42	1,091
		C-8	SF Detached	102 DU	19	57	65	38	976
		D-3	SF Detached	111 DU	21	62	71	41	1,062
		D-4	SF Detached	183 DU	35	102	117	68	1,751
		D-6	Elementary School	600 STU	138	114	18	36	774
		D-7	SF Detached	80 DU	15	45	51	30	766
		D-8	SF Detached	157 DU	30	88	100	58	1,502
		SUBTOTAL			280	532	495	313	7,922
	K	E-1	MF Attached	309 DU	31	127	124	68	2,076
	L	E-2	MF Attached	449 DU	45	184	180	99	3,017
	SUBTOTAL - 2030				**356**	**843**	**799**	**480**	**13,015**
	CUMULATIVE TOTAL - 2030				**1,210**	**2,387**	**2,191**	**1,336**	**35,414**

Table 3.10-4
Town Center Project Trip Generation

Project Phasing	Traffic Analysis Zones	Planning Area	Land Use	Proposed Quantity	Peak Hour				Daily
					AM		PM		
					In	Out	In	Out	
Phase 2	C	TC-7	CR (196 TSF)	195.6 TSF	143	92	467	507	10,496
			Pass-By Trips/Internal Capture 20%		*-29*	*-18*	*-93*	*-101*	*-2,099*
			SUBTOTAL		114	74	374	406	8,397
	T	TC-2.1	BP (419 TSF)	91.0 TSF	107	21	27	92	1,140
	SUBTOTAL - PHASE 2				**221**	**95**	**401**	**498**	**9,537**
Phase 3	F	TC-8	CR (127 TSF)	127.2 TSF	111	70	352	382	7,945
			Pass-by Trips/Internal Capture 20%		*-22*	*-14*	*-70*	*-76*	*-1,589*
			SUBTOTAL		89	56	282	306	6,356
	P	TC-3	BP (469 TSF)	468.6 TSF	553	103	141	469	5,783
	S	TC-1	CR (196 TSF)	196.4 TSF	143	92	469	509	10,539
			Pass-by Trips/Internal Capture 20%		*-29*	*-18*	*-94*	*-102*	*-2,108*
			SUBTOTAL		114	74	375	407	8,431
	T	TC-2.2	BP (419 TSF)	328.4 TSF	388	76	99	332	4,115
	U	TC-6	CR (26 TSF)	25.6 TSF	42	27	122	132	2,786
			Pass-by Trips/Internal Capture 20%		*-8*	*-5*	*-24*	*-26*	*-557*
			SUBTOTAL		34	22	98	106	2,229
	SUBTOTAL – PHASE 3				**1,178**	**331**	**995**	**1,620**	**26,914**
	CUMULATIVE TOTAL – PHASE 3				**1,399**	**426**	**1,396**	**2,118**	**36,451**
2030	Q	TC-4	CR (455 TSF)	455.2 TSF	237	150	819	883	18,190
			Pass-by Trips/Internal Capture 20%		*-47*	*-30*	*-164*	*-177*	*-3,638*
			SUBTOTAL		190	120	655	706	14,552
	R	TC-5	BP (691 TSF)	691.0 TSF	808	152	200	670	8,175
	SUBTOTAL – 2030				**998**	**272**	**855**	**1,376**	**22,727**
	CUMULATIVE TOTAL - 2030				**2,397**	**698**	**2,251**	**3,494**	**59,178**

For 2030 conditions, the Town Center project area is projected to generate a total of approximately 59,178 trip-ends per day with 3,095 vehicles per hour during the AM peak hour and 5,745 vehicles per hour during the PM peak hour.

TRIP DISTRIBUTION

Trip distribution represents the directional orientation of traffic to and from the project. Trip distribution is heavily influenced by the geographical location of the development area, the location of residential, employment and recreational opportunities and the proximity to the regional freeway system.

Summerwind Ranch Residential

The Phase 1 trip distribution patterns for the residential area (TAZ "A," "D," "E," "G" and "H") are graphically depicted on Exhibits D-1 to D-5 of Appendix D of the traffic study (Appendix H of this EIR).

The Phase 2 trip distribution patterns for the residential area (TAZ "A," "D," "E," "G," "H," "M," "N" and "O") are on Exhibits E-1 to E-8 of Appendix E of the traffic study (Appendix H of this EIR).

The Phase 3 trip distribution patterns for the residential area (TAZ "A," "B," "D," "E," "G," "H," "I," "M," "N," "O" and "V") are on Exhibit F-1 and F-11 of Appendix F of the traffic study (Appendix H of this EIR).

The 2030 trip distribution patterns for the residential area (TAZ "A," "B," "D," "E," "G," through "O" and "V") are on Exhibits G-1 and G-14 of Appendix G of the traffic study (Appendix H of this EIR).

Summerwind Ranch Town Center

The Phase 2 trip distribution patterns for the Town Center (TAZ "C" and "T") are on Exhibits E-9 and E-10 of Appendix E of the traffic study (Appendix H of this EIR).

The Phase 3 trip distribution patterns for the Town Center (TAZ "C," "F," "P," "S," "T," and "U") are on Exhibits F-12 to F-17 of Appendix F of the traffic study (Appendix H of this EIR).

The 2030 trip distribution patterns for the residential area (TAZ "A," "B," "D," "E," "G," through "O" and "V") are on Exhibits G-15 to G-22 of Appendix G of the traffic study (Appendix H of this EIR).

TRIP ASSIGNMENT

The assignment of traffic from the site to the adjoining roadway system has been based upon the site's trip generation, trip distribution, proposed arterial highway, and local street systems, which would be in place by the time of initial occupancy of the site.

Summerwind Ranch Residential

Based on the identified project traffic generation and distribution, the project-related ADT volumes for the residential project area are on Figures 3.10-7, 3.10-8, 3.10-9, and 3.10-10 for Phase 1, Phase 2, Phase 3, and 2030 conditions, respectively.

The Phase 1, Phase 2, Phase 3, and 2030 project-related AM and PM peak hour intersection turning movement volumes for the residential area are on Exhibits 4-E, 4-F, 4-G, 4-H, , 4-I, 4-J, 4-K, and 4-L, respectively (Appendix H of this EIR).

Summerwind Ranch Town Center

Based on the identified project traffic generation and distribution, the project related ADT volumes for the Town Center project area are on Figures 3.10-11, 3.10-12, and 3.10-13for Phase 2, Phase 3, and 2030 conditions, respectively.

The Phase 2, Phase 3, and 2030 project related AM and PM peak hour intersection turning movement volumes for the Town Center are on Exhibits 4-P, 4-Q, 4-R, 4-S, 4-T, and 4-U, respectively (Appendix H of this EIR).

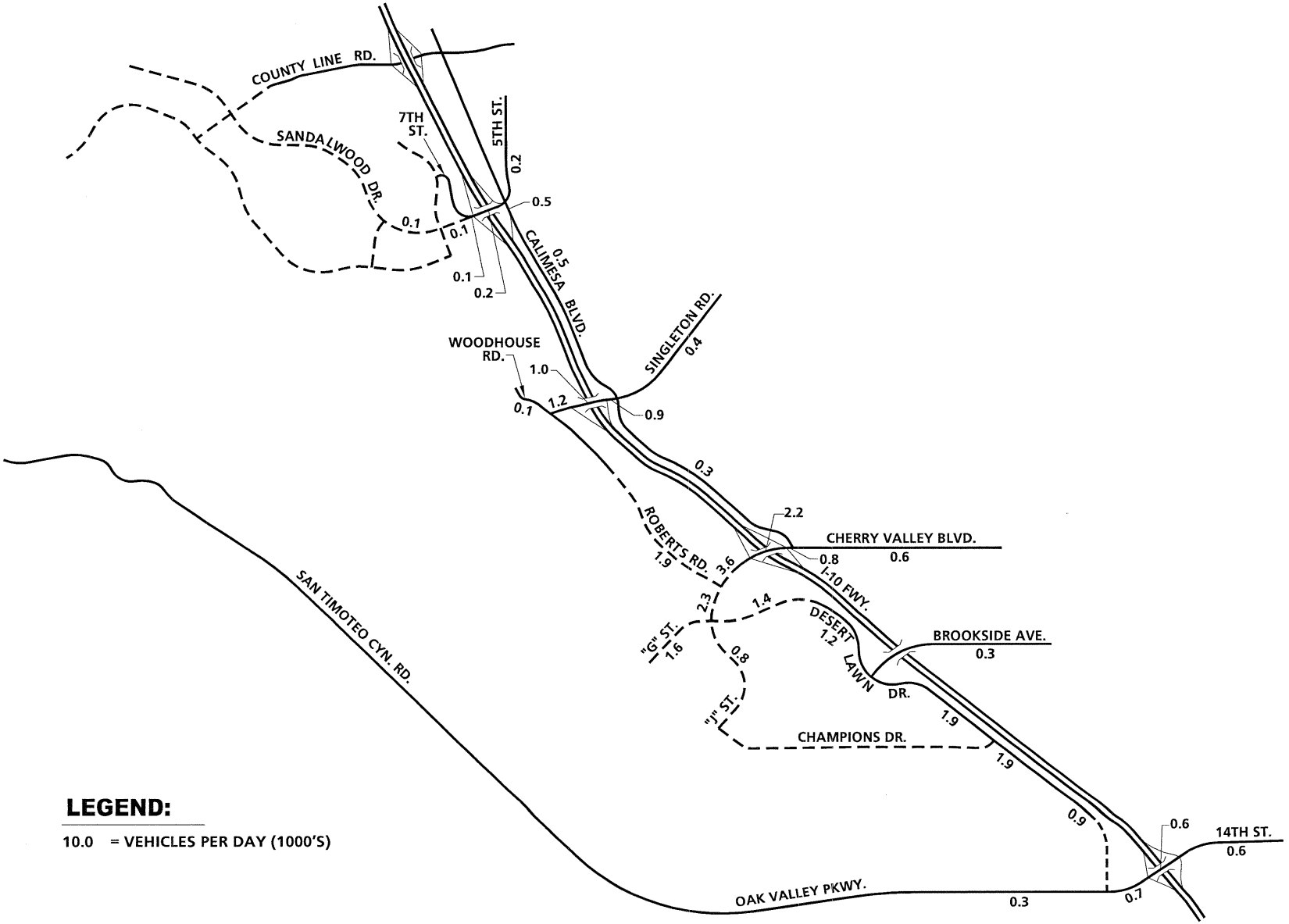
TRAFFIC ANALYSIS

Intersection Level of Service for Phase 1

Impact T1 The proposed project would potentially impact the LOS in Phase 1 for the intersections listed in Table 3.10-5.

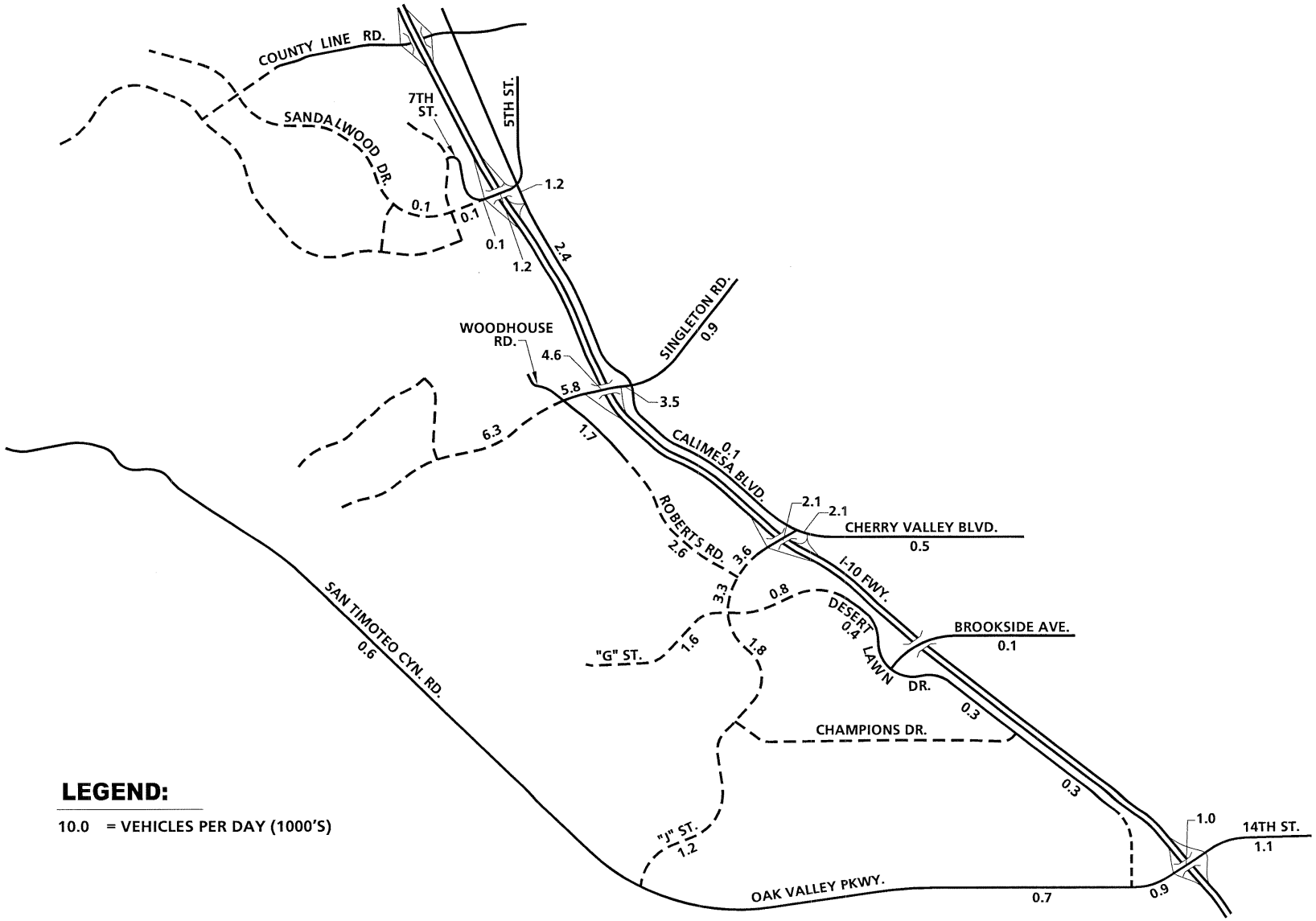
Phase 1 intersection levels of service are shown in Table 3.10-5. Table 3.10-5 is a summary of LOS for all phases (Phases 1, 2, 3, 2030, and General Plan build-out). For details on HCM calculations and proposed improvements for Phase 1, please refer to Table 5-1 of the traffic study (Appendix H of the EIR). Phase 1 AM and PM peak hour intersection turning movement volumes are shown on Figures 3.10-14 and 3.10-15, respectively.

For Phase 1 traffic conditions, the study area intersections are projected to operate at acceptable levels of service during the peak hours with the improvements listed in Table 5-1 of the traffic study.



EDAW URBAN CROSSROADS N

Figure 3.10-7
Summerwind Ranch - SunCal Residential Project Phase 1 Average Daily Traffic (ADT)



EDAW URBAN CROSSROADS

Figure 3.10-8
Summerwind Ranch - SunCal Residential Project Phase 2 Average Daily Traffic (ADT)

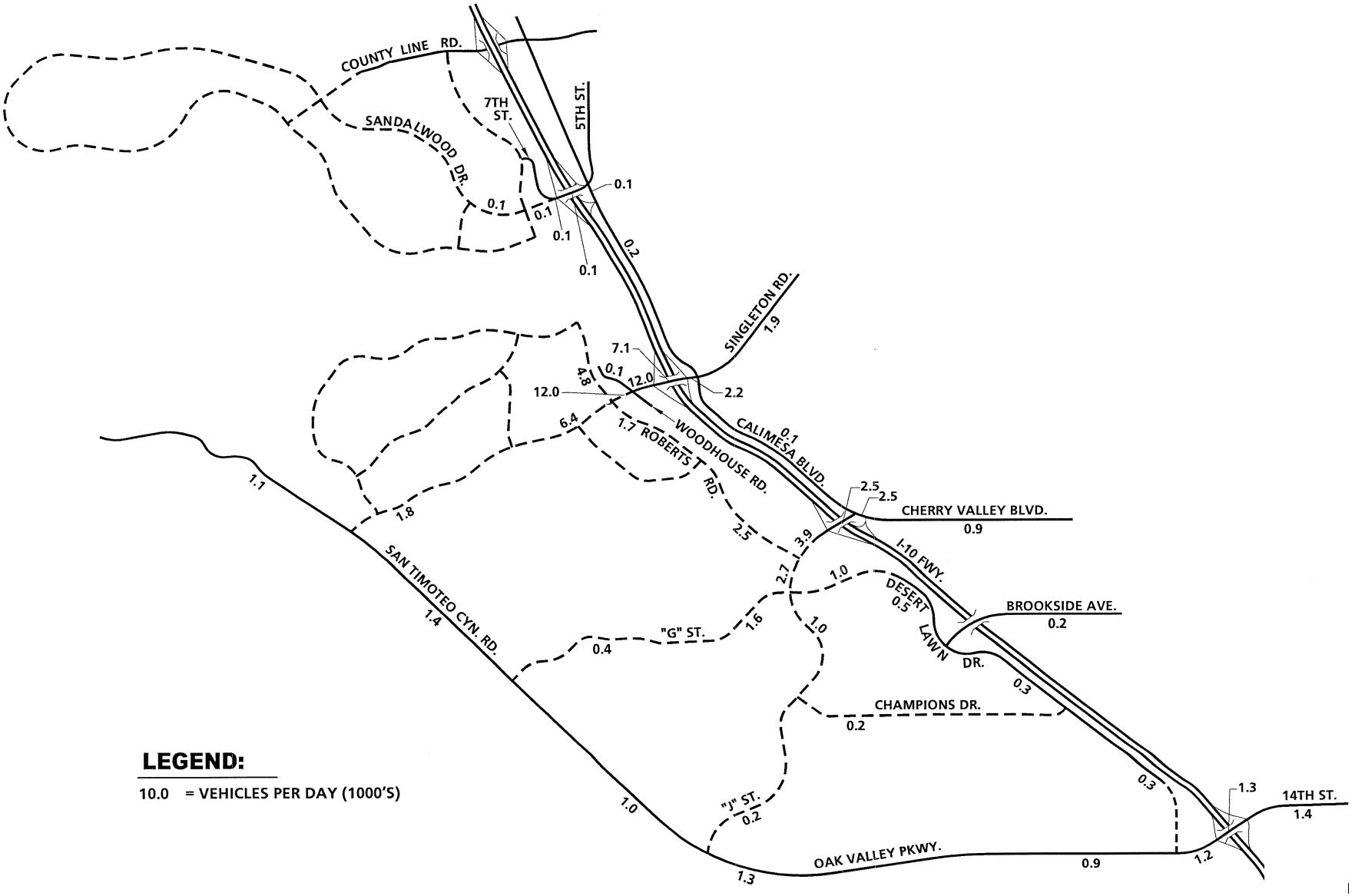


Figure 3.10-9
Summerwind Ranch - SunCal Residential Project Phase 3 Average Daily Traffic (ADT)

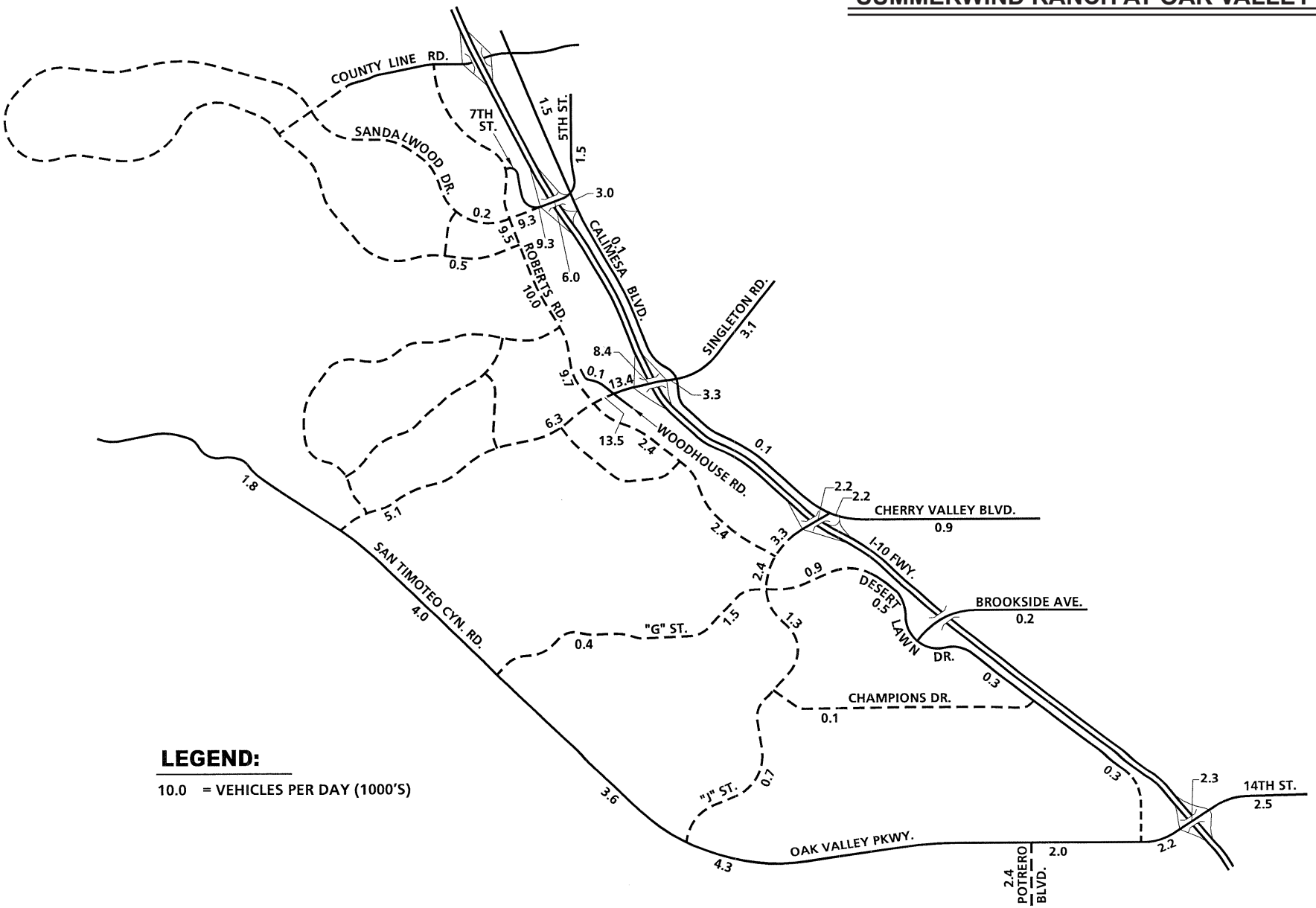
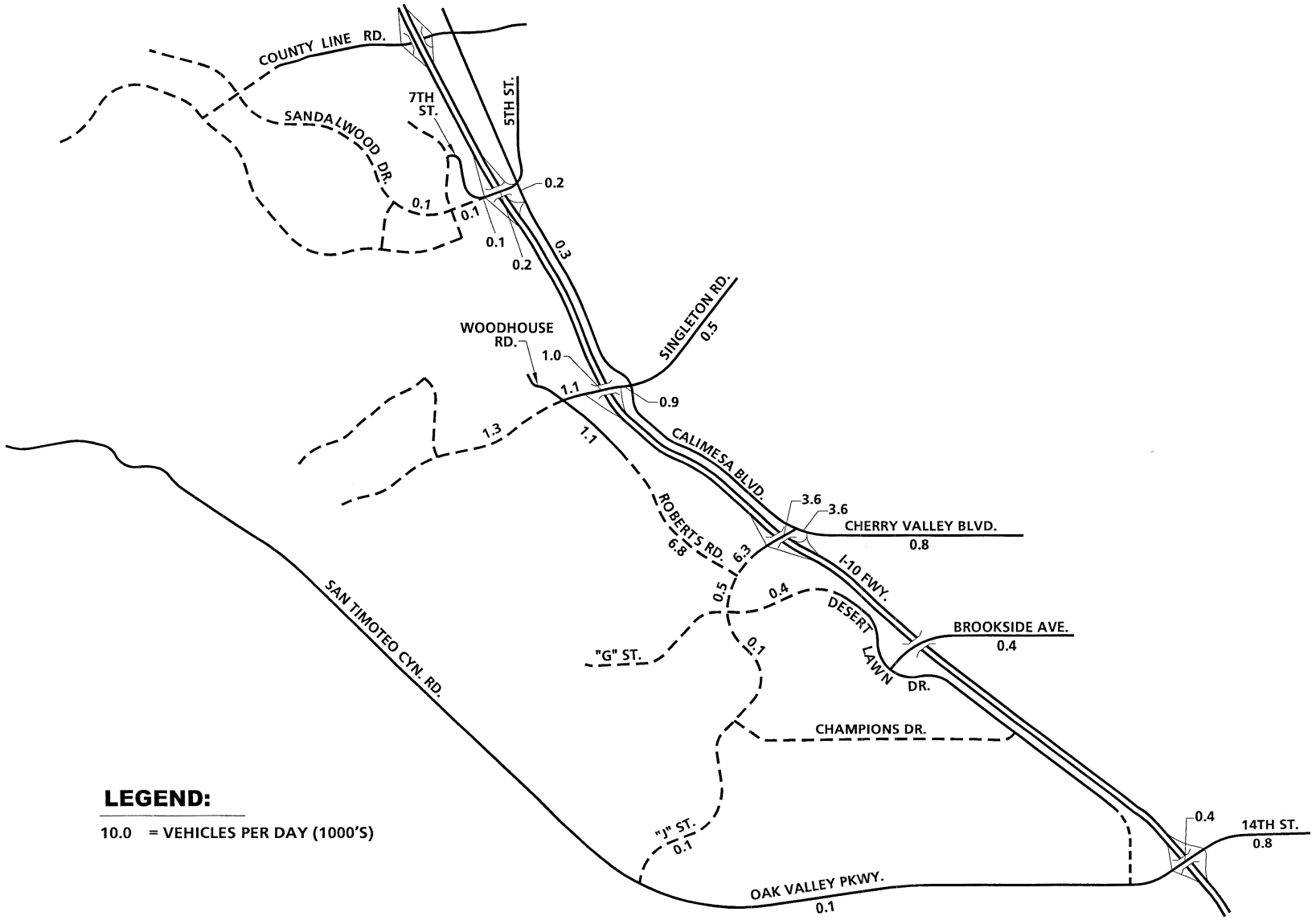


Figure 3.10-10
Summerwind Ranch - SunCal Residential Project 2030 Average Daily Traffic (ADT)



EDAW URBAN CROSSROADS

Figure 3.10-11
Summerwind Ranch - Town Center Project Phase 2 Average Daily Traffic (ADT)

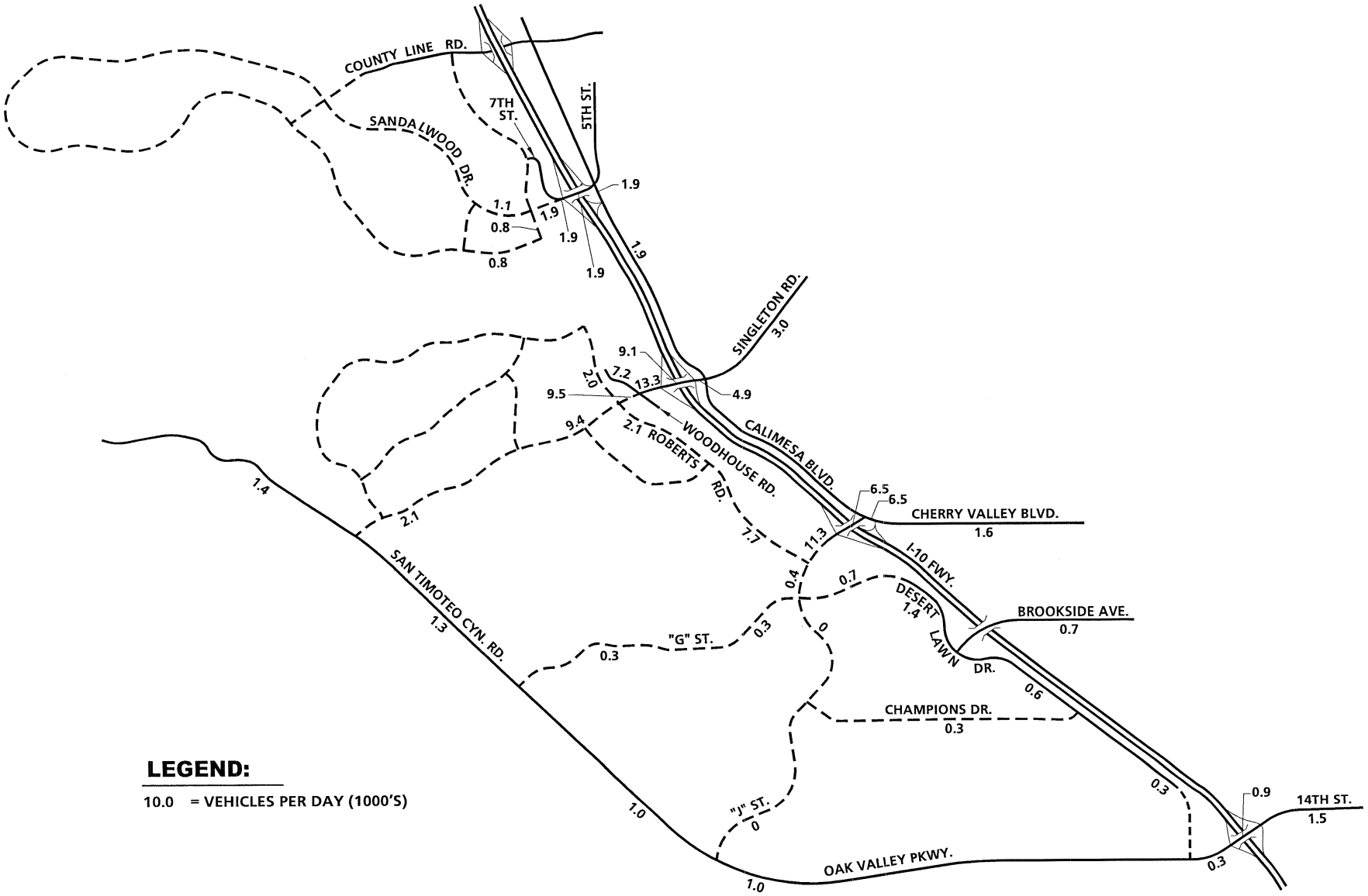
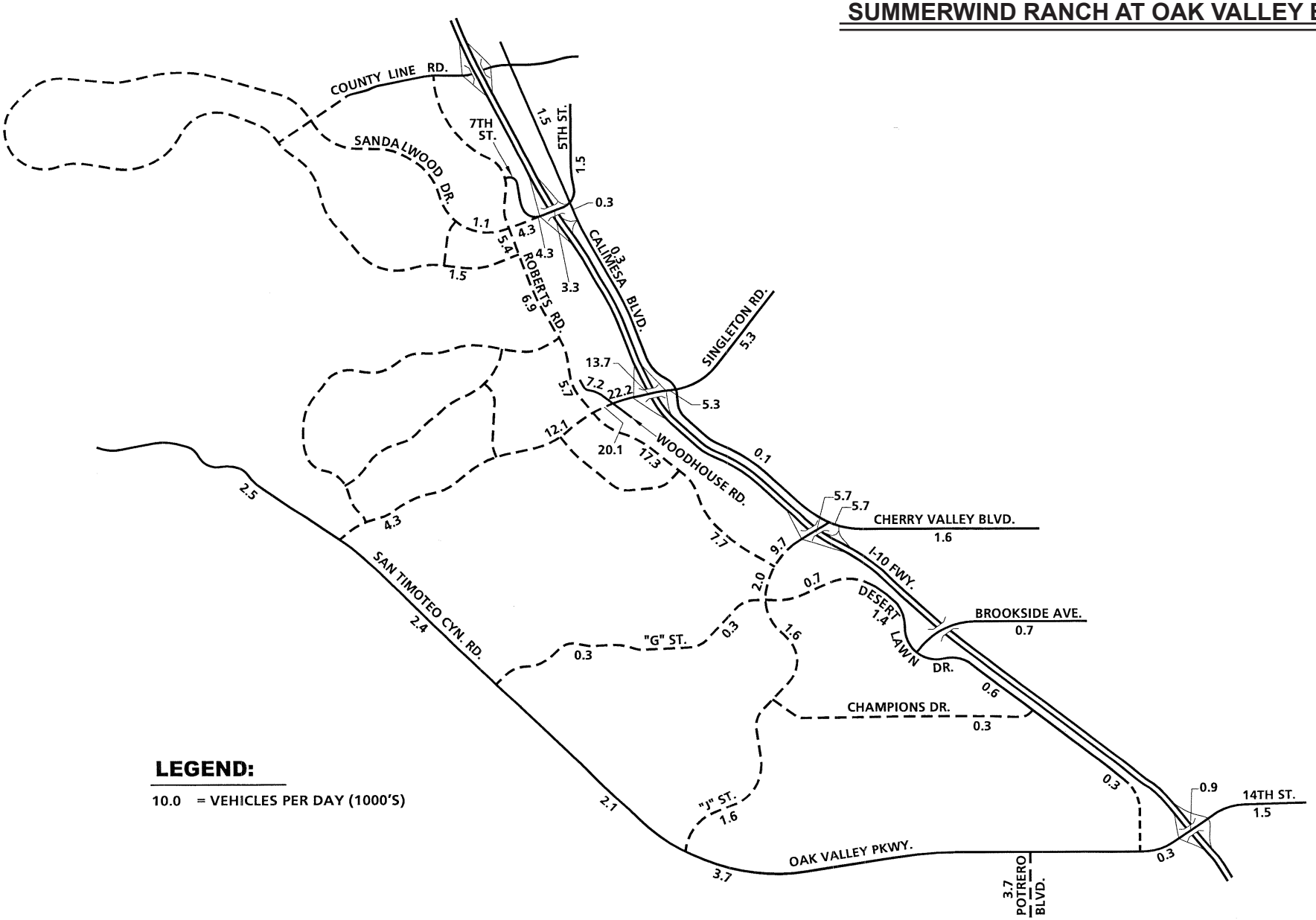


Figure 3.10-12
Summerwind Ranch - Town Center Project Phase 3 Average Daily Traffic (ADT)



EDAW URBAN CROSSROADS

Figure 3.10-13
Summerwind Ranch - Town Center Project 2030 Average Daily Traffic (ADT)

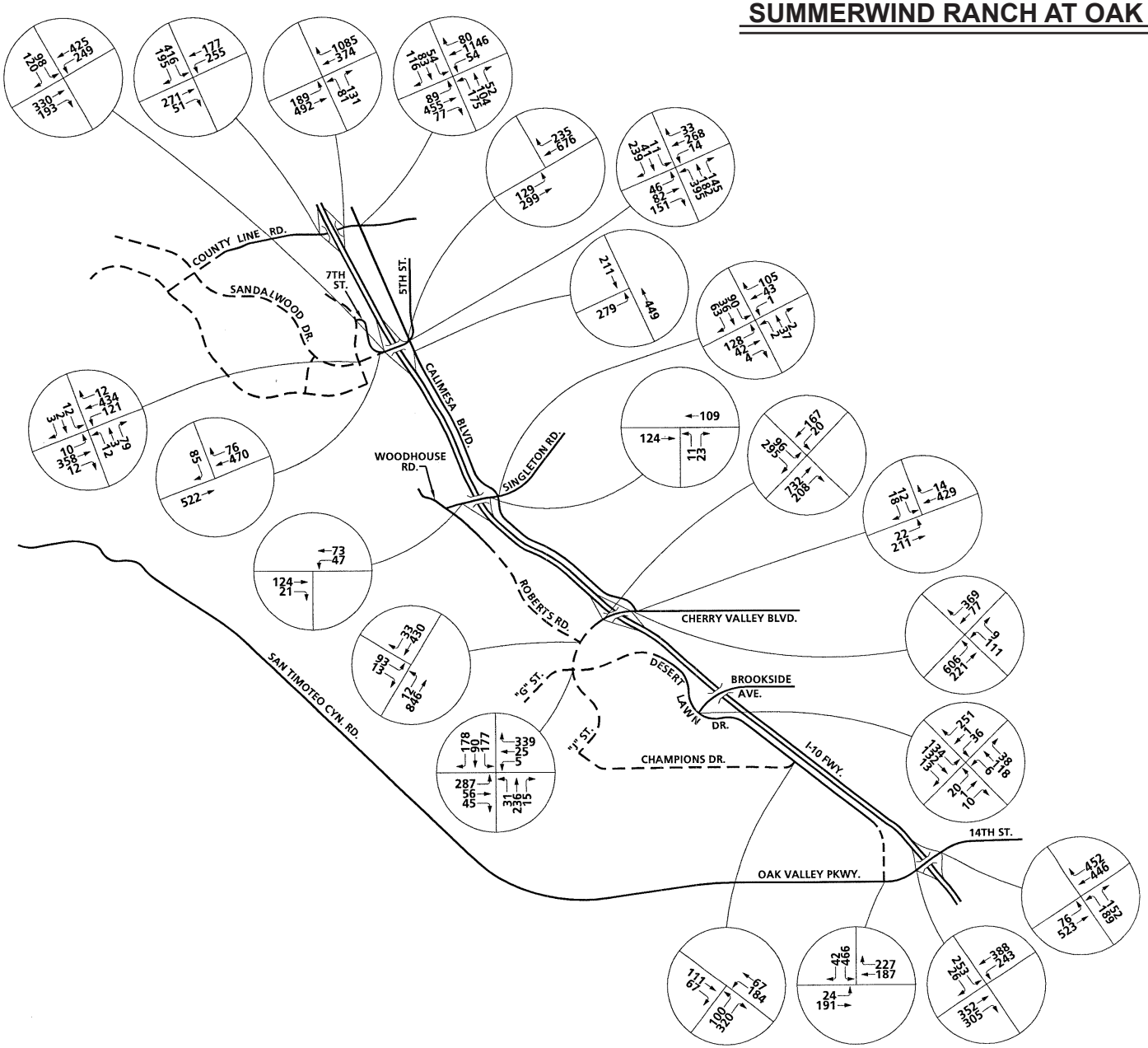


Figure 3.10-14
Phase 1 AM Peak Hour Intersection Volumes

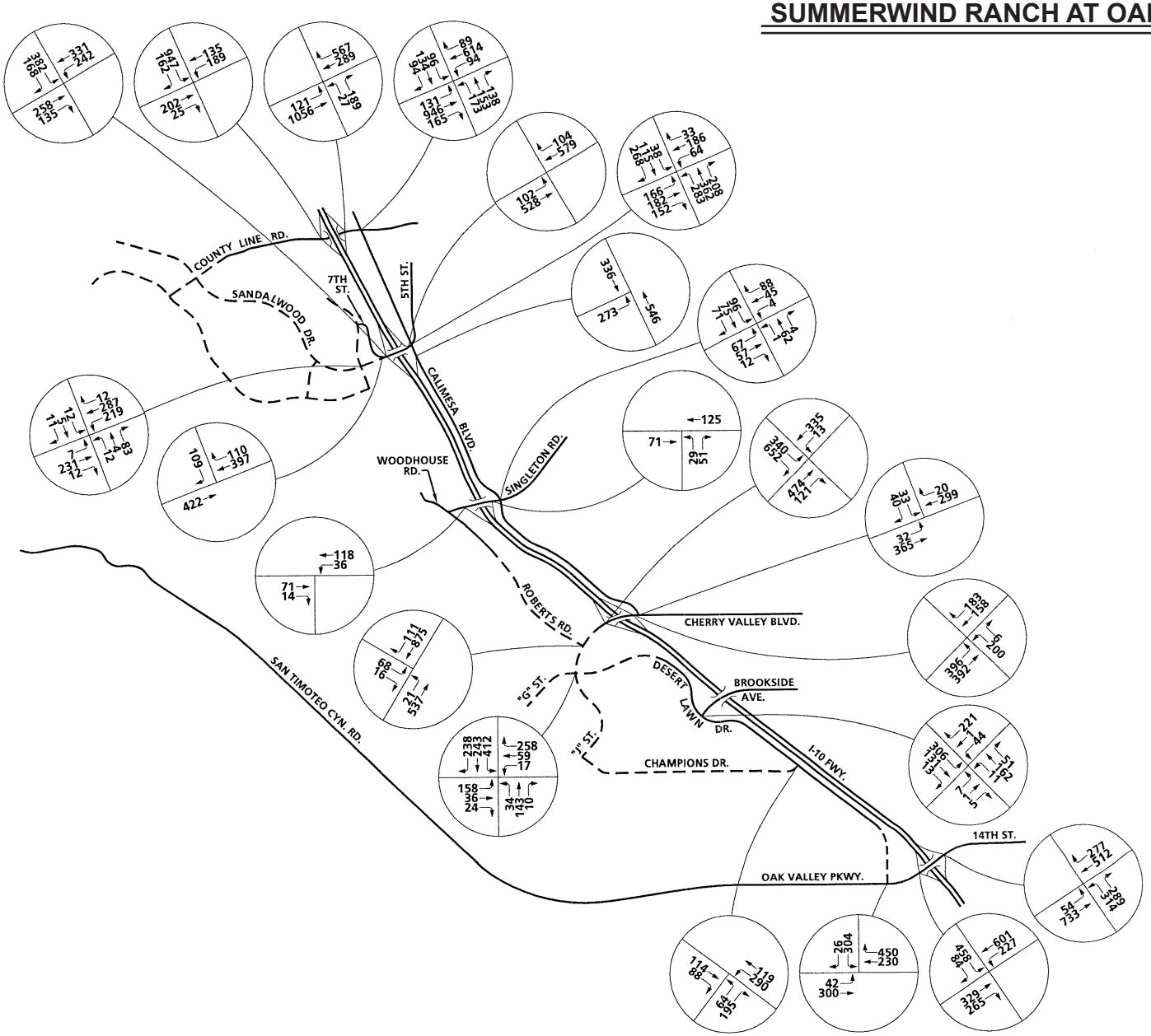


Figure 3.10-15
Phase 1 PM Peak Hour Intersection Volumes

Table 3.10-5
Summary of Intersection Analysis for Phases 1, 2, 3, 2030, and General Plan Build-out
Traffic Conditions with Improvements

Intersection	Peak Hour									
	Phase 1 LOS		Phase 2 LOS		Phase 3 LOS		2030 LOS		General Plan Build-out LOS	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Desert Lawn Dr. (NS) at:										
▪ Cherry Valley Blvd. (EW)	C	C	C	C	C	C	C	C	C	C
▪ Brookside Ave. (EW)	B	B	C	C	B	C	B	C	C	C
▪ Champions Dr. (EW)	B	B	B	B	B	B	B	B	C	C
▪ Oak Valley Pkwy. (EW)	C	B	B	B	D	B	B	C	C	C
Roberts Rd. (NS) at:										
▪ County Line Rd. (EW)	--	--	--	--	B	C	C	C	C	C
▪ Sandalwood Dr. (EW)	B	B	B	B	C	C	C	C	C	C
▪ "D" St. (EW)	--	--	--	--	--	--	C	C	C	C
▪ Singleton Rd. (EW)	--	--	B	B	C	C	C	C	C	C
▪ Cherry Valley Blvd. (EW)	A	A	B	B	C	C	C	C	C	C
7th St. (NS) at:										
▪ Sandalwood Dr. (EW)	B	B	B	C	B	C	B	C	C	D
Woodhouse Rd. (NS) at:										
▪ Singleton Rd. (EW)	--	--	B	C	B	C	B	C	B	C
I-10 SB Ramps (NS) at:										
▪ County Line Rd. (EW)	C	C	C	C	C	C	C	C	C	C
▪ Sandalwood Dr. (EW)	B	C	C	C	C	C	B	C	C	C
▪ Singleton Rd. (EW)	A	A	A	A	C	C	C	C	B	C
▪ Cherry Valley Blvd. (EW)	C	C	B	C	B	C	B	C	B	B
▪ Oak Valley Pkwy. (EW)	C	C	C	C	C	D	C	D	C	D
I-10 NB Ramps (NS) at:										
▪ County Line Rd. (EW)	B	C	B	B	C	C	C	C	C	B

Intersection	Peak Hour									
	Phase 1 LOS		Phase 2 LOS		Phase 3 LOS		2030 LOS		General Plan Build-out LOS	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
▪ 5th St. (EW)	A	A	--	--	--	--	--	--	--	--
▪ Singleton Rd. (EW)	A	A	A	B	C	C	C	C	C	C
▪ Cherry Valley Blvd. (EW)	B	B	--	--	--	--	--	--	--	--
▪ 14th St. (EW)	B	B	C	C	C	D	C	D	B	B
Calimesa Blvd. (NS) at:										
▪ County Line Rd. (EW)	C	C	C	C	C	C	C	C	C	C
▪ 5th St. (EW)	C	C	C	C	C	C	C	C	C	C
▪ I-10 NB Off-Ramp (EW)	B	B	C	C	B	B	B	C	C	B
▪ Singleton Rd. (EW)	A	A	C	C	C	C	C	C	C	C
▪ Cherry Valley Blvd. (EW)	B	B	B	B	B	C	B	C	C	C
Cherry Valley Blvd. (NS) at:										
▪ I-10 NB Ramps (EW)	--	--	C	C	C	C	B	C	B	C
Potrero Blvd. (NS) at:										
▪ Oak Valley Pkwy. (EW)	--	--	--	--	--	--	C	D	D	D
"J" St. (NS) at:										
▪ Champions Dr. (EW)	--	--	B	B	B	B	C	B	C	B
▪ Oak Valley Pkwy. (EW)	--	--	B	B	C	C	C	C	D	D
"G" St. (NS) at:										
▪ San Timoteo Cyn. Rd. (EW)	--	--	--	--	B	B	B	B	B	B
Singleton Rd. (NS) at:										
▪ San Timoteo Cyn. Rd. (EW)	--	--	--	--	B	B	C	C	C	C

Intersection Level of Service for Phase 2

Impact T2 The proposed project would potentially impact the LOS in Phase 2 for the intersections listed in Table 3.10-5, above.

Phase 2 intersection levels of service are shown in Table 3.10-5. Phase 2 AM and PM peak hour intersection turning movement volumes are shown on Figures 3.10-16 and 3.10-17, respectively.

For Phase 2 traffic conditions, the study area intersections are projected to operate at acceptable levels of service during the peak hours with the improvements listed in Table 5-2 (Appendix H of the EIR). Phase 2 HCM calculation worksheets are provided in Appendix M of the traffic study (Appendix H of this EIR).

Intersection Level of Service for Phase 3

Impact T3 The proposed project would potentially impact the LOS in Phase 3 for the intersections listed in Table 3.10-5, above.

Phase 3 intersection levels of service are shown in 3.10-5. Phase 3 AM and PM peak hour intersection turning movement volumes are shown on Figures 3.10-18 and 3.10-19, respectively.

For Phase 3 traffic conditions, the study area intersections are projected to operate at acceptable levels of service during the peak hours with the improvements listed in Table 5-3 (Appendix H of the EIR). Phase 3 HCM calculation worksheets are provided in Appendix N of the traffic study (Appendix H of this EIR).

Intersection Level of Service for 2030

Impact T4 The proposed project would potentially impact the LOS in 2030 for the intersections listed in Table 3.10-5, above.

2030 intersection levels of service are shown in Table 3.10-5. 2030 AM and PM peak hour intersection turning movement volumes are shown on Figures 3.10-20 and 3.10-21, respectively.

For 2030 traffic conditions, the study area intersections are projected to operate at acceptable levels of service during the peak hours with the improvements listed in Table 5-4 (Appendix H of the EIR). 2030 HCM calculation worksheets are provided in Appendix O of the traffic study (Appendix H of this EIR).

Intersection Level of Service for General Plan Build-out

Impact T5 The proposed project would potentially impact the LOS for General Plan Build-out for the intersections listed in Table 3.10-5, above.

General Plan Build-out intersection levels of service are shown in Table 3.10-5. General Plan Build-out AM and PM peak hour intersection turning movement volumes are shown on Figures 3.10-22 and 3.10-23, respectively.

For General Plan Build-out traffic conditions, the study area intersections are projected to operate at acceptable levels of service during the peak hours with the improvements listed in Table 5-5 (Appendix H of the EIR). General Plan Build-out HCM calculation worksheets are provided in Appendix P of the traffic study (Appendix H of this EIR).

FAIR SHARE ANALYSIS

Methodology

The fair share analysis is a refinement of the impact analysis that determines the proposed project's percent contribution to total traffic by study intersection. The methodology used to determine the appropriate fair share contribution is a calculation of the volumes of total new traffic at an intersection compared to project's specific traffic contribution during the peak hours. The fair share calculations are used to determine mitigation fee contribution for the needed roadway improvements.

Project Traffic Fair Share Calculations

Table 3.10-6 summarizes the Summerwind Ranch Residential project percentage of new traffic at the study area intersections for 2030 traffic conditions. As indicated on 3.10-6, the Summerwind Ranch Residential project is expected to contribute between 0.2 and 34.7 percent of new traffic for the study area intersections.

Table 3.10-7 summarizes of the Summerwind Ranch Town Center project percent of new traffic at the study area intersections for 2030 traffic conditions. As indicated on Table 3.10-7, the Summerwind Ranch Town Center project is expected to contribute between 0.2 and 54.0 percent of new traffic for the study area intersections.

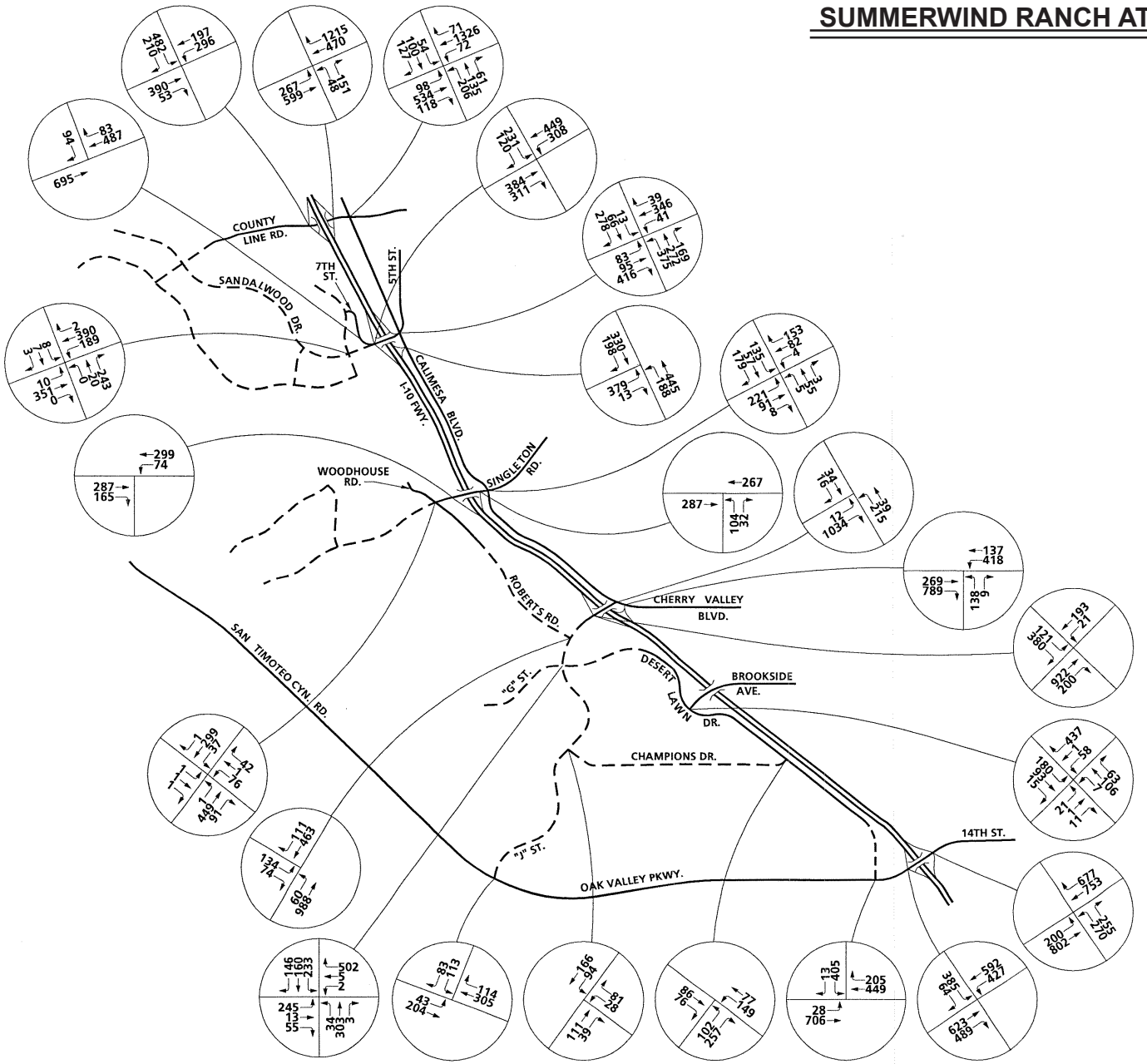


Figure 3.10-16
Phase 2 AM Peak Hour Intersection Volumes

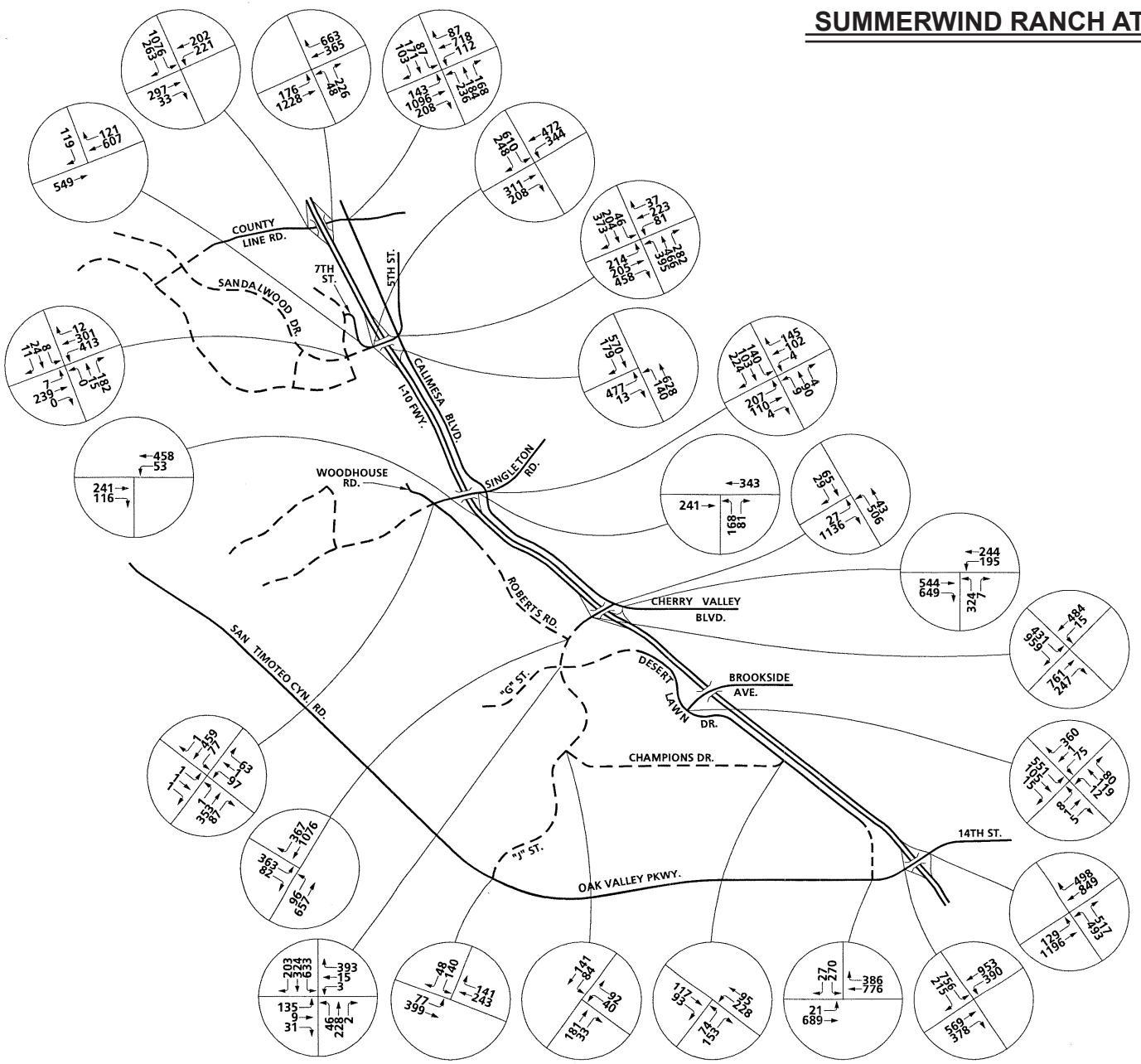


Figure 3.10-17
Phase 2 PM Peak Hour Intersection Volumes

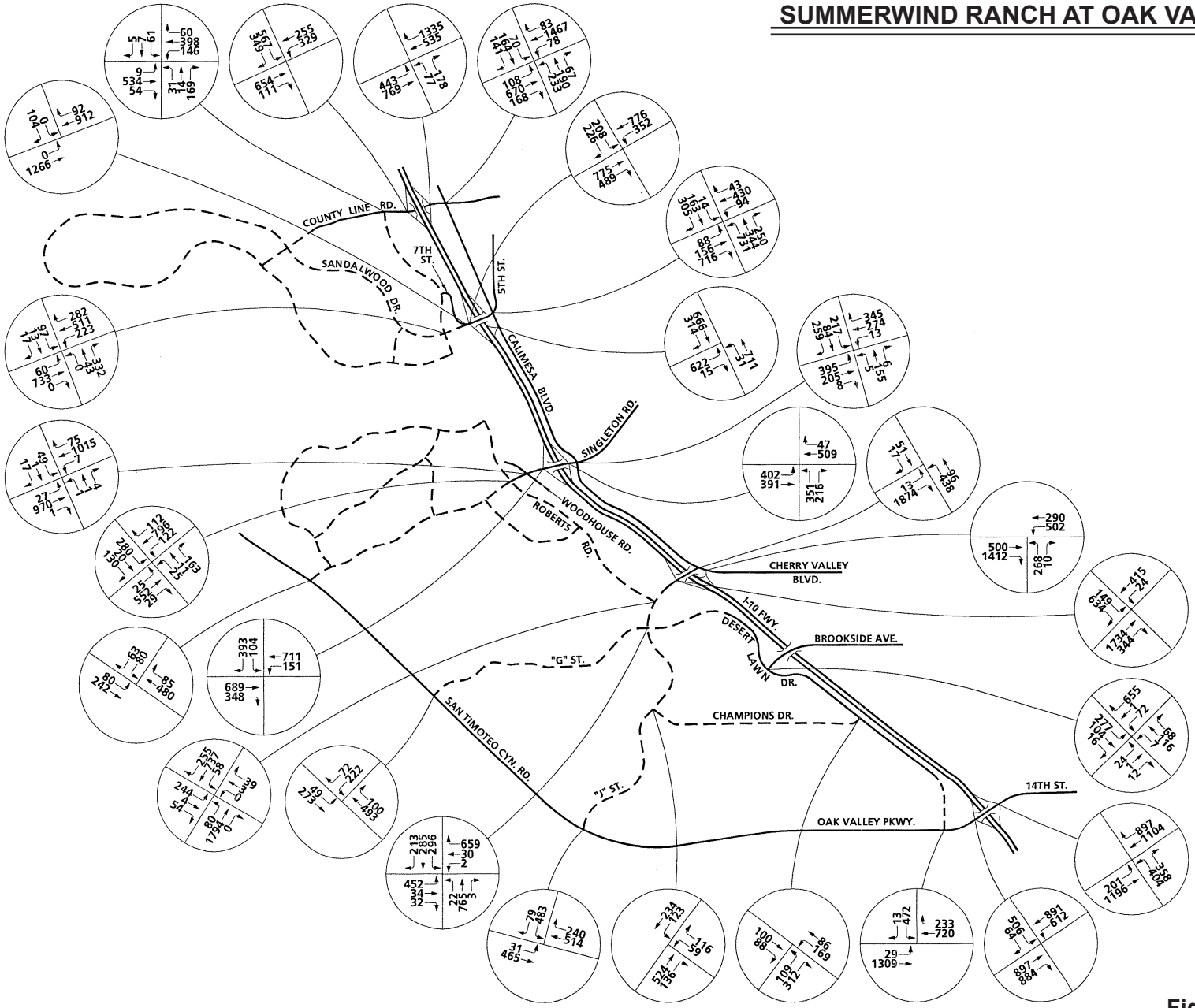


Figure 3.10-18
Phase 3 AM Peak Hour Intersection Volumes

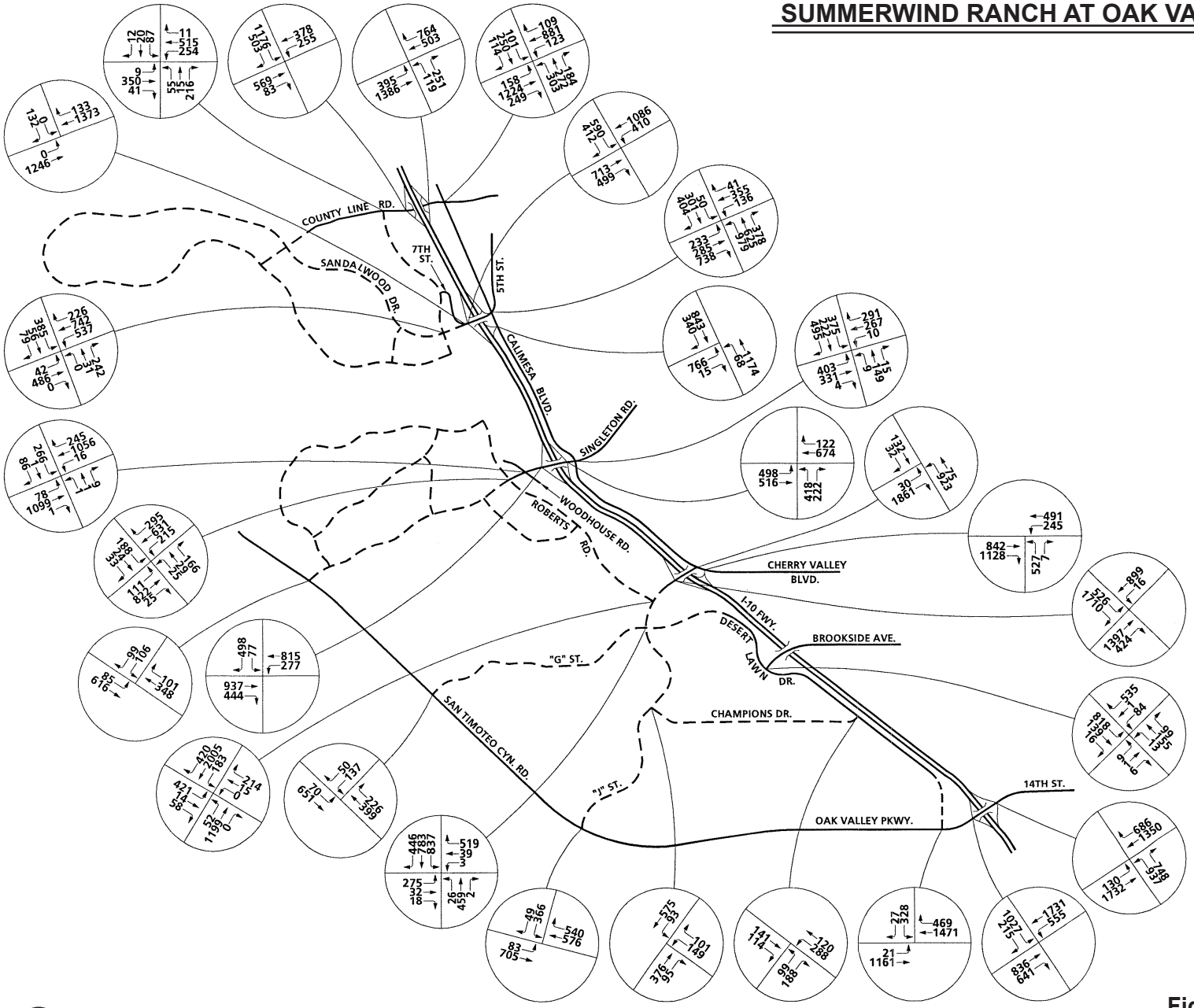


Figure 3.10-19
Phase 3 PM Peak Hour Intersection Volumes

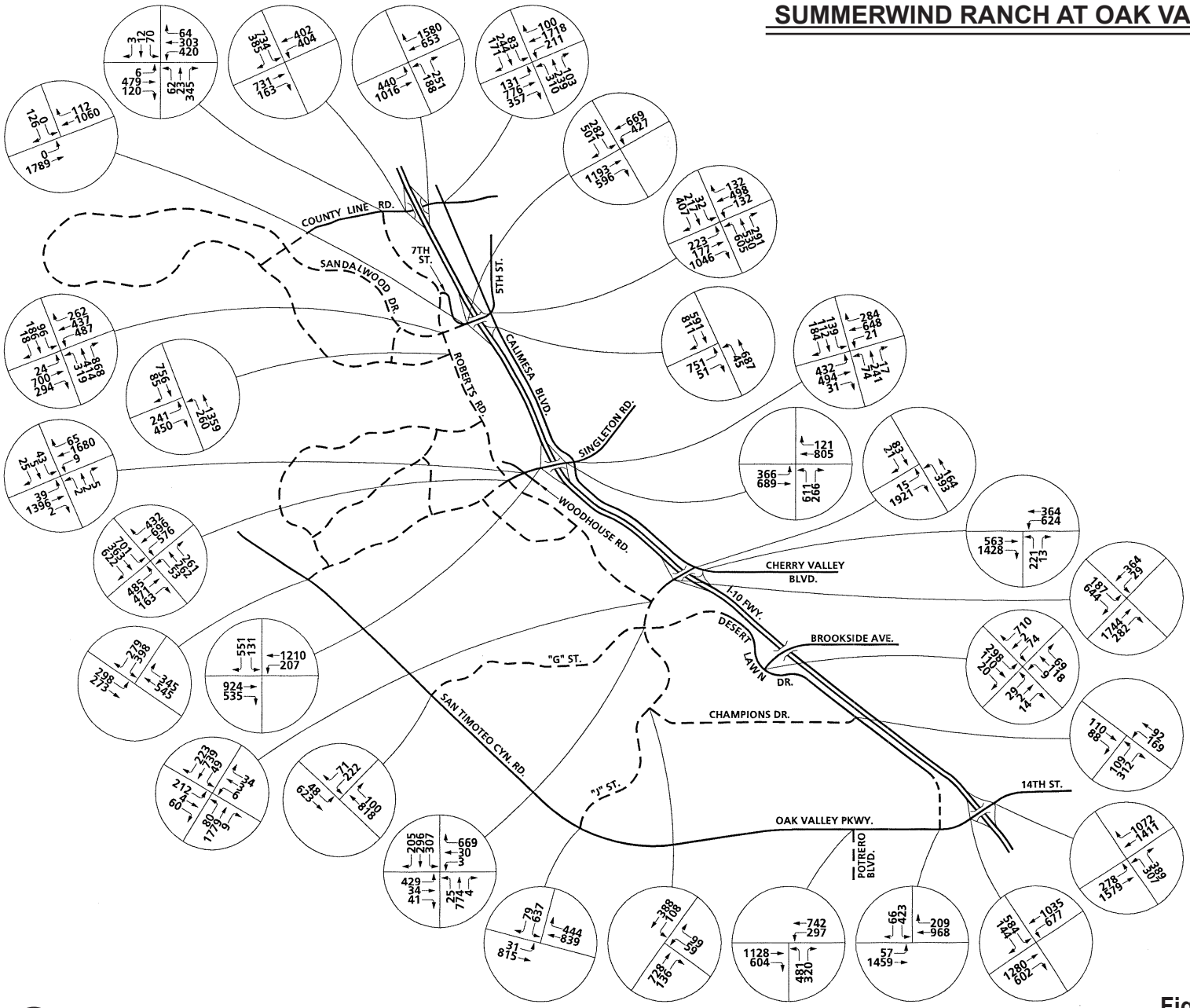


Figure 3.10-20
2030 AM Peak Hour Intersection Volumes

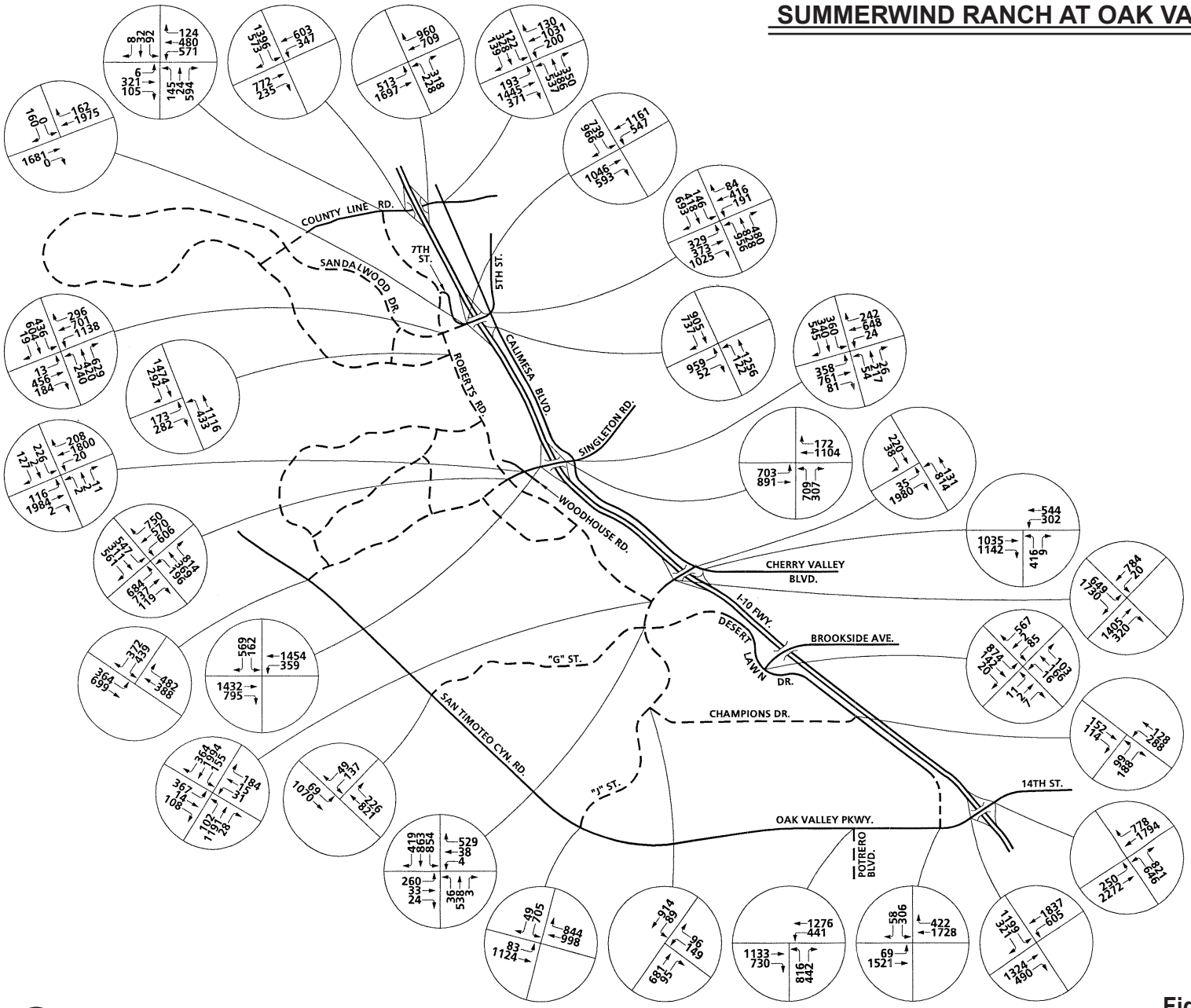


Figure 3.10-21
2030 PM Peak Hour Intersection Volumes

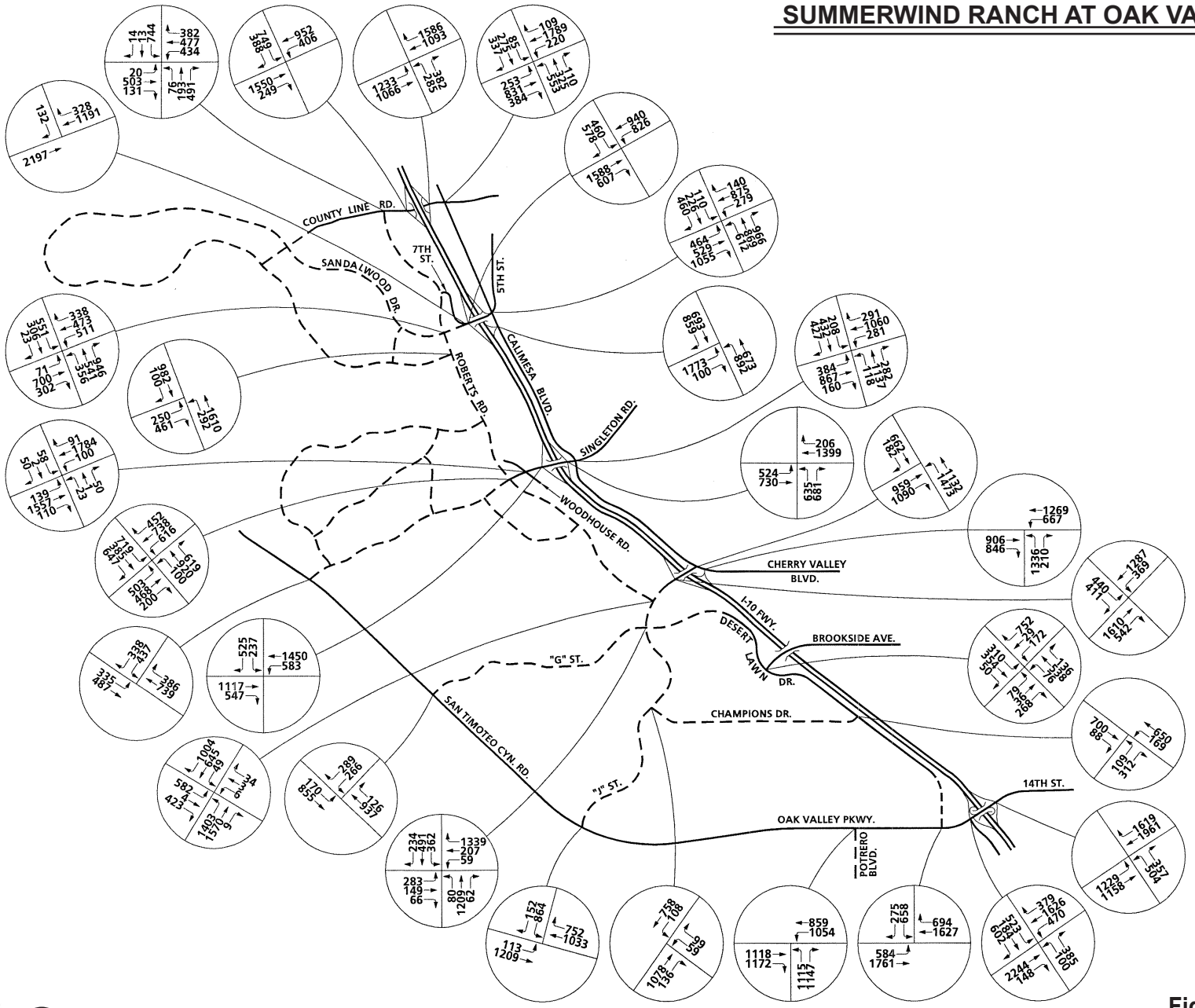


Figure 3.10-22
General Plan Build-Out AM Peak Hour Intersection Volumes

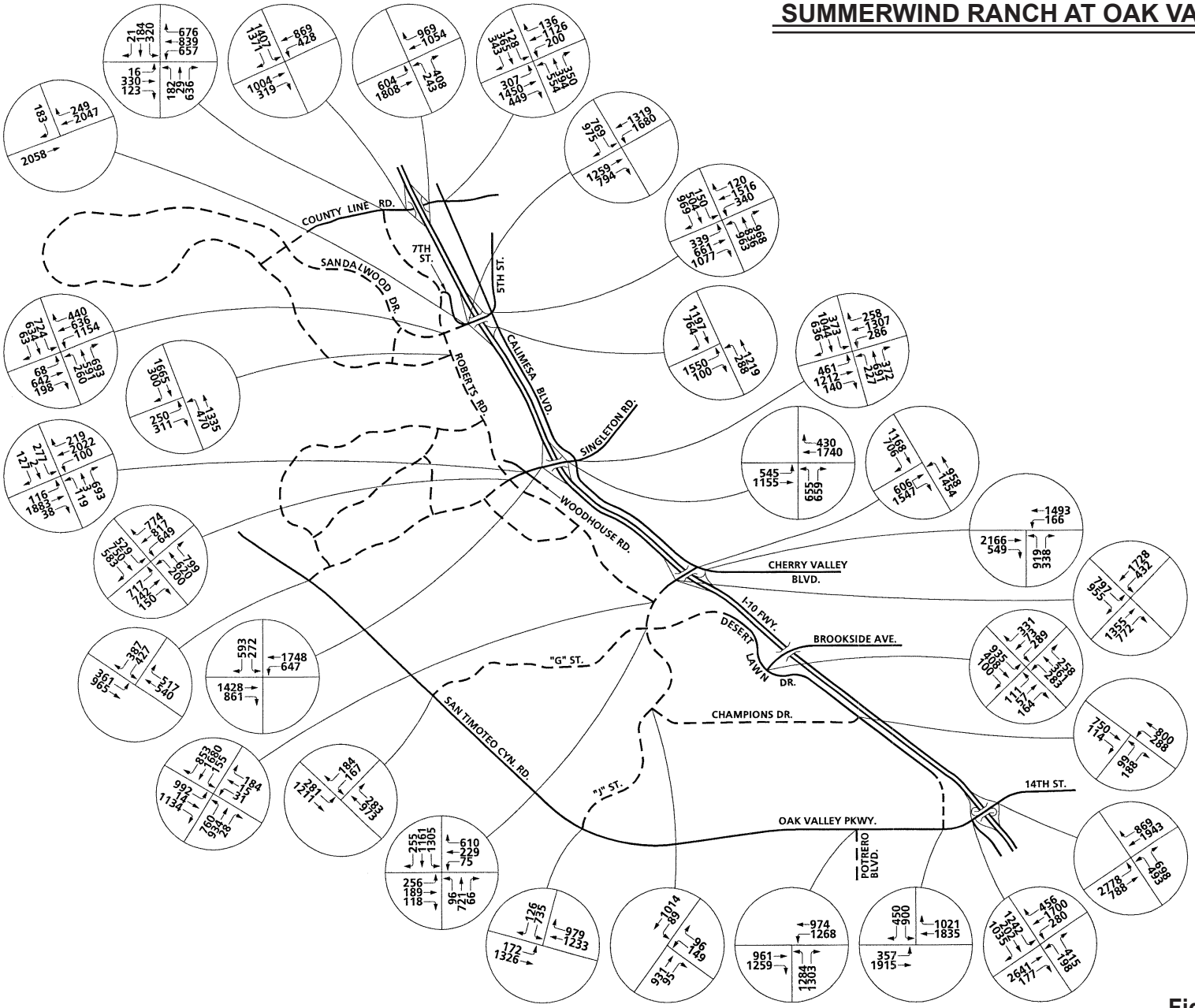


Figure 3.10-23
General Plan Build-Out PM Peak Hour Intersection Volumes

Table 3.10-8 summarizes of percent of new traffic at the northerly extension of Roberts Road between "D" Street (southerly Fiesta Property boundary) and the Summerwind Ranch project boundary. As indicated on Table 3.10-8, the Summerwind Ranch Residential project area contributes approximately 30% of the total new traffic along Roberts Road in 2030. For the Summerwind Ranch Town Center project area, it contributes approximately 20% of the total new traffic in 2030. Overall, the Summerwind Ranch project area contributes approximately 50% of the total new traffic along Roberts Road between "D" Street (southerly Fiesta Property boundary) and the Summerwind Ranch project boundary.

Table 3.10-6
Intersection Fair Share Analysis – Residential

Location	Peak Period	Existing Traffic	Overall 2030 Traffic	Project 2030 Traffic	Total New Traffic	Project Percent of New Traffic
Desert Lawn Dr. (NS) at:						
• Cherry Valley Blvd. (EW)	AM	96	2,817	310	2,721	11.4%
	PM	138	3,601	312	3,463	9.0%
• Brookside Ave. (EW)	AM	119	1,455	62	1,336	4.6%
	PM	147	1,995	50	1,848	2.7%
• Champion Dr. (EW)	AM	49	880	20	831	2.4%
	PM	79	969	27	890	3.0%
• Oak Valley Pkwy. (EW)	AM	125	3,182	192	3,057	6.3%
	PM	182	4,104	228	3,922	5.8%
Roberts Rd. (NS) at:						
• County Line Rd. (EW)	AM	105	1,938	-	1,833	0.0%
	PM	171	2,550	-	2,379	0.0%
• Sandalwood Dr. (EW)	AM	-	4,105	572	4,105	13.9%
	PM	-	5,136	589	5,136	11.5%
• "D" St. (EW)	AM	-	3,151	630	3,151	20.0%
	PM	-	3,770	631	3,770	16.7%
• Singleton Rd. (EW)	AM	-	5,085	1,520	5,085	29.9%
	PM	-	6,264	1,593	6,264	25.4%
• Cherry Valley Blvd. (EW)	AM	96	3,198	537	3,102	17.3%
	PM	138	4,553	412	4,415	9.3%
7th St. (NS) at:						
• Sandalwood Dr. (EW)	AM	131	3,087	530	2,956	17.9%
	PM	150	3,978	567	3,828	14.8%
Woodhouse Rd. (NS) at:						
• Singleton Rd. (EW)	AM	10	3,273	1,229	3,263	37.7%
	PM	19	4,500	1,359	4,481	30.3%
I-10 SB Ramps (NS) at:						
• County Line Rd. (EW)	AM	593	2,819	-	2,226	0.0%
	PM	906	3,926	-	3,020	0.0%
• Sandalwood Dr. (EW)	AM	413	3,668	530	3,255	16.3%
	PM	653	5,052	567	4,399	12.9%
• Singleton Rd. (EW)	AM	26	3,558	1,225	3,532	34.7%
	PM	33	4,771	1,354	4,738	28.6%
• Cherry Valley Blvd. (EW)	AM	172	3,250	432	3,078	14.0%

Location	Peak Period	Existing Traffic	Overall 2030 Traffic	Project 2030 Traffic	Total New Traffic	Project Percent of New Traffic
	PM	360	4,908	338	4,548	7.4%
• Oak Valley Pkwy. (EW)	AM	297	4,322	206	4,025	5.1%
	PM	420	5,776	237	5,356	4.4%
I-10 NB Ramps (NS) at:						
• County Line Rd. (EW)	AM	1,425	4,128	-	2,703	0.0%
	PM	1,378	4,425	-	3,047	0.0%
• Singleton Rd. (EW)	AM	35	2,858	724	2,823	25.6%
	PM	46	3,886	871	3,840	22.7%
• 14th St. (EW)	AM	527	5,036	211	4,509	4.7%
	PM	479	6,561	253	6,082	4.2%
Calimesa Blvd. (NS) at:						
• County Line Rd. (EW)	AM	1,702	4,443	-	2,741	0.0%
	PM	1,927	5,232	-	3,305	0.0%
• 5th St. (EW)	AM	834	4,290	353	3,456	10.2%
	PM	1,327	5,939	225	4,612	4.9%
• I-10 NB Off-Ramp (EW)	AM	366	2,936	353	2,570	13.7%
	PM	647	4,031	225	3,384	6.6%
• Singleton Rd. (EW)	AM	151	2,677	318	2,526	12.6%
	PM	221	3,656	330	3,435	9.6%
• Cherry Valley Blvd. (EW)	AM	371	2,597	281	2,226	12.6%
	PM	396	3,218	227	2,822	8.0%
Cherry Valley Blvd. (NS) at:						
• I-10 NB Ramps (EW)	AM	403	3,213	263	2,810	9.4%
	PM	400	3,448	213	3,048	7.0%
Potrero Blvd. (NS) at:						
• Oak Valley Pkwy. (EW)	AM	98	3,572	400	3,474	11.5%
	PM	146	4,838	443	4,692	9.4%
"J" St. (NS) at:						
• Champions Dr. (EW)	AM	-	1,518	113	1,518	7.4%
	PM	-	2,024	86	2,024	4.2%
• Oak Valley Pkwy. (EW)	AM	98	2,845	401	2,747	14.6%
	PM	146	3,803	443	3,657	12.1%
"G" St. (NS) at:						
• Sam Timoteo Cyn. Rd. (EW)	AM	98	1,882	383	1,784	21.5%
	PM	146	2,372	405	2,226	18.2%
Singleton Rd. (NS) at:						
• Sam Timoteo Cyn. Rd. (EW)	AM	98	2,138	509	2,040	25.0%
	PM	146	2,744	545	2,598	21.0%

Table 3.10-7
Intersection Fair Share Analysis – Town Center

Location	Peak Period	Existing Traffic	Overall 2030 Traffic	Project 2030 Traffic	Total New Traffic	Project Percent of New Traffic
Desert Lawn Dr. (NS) at:						
• Cherry Valley Blvd. (EW)	AM	96	2,817	53	2,721	1.9%
	PM	138	3,601	216	3,463	6.2%
• Brookside Ave. (EW)	AM	119	1,455	32	1,336	2.4%
	PM	147	1,995	128	1,848	6.9%
• Champion Dr. (EW)	AM	49	880	14	831	1.7%
	PM	79	969	58	890	6.5%
• Oak Valley Pkwy. (EW)	AM	125	3,182	7	3,057	0.2%
	PM	182	4,104	85	3,922	2.2%
Roberts Rd. (NS) at:						
• County Line Rd. (EW)	AM	105	1,938	-	1,833	0.0%
	PM	171	2,550	-	2,379	0.0%
• Sandalwood Dr. (EW)	AM	-	4,105	90	4,105	2.2%
	PM	-	5,136	159	5,136	3.1%
• "D" St. (EW)	AM	-	3,151	210	3,151	6.7%
	PM	-	3,770	310	3,770	8.2%
• Singleton Rd. (EW)	AM	-	5,085	1,934	5,085	38.0%
	PM	-	6,264	2,749	6,264	43.9%
• Cherry Valley Blvd. (EW)	AM	96	3,198	273	3,102	8.8%
	PM	138	4,553	1,112	4,415	25.2%
7th St. (NS) at:						
• Sandalwood Dr. (EW)	AM	131	3,087	15	2,956	0.5%
	PM	150	3,978	52	3,828	1.4%
Woodhouse Rd. (NS) at:						
• Singleton Rd. (EW)	AM	10	3,273	1,434	3,263	43.9%
	PM	19	4,500	2,420	4,481	54.0%
I-10 SB Ramps (NS) at:						
• County Line Rd. (EW)	AM	593	2,819	-	2,226	0.0%
	PM	906	3,926	-	3,020	0.0%
• Sandalwood Dr. (EW)	AM	413	3,668	15	3,255	0.5%
	PM	653	5,052	52	4,399	1.2%
• Singleton Rd. (EW)	AM	26	3,558	1,377	3,532	39.0%
	PM	33	4,771	2,184	4,738	46.1%
• Cherry Valley Blvd. (EW)	AM	172	3,250	218	3,078	7.1%
	PM	360	4,908	897	4,548	19.7%
• Oak Valley Pkwy. (EW)	AM	297	4,322	17	4,025	0.4%
	PM	420	5,776	85	5,356	1.6%
I-10 NB Ramps (NS) at:						
• County Line Rd. (EW)	AM	1,425	4,128	-	2,703	0.0%

Location	Peak Period	Existing Traffic	Overall 2030 Traffic	Project 2030 Traffic	Total New Traffic	Project Percent of New Traffic
	PM	1,378	4,425	-	3,047	0.0%
• Singleton Rd. (EW)	AM	35	2,858	836	2,823	29.6%
	PM	46	3,886	1,350	3,840	35.2%
• 14th St. (EW)	AM	527	5,036	33	4,509	0.7%
	PM	479	6,561	137	6,082	2.3%
Calimesa Blvd. (NS) at:						
• County Line Rd. (EW)	AM	1,702	4,443	-	2,741	0.0%
	PM	1,927	5,232	-	3,305	0.0%
• 5th St. (EW)	AM	834	4,290	6	3,456	0.2%
	PM	1,327	5,939	27	4,612	0.6%
• I-10 NB Off-Ramp (EW)	AM	366	2,936	6	2,570	0.2%
	PM	647	4,031	27	3,384	0.8%
• Singleton Rd. (EW)	AM	151	2,677	295	2,526	11.7%
	PM	221	3,656	516	3,435	15.0%
• Cherry Valley Blvd. (EW)	AM	371	2,597	128	2,226	5.8%
	PM	396	3,218	530	2,822	18.8%
Cherry Valley Blvd. (NS) at:						
• I-10 NB Ramps (EW)	AM	403	3,213	125	2,810	4.4%
	PM	400	3,448	516	3,048	16.9%
Potrero Blvd. (NS) at:						
• Oak Valley Pkwy. (EW)	AM	98	3,572	171	3,474	4.9%
	PM	146	4,838	355	4,692	7.6%
"J" St. (NS) at:						
• Champions Dr. (EW)	AM	-	1,518	36	1,518	2.4%
	PM	-	2,024	148	2,024	7.3%
• Oak Valley Pkwy. (EW)	AM	98	2,845	171	2,747	6.2%
	PM	146	3,803	357	3,657	9.8%
"G" St. (NS) at:						
• Sam Timoteo Cyn. Rd. (EW)	AM	98	1,882	142	1,784	8.0%
	PM	146	2,372	238	2,226	10.7%
Singleton Rd. (NS) at:						
• Sam Timoteo Cyn. Rd. (EW)	AM	98	2,138	280	2,040	13.7%
	PM	146	2,744	457	2,598	17.6%

Table 3.10-8
Fair Share Analysis for the Northerly Extension of Roberts Road Between the Northerly Project Boundary and "D" Street (Fiesta Property)

Project Area	Existing Traffic	Overall 2030 Traffic	Project 2030 Traffic	Total New Traffic	Project Percent of New Traffic
Summerwind Ranch Residential	--	34,000	10,000	34,000	29.4%
Summerwind Ranch Town Center	--	34,000	6,900	34,000	20.3%
OVERALL TOTAL					49.7%

3.10.5 CUMULATIVE IMPACTS

To assess Phase 1, Phase 2, Phase 3, and 2030 cumulative traffic conditions, traffic generated by the Fiesta Property and Oak Valley Beaumont development areas are combined with existing traffic, traffic from other future and surrounding developments and ambient growth. The long term traffic projections (General Plan build-out) are based on the Pass Area Traffic Model, which has been updated in response to RCIP modeling work.

TRIP GENERATION

The other Calimesa mixed-use development (County Line Road to Singleton Road) area is generally located along the west and east sides of I-10 Freeway from County Line Road to Singleton Road. This area is divided into 12 TAZs (TAZ 1a through 12a), and consists of single-family detached, multi-family attached, high school, commercial retail, business park, light industrial, and professional office land uses. For daily and peak hour trip generation for this area refer to Table 3.10-9.

Tables 3.10-10 to 3.10-13 list the other surrounding developments for Phase 1, Phase 2, Phase 3, and 2030 traffic conditions. These tables also show the daily and peak hour vehicle trips generated by the other developments being evaluated concurrently in the study area.

The Oak Valley Beaumont development area is located west of the I-10 Freeway between Desert Lawn Drive and Oak Valley Parkway. The Valley Beaumont development area is divided into 9 TAZs (TAZ 1b through 9b), and consists of single-family detached residential and multi-family attached residential land uses. Both daily and peak hour trip generation for the Oak Valley Beaumont development area and Fiesta are shown in Tables 3.10-14 and 3.10-15, respectively.

Table 3.10-9
Other Calimesa Mixed-Use Development
(County Line Road to Singleton Road)
Incremental Growth to General Plan Build-out Trip Generation
(west of I-10)

Project Phasing	Traffic Analysis Zones	Planning Area	Land Use	Proposed Quantity	Peak Hour				Daily
					AM		PM		
					In	Out	In	Out	
Phase 1	6a	6	High School	2,000 STU	560	260	140	140	3,420
Phase 2	1a	1a	SF Detached	59 DU	11	33	38	22	565
	2a	1b	SF Detached	59 DU	11	33	38	22	565
Phase 3	3a-1	2a	SF Detached	100 DU	19	56	64	37	957
	4a	2b	SF Detached	28 DU	5	16	18	10	268
		3b	CR (166 TSF)	15.66 TSF	12	8	40	43	891
			Pass-by Trips/Internal Capture 20%		*-2*	*-2*	*-8*	*-9*	*-178*
			BP (387 TSF)	36.54 TSF	43	8	11	37	463
		SUBTOTAL			58	30	61	81	1,444
	5a	8	Light Industrial	159.90 TSF	130	18	19	138	1,115
		9	CR (98 TSF)	97.50 TSF	94	60	295	320	6,668
			Pass-by Trips/Internal Capture 20%		*-19*	*-12*	*-59*	*-64*	*-1,334*
			BP (228 TSF)	227.50 TSF	271	52	73	241	3,190
		SUBTOTAL			476	118	328	635	9,639
2030	3A-2	3a	CR (166 TSF)	150.00 TSF	117	75	380	411	8,531
			Pass-by Trips/Internal Capture 20%		*-23*	*-15*	*-76*	*-82*	*-1,706*
			BP (387 TSF)	350.00 TSF	413	81	105	354	4,438
		7	SF Detached	179 DU	34	100	115	66	1,713
		SUBTOTAL			541	241	524	749	12,976
TOTAL – WEST OF I-10 FREEWAY					**1,676**	**771**	**1,193**	**1,686**	**29,566**

Table 3.10-9 (*Cont'd*.)
Other Calimesa Mixed-use Development (County Line Road to Singleton Road)
Incremental Growth to General Plan Build-out Trip Generation (east of I-10)

Project Phasing	Traffic Analysis Zones	Planning Area	Land Use	Proposed Quantity	Peak Hour				Daily
					AM		PM		
					In	Out	In	Out	
Phase 2	7a-1	10	Light Industrial	41.25 TSF	33	5	5	35	228
	9a	14	SF Detached	267 DU	51	150	171	99	2,555
	10a	17	CR (38 TSF)	38.37 TSF	54	35	160	173	3,656
			Pass-by Trips/Internal Capture 20%		-11	-7	-32	-35	-731
			BP (90 TSF)	89.53 TSF	108	21	30	103	1,706
			SUBTOTAL		151	49	158	241	4,631
	12a-1	24	MF Attached	113 DU	11	46	45	25	759
		26	SF Detached	146 DU	28	82	93	54	1,397
		SUBTOTAL			*39*	*128*	*138*	*79*	*2,156*
Phase 3	8a	12	MF Attached	161 DU	16	66	64	35	1,082
		16	Light Industrial	259.20 TSF	210	29	31	223	1,807
		SUBTOTAL			226	95	95	258	2,889
	12a-2	23	PO (237 TSF)	237.25 TSF	330	45	59	287	2,596
		25	CR (151 TSF)	151.38 TSF	123	79	395	428	8,900
			Pass-by Trips/Internal Capture 20%		*-25*	*-16*	*-79*	*-86*	*-1,780*
			BP (353 TSF)	353.22 TSF	420	81	109	360	4,542
		SUBTOTAL			848	189	484	989	14,258
2030	7a-2	11	CR (74 TSF)	74.22 TSF	80	51	247	268	5,601
			Pass-by Trips/Internal Capture 20%		*-16*	*-10*	*-49*	*-54*	*-1,120*
			BP (173 TSF)	173.18 TSF	208	40	55	189	2,610
		15	PO (428 TSF)	428.09 TSF	527	73	94	462	4,088
		SUBTOTAL			799	154	347	865	11,179
	11a	19	CR (86 TSF)	85.56 TSF	86	56	270	293	6,125
			Pass-by Trips/Internal Capture 20%		-17	-11	-54	-59	-1,225
			BP (200 TSF)	199.64 TSF	240	46	64	214	2,891
		21	SF Detached	16 DU	3	9	10	6	153
		22	CR (8 TSF)	8.10 TSF	21	14	57	62	1,331
			Pass-by Trips/Internal Capture 20%		-4	-3	-11	-12	-266
		SUBTOTAL			329	111	336	504	9,009
TOTAL – EAST OF I-10 FREEWAY					**2,476**	**881**	**1,734**	**3,070**	**46,965**

Table 3.10-10
Other Surrounding Development Areas (Phase 1) Trip Generation

Traffic Zone	Project	Peak Hour				Daily
		AM		PM		
		In	Out	In	Out	
2	Omega Homes	4	13	15	8	217
3	Oak Valley Greens	204	542	699	436	11,019
4	Cougar Ranch	4	13	15	8	220
5	Cougar Ranch II	9	27	32	18	469
11	Kirkwood Ranch	25	73	85	47	1,244
12	Oak Valley Commercial	126	76	88	119	2,407
14	Omega Homes II	4	11	13	7	195
15	Noble Creek	31	90	105	58	1,541
23	TR 30779	12	35	41	23	606
24	Sundance (TAZ 1)	45	133	155	86	2,285
25	Sundance (TAZ 2)	14	42	49	27	715
26	Sundance (TAZ 3)	99	147	221	181	4,096
27	Sundance (TAZ 4)	98	100	63	51	1,125
28	Sundance (TAZ 5)	8	43	42	20	677
29	Sundance (TAZ 6)	43	64	47	33	849
30	Sundance (TAZ 7)	30	19	94	102	2,116
31	Sundance (TAZ 8)	47	137	160	88	2,355
100	JP Ranch	108	295	342	200	5,395
TOTAL		**911**	**1,860**	**2,266**	**1,512**	**37,531**

Table 3.10-11
Other Surrounding Development Areas (Phase 2) Trip Generation

Traffic Zone	Project	Peak Hour				Daily
		AM		PM		
		In	Out	In	Out	
2	Omega Homes	9	25	29	16	434
3	Oak Valley Greens	407	1,084	1,398	871	22,038
4	Cougar Ranch	9	26	30	17	440
5	Cougar Ranch II	19	55	64	35	938
11	Kirkwood Ranch	49	145	169	93	2,488
12	Oak Valley Commercial	253	153	175	239	4,815
14	Omega Homes II	8	23	27	15	389
15	Noble Creek	61	180	209	116	3,081
23	TR 30779	24	71	83	45	1,212
24	Sundance (TAZ 1)	91	267	310	171	4,569

Traffic Zone	Project	Peak Hour				Daily
		AM		PM		
		In	Out	In	Out	
25	Sundance (TAZ 2)	29	84	97	54	1,429
26	Sundance (TAZ 3)	198	294	442	362	8,192
27	Sundance (TAZ 4)	196	199	127	103	2,249
28	Sundance (TAZ 5)	16	87	85	41	1,354
29	Sundance (TAZ 6)	87	127	94	66	1,697
30	Sundance (TAZ 7)	60	38	189	204	4,232
31	Sundance (TAZ 8)	94	275	319	177	4,710
100	JP Ranch	108	295	342	200	5,395
TOTAL		**1,718**	**3,428**	**4,189**	**2,825**	**69,662**

Table 3.10-12
Other Surrounding Development Areas (Phase 3) Trip Generation

Traffic Zone	Project	Peak Hour				Daily
		AM		PM		
		In	Out	In	Out	
2	Omega Homes	13	38	44	24	651
3	Oak Valley Greens	611	1,626	2,097	1,307	33,057
4	Cougar Ranch	13	39	45	25	660
5	Cougar Ranch II	28	82	96	53	1,407
11	Kirkwood Ranch	74	218	254	140	3,732
12	Oak Valley Commercial	379	229	263	358	7,222
14	Omega Homes II	12	34	40	22	584
15	Noble Creek	92	270	314	174	4,622
23	TR 30779	36	106	124	68	1,818
24	Sundance (TAZ 1)	136	400	465	257	6,854
25	Sundance (TAZ 2)	43	126	146	81	2,144
26	Sundance (TAZ 3)	296	441	663	542	12,287
27	Sundance (TAZ 4)	294	299	190	154	3,374
28	Sundance (TAZ 5)	24	130	127	61	2,031
29	Sundance (TAZ 6)	130	191	141	99	2,546
30	Sundance (TAZ 7)	89	57	283	305	6,347
31	Sundance (TAZ 8)	141	412	479	265	7,065
100	JP Ranch	108	295	342	200	5,395
101	Country Club Ridge	51	150	172	99	2,565
102	Braswell	13	33	39	23	647
TOTAL		**2,584**	**5,176**	**6,324**	**4,258**	**105,009**

Table 3.10-13
Other Surrounding Development Areas (2030) Trip Generation

Traffic Zone	Project	Peak Hour				Daily
		AM		PM		
		In	Out	In	Out	
2	Omega Homes	13	38	44	24	651
3	Oak Valley Greens	611	1,626	2,097	1,307	33,057
4	Cougar Ranch	13	39	45	25	660
5	Cougar Ranch II	28	82	96	53	1,407
11	Kirkwood Ranch	99	291	338	187	4,976
12	Oak Valley Commercial	379	229	263	358	7,222
14	Omega Homes II	23	68	79	44	1,168
15	Noble Creek	92	270	314	174	4,622
23	TR 30779	36	106	124	68	1,818
24	Sundance (TAZ 1)	136	400	465	257	6,854
25	Sundance (TAZ 2)	43	126	146	81	2,144
26	Sundance (TAZ 3)	296	441	663	542	12,287
27	Sundance (TAZ 4)	294	299	190	154	3,374
28	Sundance (TAZ 5)	24	130	127	61	2,031
29	Sundance (TAZ 6)	130	191	141	99	2,546
30	Sundance (TAZ 7)	89	57	283	305	6,347
31	Sundance (TAZ 8)	141	412	479	265	7,065
32	Sundance (TAZ 9)	92	275	319	176	4,705
33	Sundance (TAZ 10)	90	266	309	171	4,553
34	Sundance (TAZ 11)	133	239	181	114	3,191
35	Sundance (TAZ 12)	21	63	73	40	1,072
100	JP Ranch	108	292955	342	200	5,395
101	Country Club Ridge	51	150	172	99	2,565
102	Braswell	13	33	39	23	647
103	Sunset Ranch	30	90	102	59	1,531
104	Holbert Ranch	25	73	84	48	1,254
105	Willow Springs	1,110	2,009	2,673	1,953	47,116
106	Rolling Hills	246	377	833	732	16,059
107	Heartland	798	767	1,049	1,175	20,699
108	LaBorde Canyon	98	303	338	194	5,146
TOTAL		**5,262**	**9,745**	**12,408**	**8,988**	**212,162**

Table 3.10-14
Oak Valley Beaumont Project Trip Generation

Project Phasing	Traffic Analysis Zone	Land Use	Proposed Quantity	Peak Hour				Daily
				AM		PM		
				In	Out	In	Out	
Phase 1	1b	SF Detached	237 DU	45	133	152	88	2,268
	2b	SF Detached	488 DU	93	273	312	181	4,670
		Elementary School	600 STU	138	114	18	36	774
		SUBTOTAL		231	387	330	217	5,444
	3b	SF Detached	225 DU	43	126	144	83	2,153
	5b	SF Detached	226 DU	43	127	145	84	2,163
		MF Attached	237 DU	24	97	95	52	1,593
		SUBTOTAL		67	224	240	136	3,756
	7b	SF Detached	320 DU	61	179	205	118	3,062
		Elementary School	600 STU	138	114	18	36	774
		SUBTOTAL		199	293	223	154	3,836
	SUBTOTAL – PHASE 1			**585**	**1,163**	**1,089**	**678**	**17,457**
Phase 2	4b	SF Detached	382 DU	73	214	244	141	3,656
		MF Attached	480 DU	48	197	192	106	3,226
		SUBTOTAL		121	411	436	247	6,882
	8b	SF Detached	889 DU	169	498	569	329	8,508
	SUBTOTAL – PHASE 2			**290**	**909**	**1,005**	**576**	**15,390**
	CUMULATIVE TOTAL – PHASE 2			**875**	**2,072**	**2,094**	**1,254**	**32,847**
Phase 3	6b	SF Detached	665 DU	126	372	426	246	6,364
	9b	SF Detached	503 DU	96	282	322	186	4,814
		MF Attached	479 DU	48	196	192	105	3,219
		SUBTOTAL		144	478	514	291	8,033
	SUBTOTAL – PHASE 3			**270**	**850**	**940**	**537**	**14,397**
	CUMULATIVE TOTAL – PHASE 3			**1,145**	**2,922**	**3,034**	**1,791**	**47,244**

Table 3.10-15
Fiesta Property Project Trip Generation

Project Phasing	Traffic Analysis Zones	Planning Areas	Land Use	Proposed Quantity	Peak Hour				Daily
					AM		PM		
					In	Out	In	Out	
Phase 1	2	33	Recreation Center	140.0 tsf	139	88	67	162	3,203
	4	23A	Single-Family Detached Residential	33 du	6	18	21	12	316
		25	Single-Family Detached Residential	66 du	13	37	42	24	632
		26	Single-Family Detached Residential	85 du	16	48	54	31	813
		SUBTOTAL			35	103	117	67	1,761
	5	18	Elementary School	600 stu	138	114	18	36	774
		23B	Single-Family Detached Residential	3 du	1	2	2	1	29
		SUBTOTAL			139	116	20	37	803
	8	15	Single-Family Detached Residential	37 du	7	21	24	14	354
		16	Single-Family Detached Residential	56 du	11	31	36	21	536
		17	Single-Family Detached Residential	63 du	12	35	40	23	603
		SUBTOTAL			30	87	100	58	1,493
	10	13	Single-Family Detached Residential	115 du	22	64	74	43	1,101
	11	5	Single-Family Detached Residential	80 du	15	45	51	30	766
	13	9	Single-Family Detached Residential	83 du	16	46	53	31	794
	14	6	Active Park	20 ac	18	15	47	47	835
	SUBTOTAL - PHASE 1				**414**	**564**	**529**	**475**	**10,756**
Phase 2	9	10	Single-Family Detached Residential	70 du	13	39	45	26	670
		11	Single-Family Detached Residential	109 du	21	61	70	40	1,043
		12	Single-Family Detached Residential	93 du	18	52	60	34	890
		19	Single-Family Detached Residential	20 du	4	11	13	7	191
		20A	Single-Family Detached Residential	36 du	7	20	23	13	345
		20B	Single-Family Detached Residential	50 du	10	28	32	19	479
		21	Single-Family Detached Residential	102 du	19	57	65	38	976
		22	Single-Family Detached Residential	112 du	21	63	72	41	1,072
	SUBTOTAL - PHASE 2				**113**	**331**	**380**	**218**	**5,666**
	CUMULATIVE TOTAL - PHASE 2				**527**	**895**	**909**	**693**	**16,422**

Project Phasing	Traffic Analysis Zones	Planning Areas	Land Use	Proposed Quantity	Peak Hour				Daily
					AM		PM		
					In	Out	In	Out	
Phase 3	3	24	Single-Family Detached Residential	30 du	6	17	19	11	287
		28	Single-Family Detached Residential	40 du	8	22	26	15	383
		29	Single-Family Detached Residential	122 du	23	68	78	45	1,168
		30	Single-Family Detached Residential	85 du	16	48	54	31	813
		39	Single-Family Detached Residential	64 du	12	36	41	24	612
		40A	Single-Family Detached Residential	35 du	7	20	22	13	335
		40B	Single-Family Detached Residential	66 du	13	37	42	24	632
		41	Single-Family Detached Residential	42 du	8	24	27	16	402
		SUBTOTAL			93	272	309	179	4,632
	6	27A	Single-Family Detached Residential	70 du	13	39	45	26	670
		27B	Single-Family Detached Residential	55 du	10	31	35	20	526
		31	Single-Family Detached Residential	97 du	18	54	62	36	928
		32	Single-Family Detached Residential	52 du	10	29	33	19	498
		34	Single-Family Detached Residential	47 du	9	26	30	17	450
		42	Single-Family Detached Residential	70 du	13	39	45	26	670
		43	Single-Family Detached Residential	60 du	11	34	38	22	574
		44	Single-Family Detached Residential	42 du	8	24	27	16	402
		SUBTOTAL			92	276	315	182	4,718
	SUBTOTAL - PHASE 3				**185**	**548**	**624**	**361**	**9,350**
	CUMULATIVE TOTAL - PHASE 3				**712**	**1,443**	**1,533**	**1,054**	**25,772**
2030	1	35	Single-Family Detached Residential	42 du	8	24	27	16	402
		36	Single-Family Detached Residential	80 du	15	45	51	30	766
		37	Single-Family Detached Residential	110 du	21	62	70	41	1,053
		38A	Single-Family Detached Residential	34 du	6	19	22	13	325
		38B	Single-Family Detached Residential	29 du	6	16	19	11	278
		SUBTOTAL			56	166	189	111	2,824
	7	8	Middle School	900 stu	261	216	72	63	1,458
	12	2,3,4	Commercial Retail	100.0 tsf	95	61	300	326	6,791

Project Phasing	Traffic Analysis Zones	Planning Areas	Land Use	Proposed Quantity	Peak Hour				Daily
					AM		PM		
					In	Out	In	Out	
			• Pass-By Trips/Internal Capture 20%		*-19*	*-12*	*-60*	*-65*	*-1,358*
		SUBTOTAL			76	49	240	261	5,433
	15	1	Multi-Family Attached Residential	515 du	52	211	206	113	3,461
			Commercial Retail	100.0 tsf	95	61	300	326	6,791
			• Pass-By Trips/Internal Capture 20%		*-19*	*-12*	*-60*	*-65*	*-1,358*
		SUBTOTAL			128	260	446	374	8,894
	16	7	Elementary School	600 stu	138	114	18	36	774
	SUBTOTAL - 2030				**659**	**805**	**965**	**845**	**19,383**
	CUMULATIVE TOTAL - 2030				**1,371**	**2,248**	**2,498**	**1,899**	**45,155**

TRIP DISTRIBUTION

Trip distribution patterns for the other Calimesa mixed-use development (County Line Road to Singleton Road) area are depicted on the following figures:

- Phase 1 (TAZ 6a) - Exhibit H-1 of Appendix H of the traffic study (Appendix H of this EIR).
- The Phase 2 (TAZ 1a, 2a, 6a, 7a, 9a, 10a and 12a) - Exhibits I-1 to I-7 of Appendix I of the traffic study (Appendix H of this EIR).
- The Phase 3 (TAZ 1a, 2a, 3a, 4a, 5a, 6a, 7a, 8a, 9a, 10a, and 12a) - Exhibits J-1 to J-11 of Appendix J of the traffic study (Appendix H of this EIR).
- 2030 (TAZ 1a through 12a) – Exhibits K-1 to K-12 of Appendix K of the traffic study (Appendix H of this EIR).

Trip distribution patterns for the Oak Valley Beaumont area are depicted on the following exhibits:

- Phase 1 (TAZ 1b, 2b, 3b, 5b, and 7b) – Exhibits H-2 to H-6 of Appendix H of the traffic study (Appendix H of this EIR).
- Phase 2 (TAZ 1b, 2b, 3b, 4b, 5b, 7b, and 8b) – Exhibits I-8 to I-14 of Appendix I of the traffic study (Appendix H of this EIR).
- Phase 3 (TAZ 1b to 9b) – Exhibits J-12 to J-20 of Appendix J of the traffic study (Appendix H of this EIR).
- 2030 (TAZ 1b to 9b) – Exhibits K-13 to K-21 of Appendix K of the traffic study (Appendix H of this EIR).

Trip distribution patterns for the Fiesta Property development area are depicted on the following exhibits:

- Phase 1 (TAZ 2, 4, 5, 8, 10, 11, 13, and 14) – Exhibits H-7 to H-14 of Appendix H of the traffic study (Appendix H of this EIR).
- Phase 2 (TAZ 2, 4, 5, 8, 9, 10, 11, 13, and 14) – Exhibits I-15 to I-23 of Appendix I of the traffic study (Appendix H of this EIR).
- Phase 3 (TAZ 2, 3, 4, 5, 6, 8, 9, 10, 11, 13, and 14) – Exhibits J-21 to J-31 of Appendix J of the traffic study (Appendix H of this EIR).
- 2030 (TAZ 1 to 16) – Exhibits K-22 to K-37 of Appendix K of the traffic study (Appendix H of this EIR).

AMBIENT GROWTH TRAFFIC

To account for ambient growth not included in other Calimesa mixed-use development and other surrounding areas summarized previously, background future traffic volumes have been calculated based on the following ambient growth rates over the existing traffic volumes for the various phases as follows:

- Phase 1 – 22%
- Phase 2 – 34%
- Phase 3 – 48%
- 2030 – 80%

The background growth rate, combined with the large amount of cumulative project traffic sources listed in the above report sections, yields long range forecasts that are comparable to RCIP data.

The list of cumulative projects includes approved and probable developments in the City of Calimesa as well as in the City of Beaumont. As noted above, the cumulative growth is anticipated to be accounted for by the development of the Fiesta Property, Oak Valley Beaumont, and other Calimesa mixed-use development area, as well as the following:

- Omega Homes
- Oak Valley Greens
- Cougar Ranch
- Cougar Ranch II
- Kirkwood Ranch
- Oak Valley Commercial
- Omega Homes II
- Noble Creek
- TR 30779
- Sundance
- JP Ranch

- Country Club Ridge
- Braswell
- Sunset Ranch
- Holbert Ranch
- Willow Springs
- Rolling Hills
- Heartland
- LaBorde Canyon

Ambient growth has been added to daily and peak hour traffic volumes on surrounding roadways, in addition to traffic generated by the proposed project, Fiesta Property, Oak Valley Beaumont including other future and surrounding developments.

OVERALL TOTAL TRAFFIC

Overall Phase 1 (Figure 3.10-24)

For Phase 1 traffic conditions, traffic signals are projected to be warranted at the following additional study area intersections

Desert Lawn Drive (NS) at:
- Cherry Valley Boulevard ("J" Street) (EW)
- Brookside Avenue (EW)
- Champions Drive (EW)
- Oak Valley Parkway (EW)

Roberts Road (NS) at:
- Sandalwood Drive (EW)
- Cherry Valley Boulevard (EW)

I-10 Freeway Southbound Ramps (NS) at:
- County Line Road (EW)
- Cherry Valley Boulevard ("J" Street) (EW)
- Oak Valley Parkway (EW)

I-10 Freeway Northbound Ramps (NS) at:
- Cherry Valley Boulevard (EW)
- 14th Street (EW)

Calimesa Boulevard (NS) at:
- I-10 Northbound Ramps (EW)

Overall Phase 2 (Figure 3.10-25)

For Phase 2 traffic conditions, traffic signals are projected to be warranted at the following additional study area intersections:

Roberts Road/Woodhouse Road (NS) at:
- Singleton Road (EW)

Calimesa Boulevard (NS) at:
- Singleton Road (EW)
- Cherry Valley Boulevard (EW)

I-10 Northbound Ramps (NS) at:
- Cherry Valley Boulevard (EW)

"J" Street (NS) at:
- Oak Valley Parkway (EW)

Overall Phase 3 (Figure 3.10-26)

For Phase 3 traffic conditions, traffic signals are projected to be warranted at the following additional study area intersections:

Roberts Road (NS) at:
- County Line Road (EW)
- Singleton Road (EW)

"J" Street (NS) at:
- Champions Drive (EW)

"G" Street (NS) at:
- San Timoteo Canyon Road (EW)

Singleton Road (NS) at:
- San Timoteo Canyon Road (EW)

"A" Street (NS) at:
- Singleton Road (EW)

"F" Street (NS) at:
- Singleton Road (EW)

Overall 2030 Traffic (Figure 3.10-27)

For 2030 traffic conditions, a traffic signal is projected to be warranted at the following additional study area intersections:

Roberts Road (NS) at:
- "D" Street (EW)
- "C" Street (EW)
- "F" Street (EW)

Portrero Boulevard (NS) at:
- Oak Valley Parkway (EW)

C" Street (NS) at:
- Singleton Road (EW)

The General Plan Build-Out Traffic is shown in Figure 3.10-28 ADT volumes.

Impact T6 The project combined with other growth up through 2030 would have significant cumulative impact.

Effective transportation infrastructure provides economic vitality and positive quality of life in every community. Traffic congestion continues to be a primary concern of southern Californians and explosive growth in the Inland Empire makes timely improvement critical. The City of Calimesa and neighboring jurisdictions are projecting significant construction of homes and industry on vacant land to address jobs/housing balance issues, lack of affordable housing and leverage the lowest interest rates in decades. As a result, major facility improvements will be necessary in advance of 2030. Many of these improvements will be accomplished through a combination of required mitigation, established fee programs and innovative financing.

A strategic approach will be necessary to address future traffic and transportation capacity needs at the earliest opportunity. When resources are pooled, major improvements such as interchanges or extensive arterial improvements can be implemented. This is the basic premise of regional fee programs. By combining the efforts of several concurrent neighboring developments, local agencies can ensure timely implementation of roadway improvements to the full TUMF configuration.

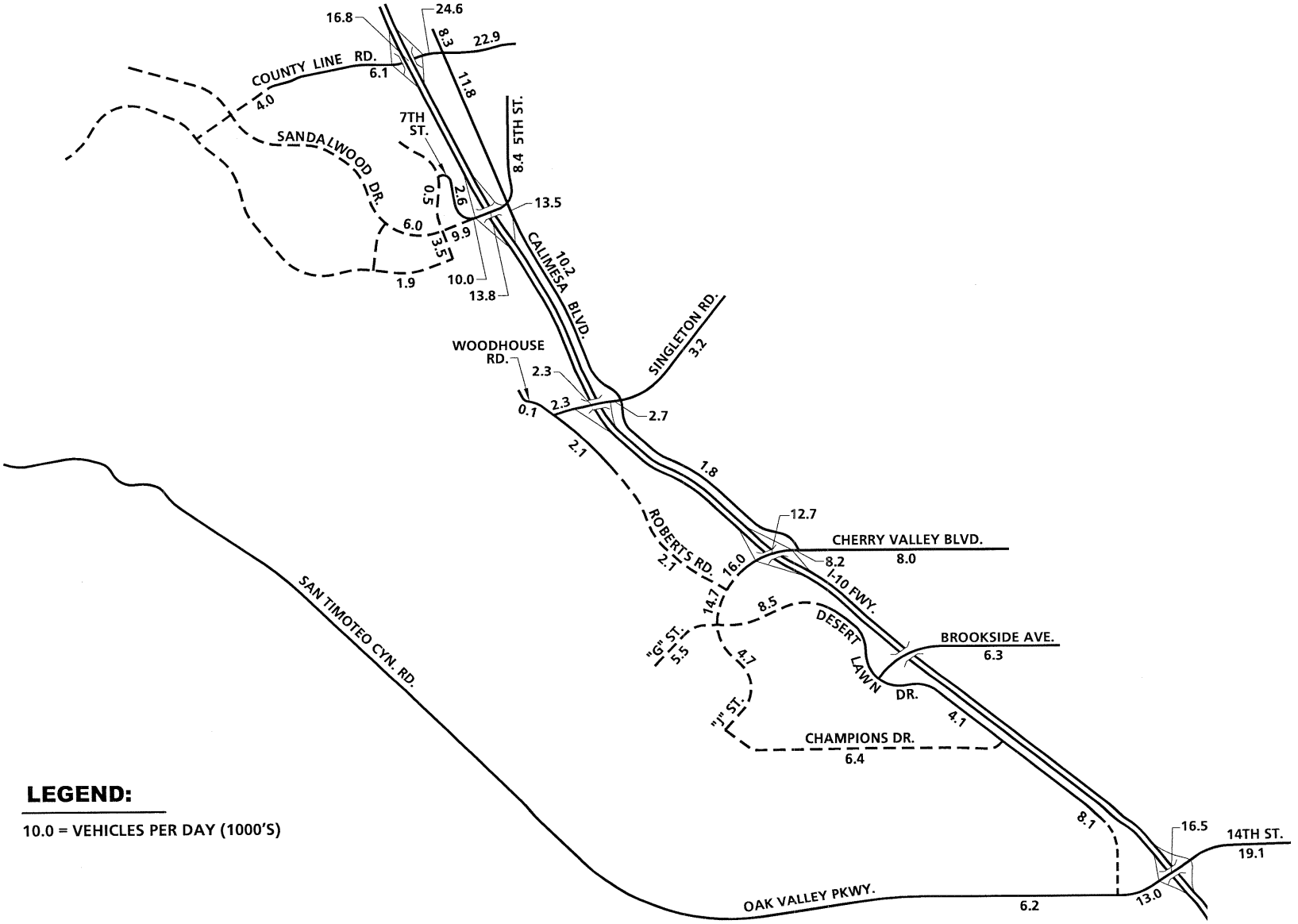
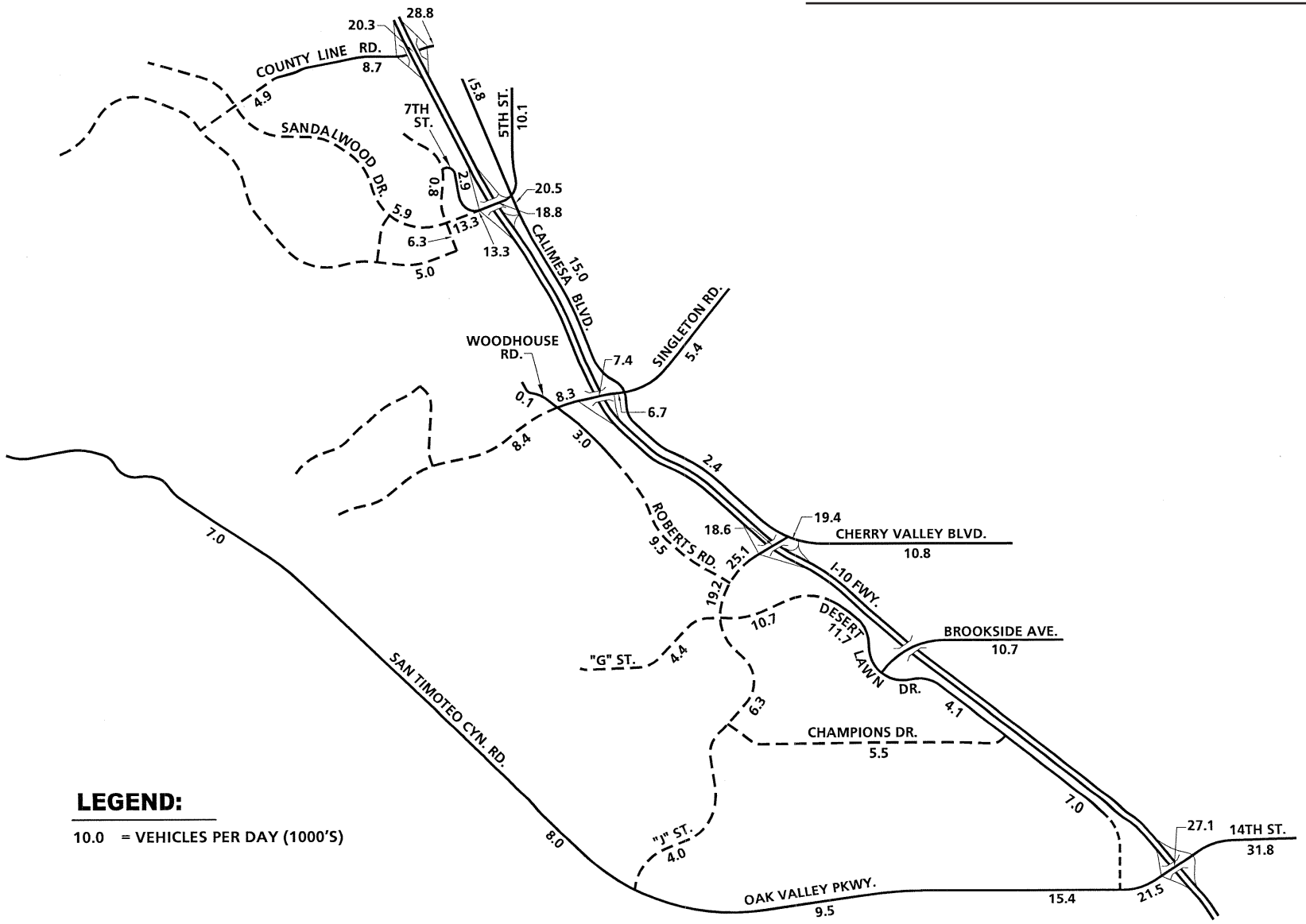


Figure 3.10-24
Phase 1 Average Daily Traffic (ADT)



EDAW URBAN CROSSROADS

Figure 3.10-25
Phase 2 Average Daily Traffic (ADT)

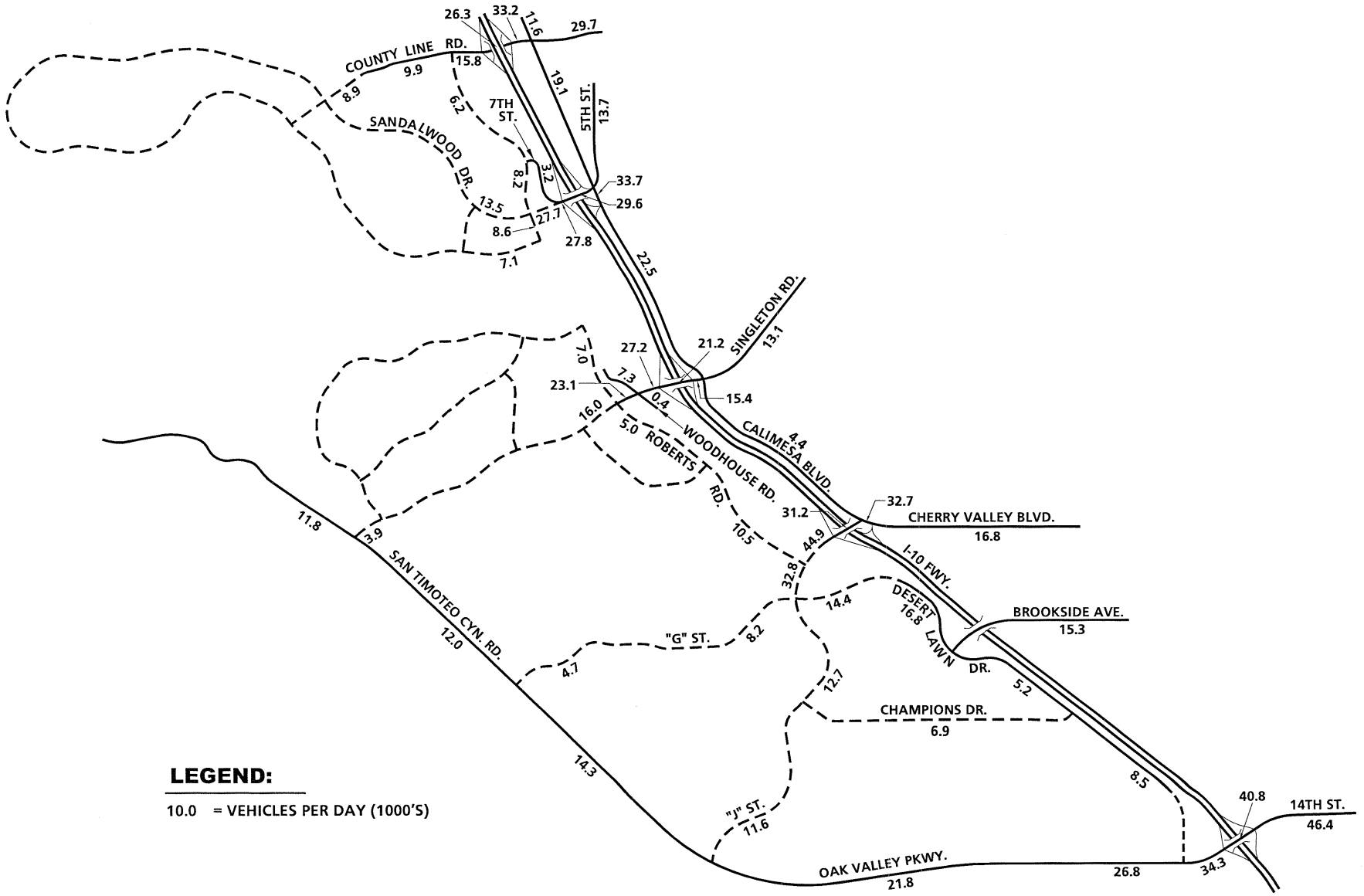


Figure 3.10-26
Phase 3 Average Daily Traffic (ADT)

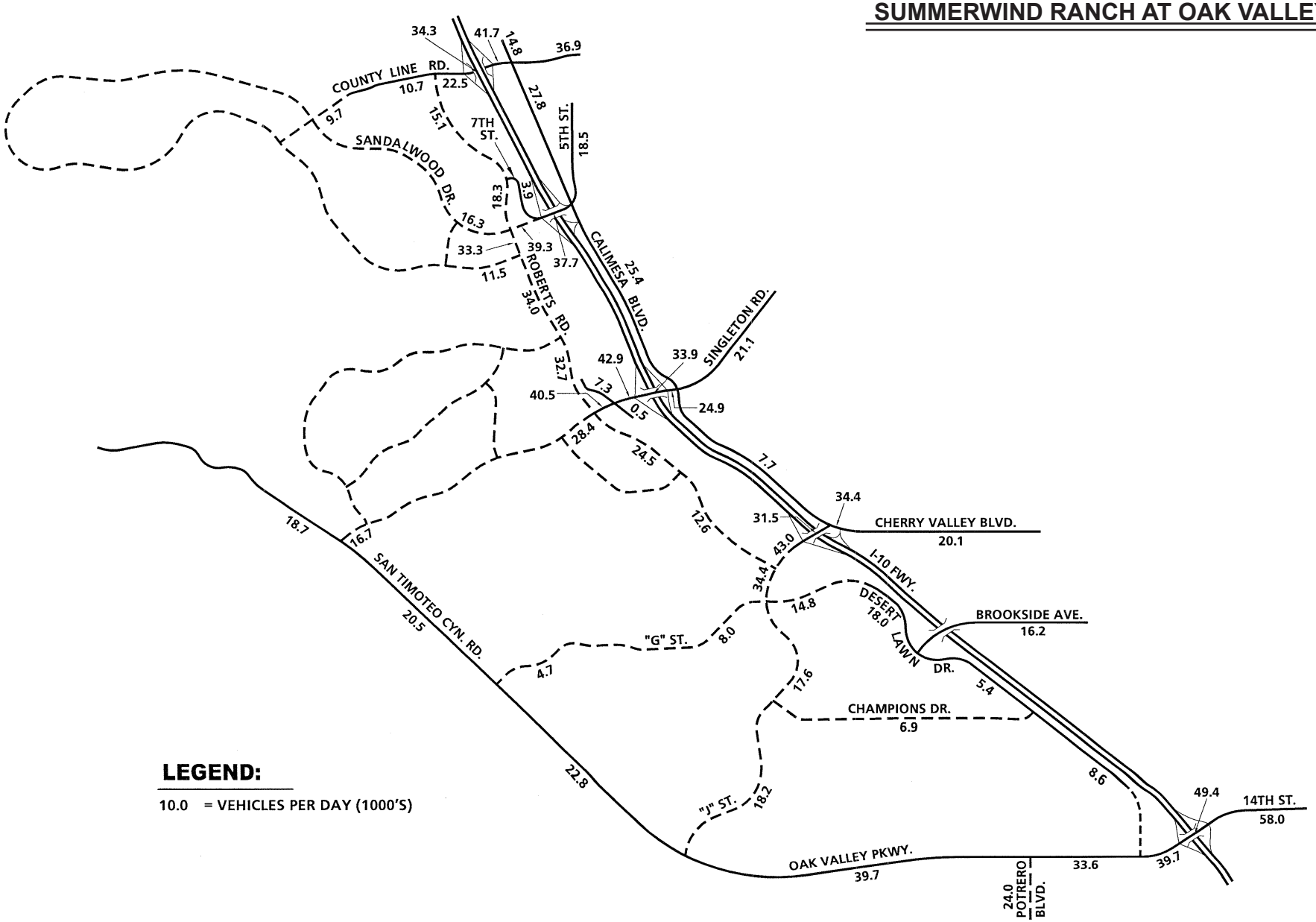


Figure 3.10-27
2030 Average Daily Traffic (ADT)

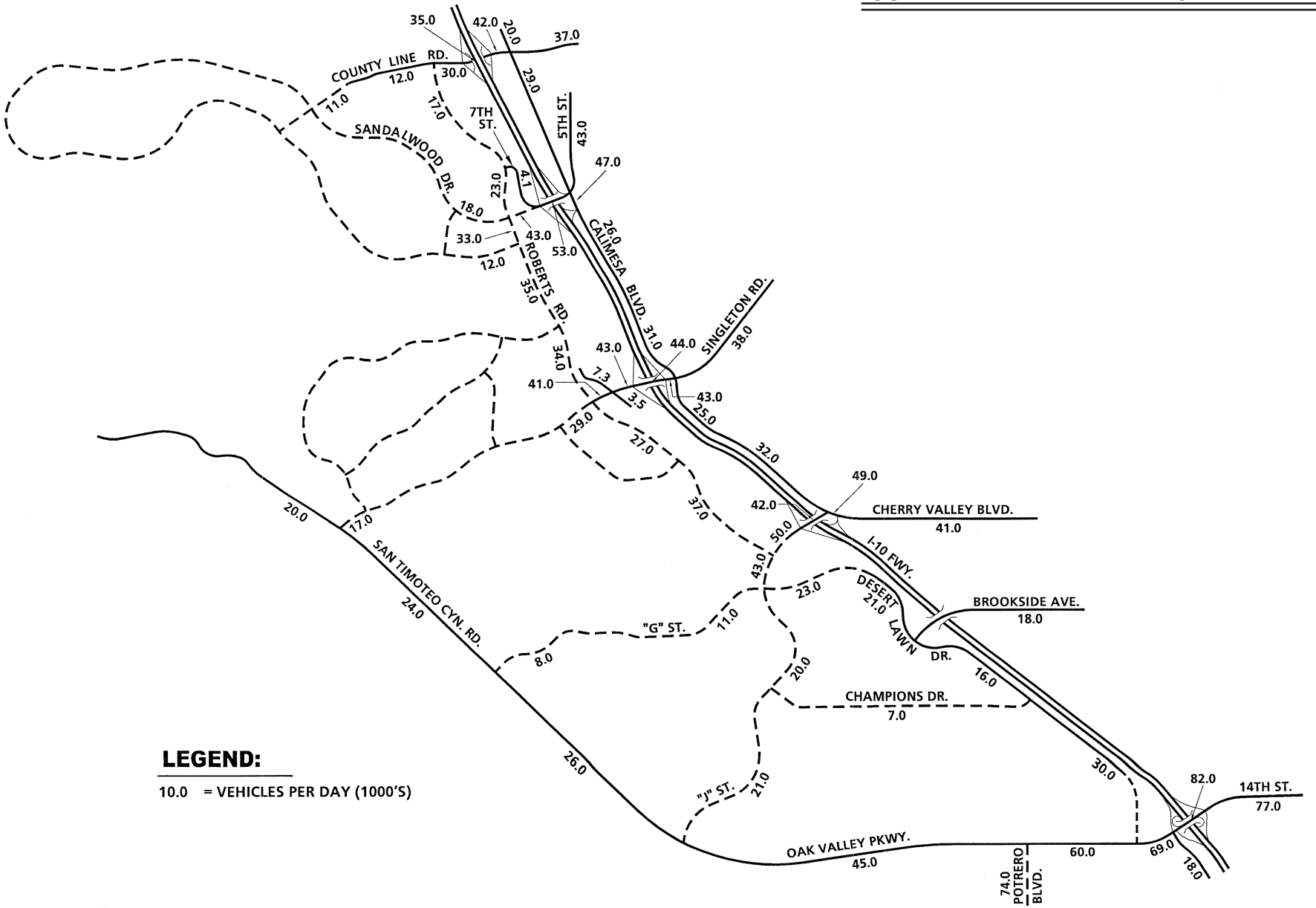


Figure 3.10-28
General Plan Build-Out Average Daily Traffic (ADT)

The Oak Valley Calimesa Cumulative Fair Share Traffic Assessment, previously prepared by Urban Crossroads, Inc. on April 23, 2004, was undertaken to determine the potential benefits of combining the efforts of three separate developments. The result is an examination of the fair share impacts compared to the relative benefits of pooled resources. The April 23, 2004 traffic assessment presented two transportation program scenarios, and recommended Scenario B for implementation. Scenario A represented a "Fair Share" distribution of TUMF revenue for facilities within the Cities of Calimesa and Beaumont valued at $75.7 million, and Scenario B is the "Local Control" variation valued at $76.4 million that assumes each jurisdiction will resolve local mitigation with fee sources within the city boundaries.

The recommended transportation program (Scenario B) is shown on Table 3.10-16 and Figure 3.10-25 of the traffic study (Appendix H of this EIR). This scenario, recommended in the April 23, 2004 traffic assessment, was created to address the complexities of multi-jurisdictional coordination and fee transfers, and eliminates the transfer of fees that are approximately equivalent between cities and projects. The "local control" program provides full funding of interchanges in the project area based solely on TUMF fees generated by the project without dependence on outside participation. Table 3.10-17 presents a breakdown of Scenario B by project.

The proposed financing program call for the proposed project areas to fully fund the construction of the I-10/Cherry Valley Interchange improvements to satisfy 2030 travel demand. The proposed 2030 I-10/Cherry Valley Interchange configuration is anticipated to be constructed with Phase 2 of the project, and the improvements are as follows:

- Widen the existing two lane bridge to a six lane bridge with a median to accommodate a westbound left turn pocket, two westbound through lanes and three eastbound through lanes along "J" Street (Cherry Valley Boulevard).

- Construct the realignment of Cherry Valley Boulevard and Calimesa Boulevard to connect with each other as a continuous roadway. The westerly extension of Cherry Valley Boulevard ("J" Street) should intersect the realigned Calimesa Boulevard/Cherry Valley Boulevard as a "T" intersection.

- Reconfigure the I-10 Northbound on-ramp and off-ramp to intersect the realigned Cherry Valley Boulevard south of "J" Street (Cherry Valley Boulevard) as a "T" intersection.

The proposed financing program calls for the proposed project areas to fully fund the construction of the I-10/Singleton Interchange improvements to satisfy 2030 travel demand. The proposed 2030 I-10/Singleton Interchange configuration is anticipated to be constructed with Phase 3 of the proposed project, and the improvements are as follows:

- Widen the existing two lane bridge to a six lane bridge with a median to accommodate back-to-back dual left turn pockets and two through lanes each direction along Singleton Road.

- Construct Calimesa Boulevard in the vicinity of the I-10/Singleton Interchange as a four lane Major.

- Construct a new I-10 Northbound on-ramp and a new I-10 Southbound off-ramp north of Singleton Road.

3.10.6 MITIGATION MEASURES

PHASE 1 – RESIDENTIAL DEVELOPMENT (FIGURE 3.10-29)

MM-T1-1 Traffic signals and left turn lane striping at the I-10 Freeway/Cherry Valley Interchange ramp intersections shall be installed.

MM-T1-2 Traffic signals and turn lane improvements shall be installed at the following intersections (Figure 3.10-33):

- Roberts Roads at Cherry Valley Boulevard
- Realigned Desert Lawn Drive ("G" Street) at Cherry Valley Boulevard

MM-T1-3 The extension of "J" Street (Cherry Valley Boulevard) shall be constructed from the I-10 Southbound Ramps to Roberts Road as an interim two-lane 32-foot pavement section.

MM-T1-4 "J" Street shall be constructed from Roberts Road to the realigned Desert Lawn Drive ("G" Street) at its ultimate half-section width as an Urban Arterial roadway (134-foot ROW) adjacent to the project.

MM-T1-5 "J" Street shall be constructed from the realigned Desert Lawn Drive ("G" Street) to the TAZ "G" south boundary at its ultimate full-section width as a Secondary roadway (88-foot ROW).

MM-T1-6 "J" Street shall be constructed from the TAZ "G" south boundary to Champions Drive as an interim two-lane 32-foot pavement section.

MM-T1-7 Champions Drive shall be constructed from its terminus to "J" Street as an interim two-lane 32-foot pavement section.

MM-T1-8 The realignment of Desert Lawn Drive shall be constructed from "J" Street to the TAZ "G" east boundary at its ultimate half-section width as a Secondary roadway (88-foot ROW) adjacent to the project.

MM-T1-9 The realignment of Desert Lawn Drive shall be constructed from the TAZ "G" east boundary to its existing alignment adjacent to I-10 Freeway as an interim two-lane 32-foot pavement section.

MM-T1-10 "G" Street shall be constructed from "J" Street to the TAZ "A" south boundary at its ultimate full-section width as a Secondary roadway (88-foot ROW).

MM-T1-11 Roberts Road shall be constructed from "J" Street to the TAZ "D" west boundary at its ultimate half-section width as an Arterial roadway (110-foot ROW) adjacent to the project.

MM-T1-12 Roberts Road shall be constructed from the TAZ "D" west boundary to the TAZ "H" south boundary as an interim two-lane 32-foot pavement section.

MM-T1-13 Roberts Road shall be constructed from the TAZ "H" south boundary to the existing Roberts Road/Woodhouse Road alignment at its ultimate half-section width as an Arterial roadway (110-foot ROW) adjacent to the project.

PHASE 2 - RESIDENTIAL DEVELOPMENT (FIGURE 3.10-30)

The Developer shall participate in the I-10 Freeway/Cherry Valley Interchange improvement project.

MM-T2-1 The Developer shall participate in the installation of a traffic signal and turn lane improvements at the intersection of Calimesa Boulevard and Singleton Road.

MM-T2-2 A traffic signal and turn lane improvements shall be installed at the intersection of Roberts Road/Woodhouse Road and Singleton Road.

MM-T2-3 The extension of Singleton Road from Roberts Road/Woodhouse Road to the TAZ "T" west boundary shall be constructed as an interim two-lane 32-foot pavement section.

MM-T2-4 Singleton Road from the TAZ "T" west boundary to TAZ "N" Access Driveway shall be constructed at its ultimate half-section width as a Secondary roadway (88-foot ROW).

MM-T2-5 "A" Street from Singleton Road to the TAZ "O" north boundary shall be constructed at its ultimate full-section width as a Divided Collector roadway (78-foot ROW).

MM-T2-6 "A" Street from the TAZ "O" north boundary to "B" Street shall be constructed at its ultimate half-section width as a Divided Collector roadway (78-foot ROW).

MM-T2-7 "B" Street from the TAZ "M" north boundary to "A" Street shall be constructed at its ultimate half-section width as a Divided Collector roadway (78-foot ROW).

MM-T2-8 "B" Street from "A" Street to the TAZ "M" west boundary shall be constructed at its ultimate full-section width as a Divided Collector roadway (78-foot ROW).

MM-T2-9 "B" Street east of the TAZ "M" west boundary along the TAZ "N" north boundary shall be constructed at its ultimate half-section width as a Divided Collector roadway (78-foot ROW).

PHASE 2 - TOWN CENTER (FIGURE 3.10-31)

MM-T2-10 The Developer shall participate in the I-10 Freeway/Cherry Valley Interchange improvement project.

MM-T2-11 The Developer shall participate in the installation of a traffic signal and turn lane improvements at the intersection of Calimesa Boulevard and Singleton Road.

MM-T2-12 Turn lane improvements shall be provided at the intersection of Roberts Road and "J" Street (Cherry Valley Boulevard).

MM-T2-13 "J" Street shall be widened from the I-10 Southbound ramps to Roberts Road at its ultimate half-section width as an Urban Arterial roadway (134-foot ROW).

MM-T2-14 Roberts Road from "J" Street to the TAZ "D" west boundary shall be completed at its ultimate full-section width as an Arterial roadway (110-foot ROW).

MM-T2-15 Roberts Road shall be widened from the TAZ "D" west boundary to the TAZ "C" north boundary at its ultimate half-section width as an Arterial roadway (110-foot ROW).

MM-T2-16 Singleton Road from Roberts Road to the TAZ "T" shall be constructed at its ultimate half-section width as an Arterial roadway (110-foot ROW).

PHASE 3 - RESIDENTIAL DEVELOPMENT (FIGURE 3.10-32)

MM-T3-1 The Developer shall participate in the I-10 Freeway/Singleton Interchange improvement project.

MM-T3-2 The Developer shall participate in providing turn lane improvements at the I-10 Freeway/Cherry Valley Interchange.

MM-T3-3 Traffic signals and turn lane improvements shall be installed at the following intersections:

- "C" Street at Singleton Road
- "A" Street at Singleton Road

MM-T3-4 Roberts Road from the TAZ "B" south boundary to the TAZ "C" north boundary shall be completed at its ultimate full-section width as an Arterial roadway (110-foot ROW).

MM-T3-5 Roberts Road shall be widened from the TAZ "C" north boundary to the TAZ "B" north boundary at its ultimate half-section width as an Arterial roadway (110-foot ROW).

MM-T3-6 Singleton Road from its Phase 2 terminus (See Exhibit 1-D) to "C" Street shall be constructed at its ultimate half-section width as a Secondary roadway (88-foot ROW).

MM-T3-7 Singleton Road from "C" Street to San Timoteo Canyon Road shall be constructed as an interim two-lane 32-foot pavement section.

MM-T3-8 "C" Street from Singleton Road to the TAZ "I" north boundary shall be constructed at its ultimate full-section width as a Divided Collector roadway (78-foot ROW).

MM-T3-9 "C" Street from the TAZ "I" north boundary to "B" Street shall be constructed at its ultimate half-section width as a Divided Collector roadway (78-foot ROW).

MM-T3-10 "C" Street from "B" Street to Roberts Road shall be constructed at its ultimate full-section width as a Divided Collector roadway (78-foot ROW).

MM-T3-11 Roberts Road from "C" Street to the TAZ "S" north boundary shall be constructed at its ultimate half-section width as an Arterial roadway (110-foot ROW).

MM-T3-12 Complete "B" Street from "C" Street to the TAZ "I" east boundary at its ultimate full-section width as a Divided Collector roadway (78-foot R.O.W.).

MM-T3-13 "B" Street from "A" Street to "C" Street shall be completed at its ultimate full-section width as a Divided Collector roadway (78-foot ROW).

MM-T3-14 "A" Street from "B" Street to the TAZ "V" south boundary shall be completed at its ultimate full-section width as a Divided Collector roadway (78-foot ROW).

PHASE 3 - TOWN CENTER (FIGURE 3.10-33)

MM-T3-15 The Developer shall participate in the I-10 Freeway/Singleton Interchange improvement project.

MM-T3-16 The Developer shall participate in providing turn lane improvements at the I-10 Freeway/Cherry Valley Interchange.

MM-T3-17 Traffic signals and turn lane improvements shall be installed at the following intersections:

- "F" Street at Singleton Road
- Roberts Road at Singleton Road
- Roberts Road at Singleton Road

MM-T3-18 Turn lane improvements shall be provided at the following intersections:

- Roberts Road at "J" Street (Cherry Valley Boulevard)
- Realigned Desert Lawn Drive ("G" Street) at "J" Street (Cherry Valley Boulevard)

MM-T3-19 "J" Street from the I-10 Southbound Ramps to the realigned Desert Lawn Drive shall be completed at its ultimate full-section width as an Urban Arterial roadway (134-foot ROW).

MM-T3-20 The realigned Desert Lawn Drive from "J" Street to the TAZ "F" east boundary shall be completed at its ultimate full-section width as a Secondary roadway (88-foot ROW).

MM-T3-21 Roberts Road shall be widened from the TAZ "U" south boundary to "F" Street at its ultimate half-section width as an Arterial roadway (110-foot ROW).

MM-T3-22 Singleton Road shall be widened from the I-10 Southbound Ramps to Roberts Road at its ultimate half-section width as an Urban Arterial roadway (134-foot ROW).

MM-T3-23 Roberts Road from Singleton Road to the TAZ "S" north boundary shall be constructed at its ultimate full-section width as an Arterial roadway (110-foot ROW).

MM-T3-24 Singleton Road from "F" Street to the TAZ "P" west boundary shall be completed at its ultimate full-section width as an Arterial roadway (110-foot ROW).

MM-T3-25 "F" Street from Roberts Road to Singleton Road shall be constructed at its ultimate half-section width as a Major roadway (100-foot ROW).

MM-T3-26 The realignment of Roberts Road south of Singleton Road shall be constructed as an interim 32-foot pavement section.

2030 - RESIDENTIAL DEVELOPMENT (FIGURE 3.10-34)

MM-T4-1 The Developer shall participate in the northerly extension of Roberts Road from the northerly Summerwind Ranch project boundary to "D" Street (southerly Fiesta Property boundary) on a fair share basis.

MM-T4-2 The Developer shall participate in providing turn lane improvements at the following locations:

- I-10 Freeway/Cherry Valley Interchange
- I-10 Freeway/Singleton Interchange

MM-T4-3 Traffic signals and turn lane improvements shall be installed at the following intersections:

- "C" Street at Singleton Road
- Roberts Road at "C" Street

MM-T4-4 Turn lane improvements shall be provided at the following intersections:

- Singleton Road at San Timoteo Canyon Road
- Realigned Desert Lawn Drive ("G" Street) at "J" Street (Cherry Valley Boulevard)

MM-T4-5 Singleton Road from the TAZ "P" west boundary to "A" Street shall be completed at its ultimate full-section width as an Arterial roadway (110-foot ROW).

MM-T4-6 Singleton Road from "A" Street to San Timoteo Canyon Road shall be completed at its ultimate full-section width as a Secondary roadway (88-foot ROW).

MM-T4-7 Roberts Road from the TAZ "S" north boundary to the TAZ "K" north boundary shall be completed at its ultimate full-section width as an Arterial roadway (110-foot ROW).

MM-T4-8 "C" Street from the TAZ "I" north boundary to "B" Street shall be completed at its ultimate full-section width as a Divided Collector roadway (78-foot ROW).

MM-T4-9 San Timoteo Canyon Road from the TAZ "I" north boundary to Singleton Road shall be completed at its ultimate full-section width as a Divided Collector roadway (78-foot ROW).

MM-T4-10 San Timoteo Canyon Road from the TAZ "6b" north boundary to Singleton Road shall be completed at its ultimate full-section width as a Secondary Frontage roadway (76-foot ROW).

2030 - TOWN CENTER (FIGURE 3.10-35)

MM-T4-11 The Developer shall participate in the northerly extension of Roberts Road from the northerly Summerwind Ranch project boundary to "D" Street (southerly Fiesta Property boundary) on a fair share basis.

MM-T4-12 The Developer shall participate in providing turn lane improvements at the following locations:

- I-10 Freeway/Cherry Valley Interchange
- I-10 Freeway/Singleton Interchange

MM-T4-13 A traffic signal and turn lane improvements shall be installed at the intersection of Roberts Road and "F" Street.

MM-T4-14 Turn lane improvements shall be provided at the following intersections:

- "F" Street at Singleton Road
- Woodhouse Road at Singleton Road

MM-T4-15 Singleton Road from the I-10 Southbound Ramps to Roberts Road shall be completed at its ultimate full-section width as an Urban Arterial roadway (134-foot ROW).

MM-T4-16 Singleton Road from Roberts Road to "F" Street shall be completed at its ultimate full-section width as an Arterial roadway (110-foot ROW).

MM-T4-17 Roberts Road from Singleton Road to the TAZ "R" south boundary shall be completed at its ultimate full-section width as an Arterial roadway (110-foot ROW).

MM-T4-18 "F" Street from Singleton Road to Roberts Road shall be completed at its ultimate full-section width as a Major roadway (100-foot ROW).

GENERAL PLAN BUILD-OUT (FIGURES 3.10-36, 3.10-37, AND 3.10-38)

MM-T5-1 "J" Street shall be increased between Roberts Road and "G" Street, from the Enhanced Secondary roadway (104-foot ROW) designation in the Oak Valley Specific Plan to the recommended Urban Arterial roadway (134-foot ROW).

MM-T5-2 San Timoteo Canyon Road shall be decreased west of Singleton Road, from the Arterial roadway (114-foot ROW) designation in the Oak Valley Specific Plan to the recommended Divided Collector roadway (78-foot ROW).

MM-T5-3 San Timoteo Canyon Road shall be decreased between Singleton Road and "J" Street, from the Major Frontage roadway (90-foot ROW) designation in the Oak Valley Specific Plan to the recommended Secondary Frontage roadway (76-foot ROW).

MM-T5-4 Singleton Road shall be decreased between San Timoteo Canyon Road and "A" Street, from the Arterial roadway (114-foot ROW) designation in the Oak Valley Specific Plan to the recommended Secondary roadway (88-foot ROW).

MM-T5-5 "G" Street shall be decreased between San Timoteo Canyon Road and the TAZ "7b" north boundary, from the Secondary roadway (88-foot ROW) designation in the Oak Valley Specific Plan to the recommended Divided Collector roadway (78-foot ROW).

MM-T5-6 F" Street shall be decreased between Singleton Road and Roberts Road, from the Arterial roadway (114-foot ROW) designation in the Oak Valley Specific Plan to the recommended Major roadway (100-foot ROW).

MM-T5-7 Roberts Road shall be decreased between Singleton Road and "J" Street, from the Urban Arterial roadway (134-foot ROW) designation in the Oak Valley Specific Plan to the recommended Arterial roadway (110-foot ROW).

MM-T5-8 "J" Street shall be decreased between "G" Street and Champions Drive, from the Enhanced Secondary roadway (104-foot ROW) designation in the Oak Valley Specific Plan to the recommended Secondary roadway (88-foot ROW).

MM-T5-9 The realigned Desert Lawn Drive shall be decreased between "J" Street and the I-10 Freeway, from the Enhanced Secondary roadway (104-foot ROW) designation in the Oak Valley Specific Plan to the recommended Secondary roadway (88-foot ROW).

The Riverside County General Plan (RCIP version) designation for San Timoteo Canyon Road west of Singleton Road is a Mountain Arterial roadway (110-foot ROW), which is described as "highway intended to serve through traffic in mountainous area zoned for low density residential development. Access from abutting property shall be kept at a minimum. Intersections with other streets or highways shall be limited to approximately 330-foot intervals. It may be two to four lanes, and additional ROW may be required at intersections." The City of Beaumont General Plan Circulation Element designates San Timoteo Canyon Road west of Singleton Road as a Divided roadway (78-foot ROW).

CUMULATIVE IMPACTS

MM-T6-1 Cumulative impacts from traffic growth can be mitigated by implementing the traffic improvements designated herein on a fair-share basis.

MM-T6-2 A traffic study shall be prepared at the initiation of each new phase of the Summerwind Ranch Specific Plan, or other frequency specified by the City Engineer, as a means of monitoring traffic conditions in the study area. The study will be used to determine the effectiveness of constructed improvements, the nature of traffic growth, and whether phased improvements are sufficient. Recommendations for timing of proposed mitigation measures or new measures will be made.

3.10.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed specific plan and traffic study provides for physical traffic improvements, fair share determination of costs, and monitoring of traffic growth in the project area. With implementation of these measures, the project's significant impacts are mitigated to less than significant.

Ⓐ CONSTRUCT THE EXTENSION OF "J" STREET (CHERRY VALLEY BOULEVARD) FROM THE I-10 SOUTHBOUND RAMPS TO ROBERTS ROAD AS AN INTERIM 2-LANE 32-FOOT PAVEMENT SECTION.

Ⓑ CONSTRUCT "J" STREET FROM ROBERTS ROAD TO THE REALIGNED DESERT LAWN DRIVE ("G" STREET) AT ITS ULTIMATE HALF-SECTION WIDTH AS AN URBAN ARTERIAL (134-FOOT R.O.W.).

Ⓒ CONSTRUCT "J" STREET FROM THE REALIGNED DESERT LAWN DRIVE ("G" STREET) TO THE TAZ "G" SOUTH BOUNDARY AT ITS ULTIMATE FULL-SECTION WIDTH AS A SECONDARY (88-FOOT R.O.W.).

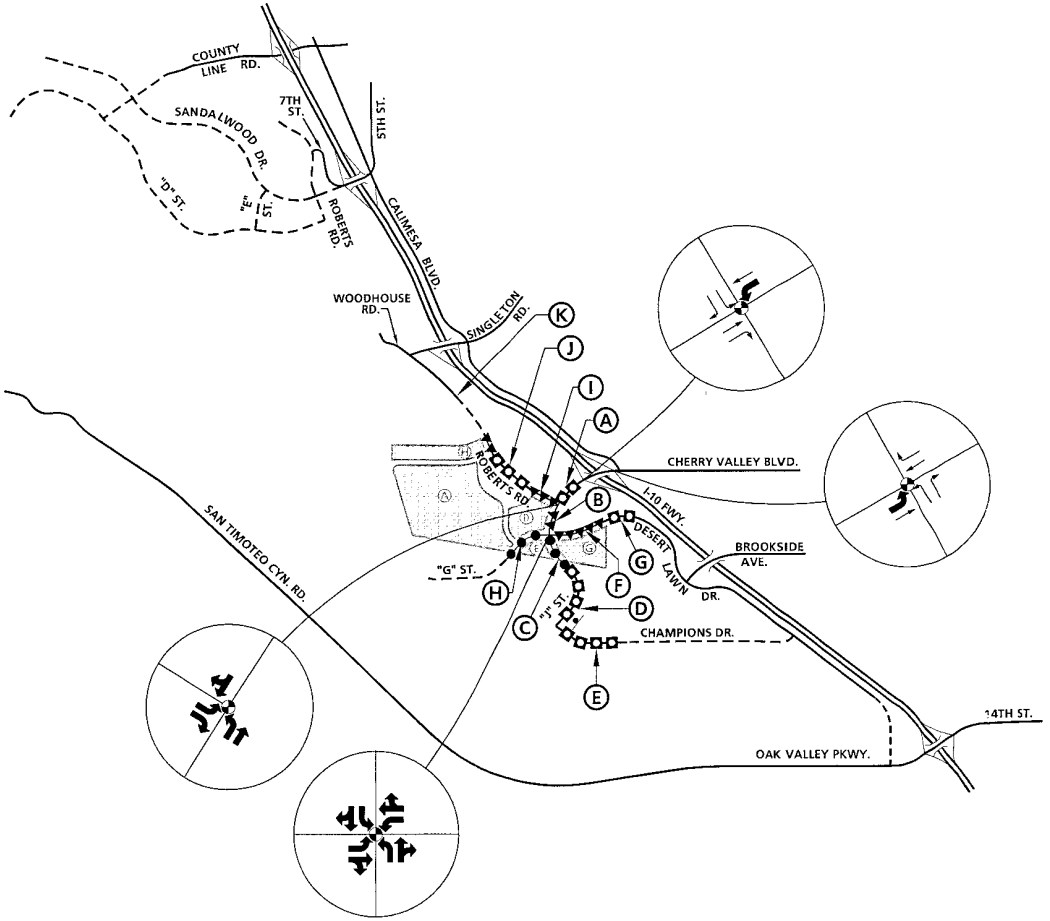
Ⓓ CONSTRUCT "J" STREET FROM THE TAZ "G" SOUTH BOUNDARY TO CHAMPIONS DRIVE AS AN INTERIM 2-LANE 32-FOOT PAVEMENT SECTION.

Ⓔ CONSTRUCT CHAMPIONS DRIVE FROM ITS TERMINUS TO "J" STREET AS AN INTERIM 2-LANE 32-FOOT PAVEMENT SECTION.

Ⓕ CONSTRUCT THE REALIGNMENT OF DESERT LAWN DRIVE FROM "J" STREET TO THE TAZ "G" EAST BOUNDARY AT ITS ULTIMATE HALF-SECTION WIDTH AS A SECONDARY (88-FOOT R.O.W.).

Ⓖ CONSTRUCT THE REALIGNMENT OF DESERT LAWN DRIVE FROM THE TAZ "G" EAST BOUNDARY TO ITS EXISTING ALIGNMENT ADJACENT TO I-10 FREEWAY AS AN INTERIM 2-LANE 32-FOOT PAVEMENT SECTION.

Ⓗ CONSTRUCT "G" STREET FROM "J" STREET TO THE TAZ "A" SOUTH BOUNDARY AT ITS ULTIMATE FULL-SECTION WIDTH AS A SECONDARY (88-FOOT R.O.W.).



Ⓘ CONSTRUCT ROBERTS ROAD FROM "J" STREET TO THE TAZ "D" WEST BOUNDARY AT ITS ULTIMATE HALF-SECTION WIDTH AS AN ARTERIAL (110-FOOT R.O.W.).

Ⓙ CONSTRUCT ROBERTS ROAD FROM THE TAZ "D" WEST BOUNDARY TO THE TAZ "H" SOUTH BOUNDARY AS AN INTERIM 2-LANE 32-FOOT PAVEMENT SECTION.

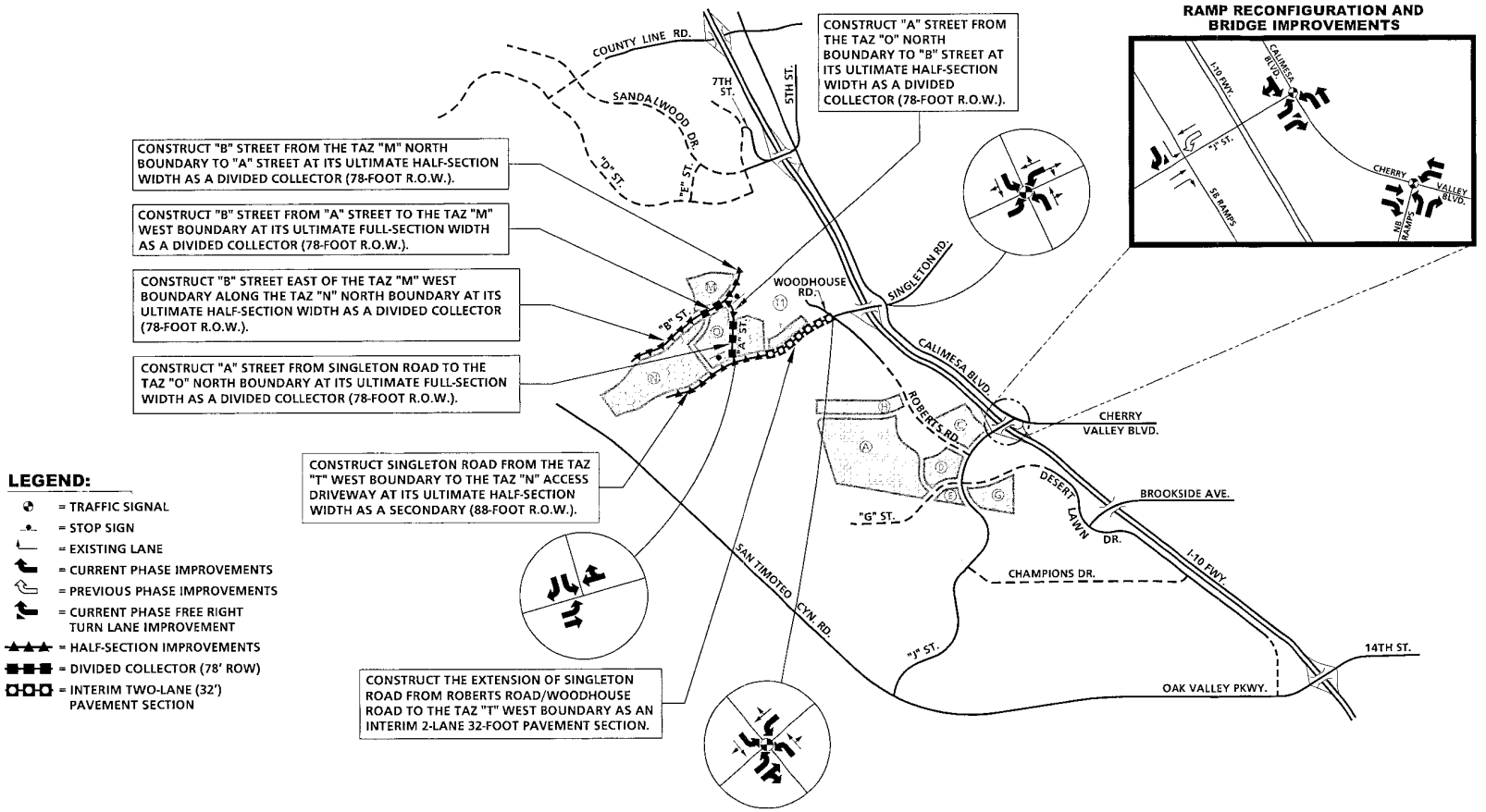
Ⓚ CONSTRUCT ROBERTS ROAD FROM THE TAZ "H" SOUTH BOUNDARY TO THE EXISTING ROBERTS ROAD/WOODHOUSE ROAD ALIGNMENT AT ITS ULTIMATE HALF-SECTION WIDTH AS AN ARTERIAL (110-FOOT R.O.W.).

LEGEND:

- = TRAFFIC SIGNAL
- = STOP SIGN
- = EXISTING LANE
- = CURRENT PHASE IMPROVEMENTS
- = INTERIM TWO-LANE (32') PAVEMENT SECTION
- = SECONDARY (88' ROW)
- = HALF-SECTION IMPROVEMENTS

EDAW URBAN CROSSROADS N

Figure 3.10-29
Summerwind Ranch - SunCal Residential Phase 1 Circulation Recommendataions



EDAW URBAN CROSSROADS

Figure 3.10-30
Summerwind Ranch - SunCal Residential Phase 2 Circulation Recommendataions

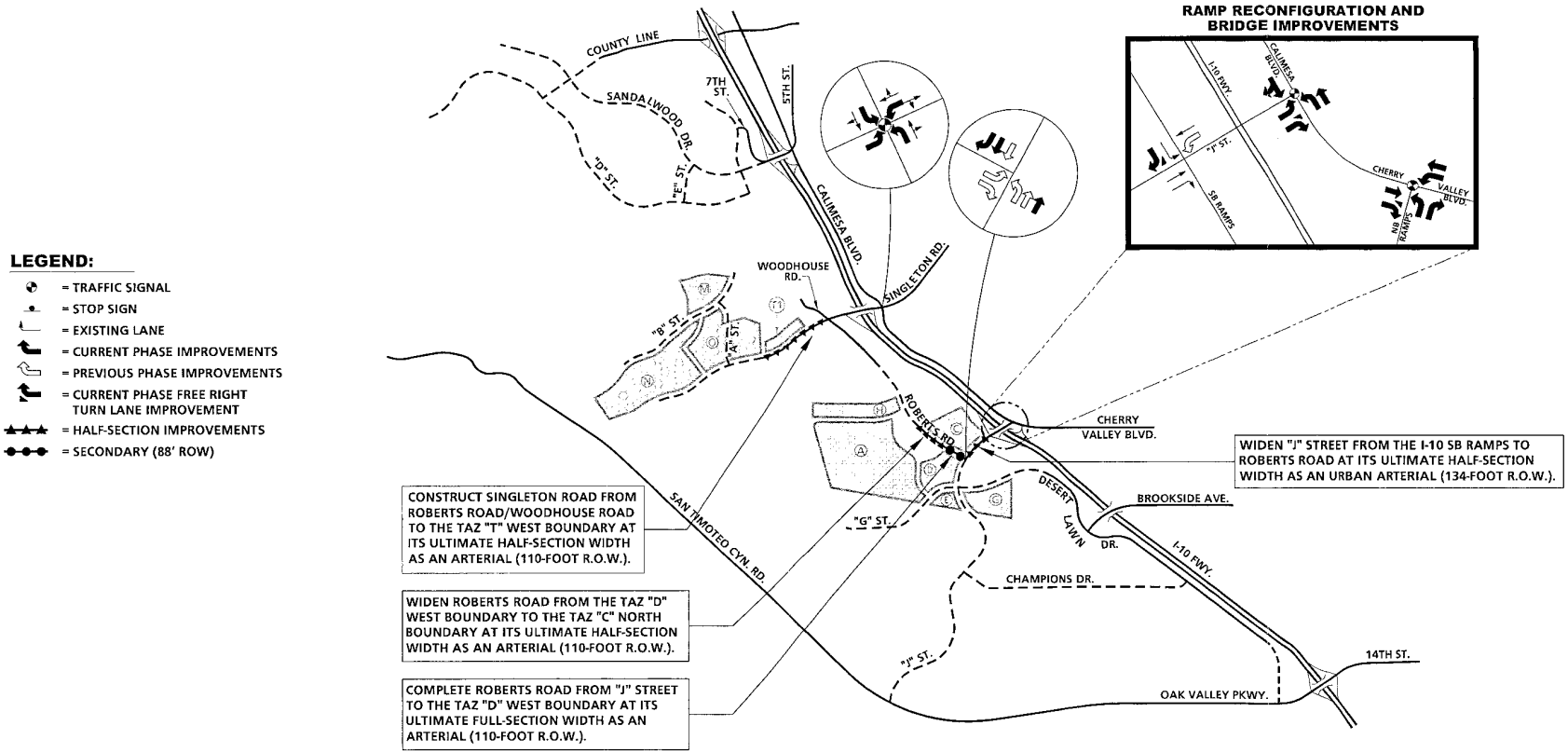


Figure 3.10-31
Summerwind Ranch - Town Center Phase 2 Circulation Recommendataions

Ⓐ COMPLETE ROBERTS ROAD FROM THE TAZ "B" SOUTH BOUNDARY TO THE TAZ "C" NORTH BOUNDARY AT ITS ULTIMATE FULL-SECTION WIDTH AS AN ARTERIAL (110-FOOT R.O.W.).

Ⓑ WIDEN ROBERTS ROAD FROM THE TAZ "C" NORTH BOUNDARY TO THE TAZ "B" NORTH BOUNDARY AT ITS ULTIMATE HALF-SECTION WIDTH AS AN ARTERIAL (110-FOOT R.O.W.).

Ⓒ CONSTRUCT SINGLETON ROAD FROM ITS PHASE 2 TERMINUS (SEE EXHIBIT 1-D) TO "C" STREET AT ITS ULTIMATE HALF-SECTION WIDTH AS A SECONDARY (88-FOOT R.O.W.).

Ⓓ CONSTRUCT SINGLETON ROAD FROM "C" STREET TO SAN TIMOTEO CANYON ROAD AS AN INTERIM 2-LANE 32-FOOT PAVEMENT SECTION.

Ⓔ CONSTRUCT "C" STREET FROM SINGLETON ROAD TO THE TAZ "I" NORTH BOUNDARY AT ITS ULTIMATE FULL-SECTION WIDTH AS A DIVIDED COLLECTOR (78-FOOT R.O.W.).

Ⓕ CONSTRUCT "C" STREET FROM THE TAZ "I" NORTH BOUNDARY TO "B" STREET AT ITS ULTIMATE HALF-SECTION WIDTH AS A DIVIDED COLLECTOR (78-FOOT R.O.W.).

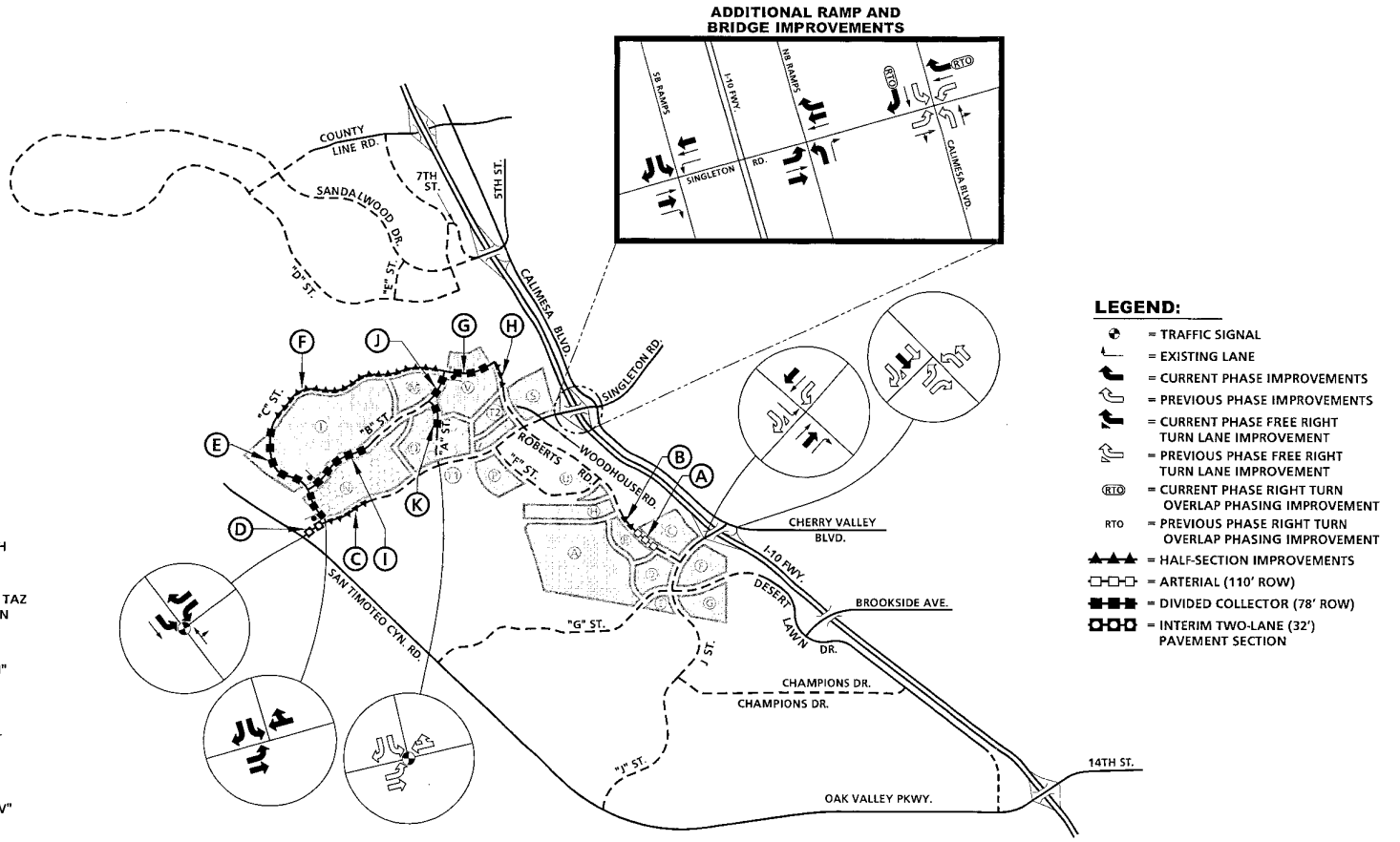
Ⓖ G. CONSTRUCT "C" STREET FROM "B" STREET TO ROBERTS ROAD AT ITS ULTIMATE FULL-SECTION WIDTH AS A DIVIDED COLLECTOR (78-FOOT R.O.W.).

Ⓗ CONSTRUCT ROBERTS ROAD FROM "C" STREET TO THE TAZ "S" NORTH BOUNDARY AT ITS ULTIMATE HALF-SECTION WIDTH AS AN ARTERIAL (110-FOOT R.O.W.).

Ⓘ COMPLETE "B" STREET FROM "C" STREET TO THE TAZ "I" EAST BOUNDARY AT ITS ULTIMATE FULL-SECTION WIDTH AS A DIVIDED COLLECTOR (78-FOOT R.O.W.).

Ⓙ COMPLETE "B" STREET FROM 'A" STREET TO "C" STREET AT ITS ULTIMATE FULL-SECTION WIDTH AS A DIVIDED COLLECTOR (78-FOOT R.O.W.).

Ⓚ COMPLETE "A" STREET FROM "B" STREET TO THE TAZ "V" SOUTH BOUNDARY AT ITS ULTIMATE FULL-SECTION WIDTH AS A DIVIDED COLLECTOR (78-FOOT R.O.W.).



EDAW URBAN CROSSROADS

Figure 3.10-32
Summerwind Ranch - SunCal Residential Phase 3 Circulation Recommendataions

Ⓐ COMPLETE "J" STREET FROM THE I-10 SOUTHBOUND RAMPS TO THE REALIGNED DESERT LAWN DRIVE AT ITS ULTIMATE FULL-SECTION WIDTH AS AN URBAN ARTERIAL (134-FOOT R.O.W.).

Ⓑ COMPLETE THE REALIGNED DESERT LAWN DRIVE FROM "J" STREET TO THE TAZ "F" EAST BOUNDARY AT ITS ULTIMATE FULL-SECTION WIDTH AS A SECONDARY (88-FOOT R.O.W.).

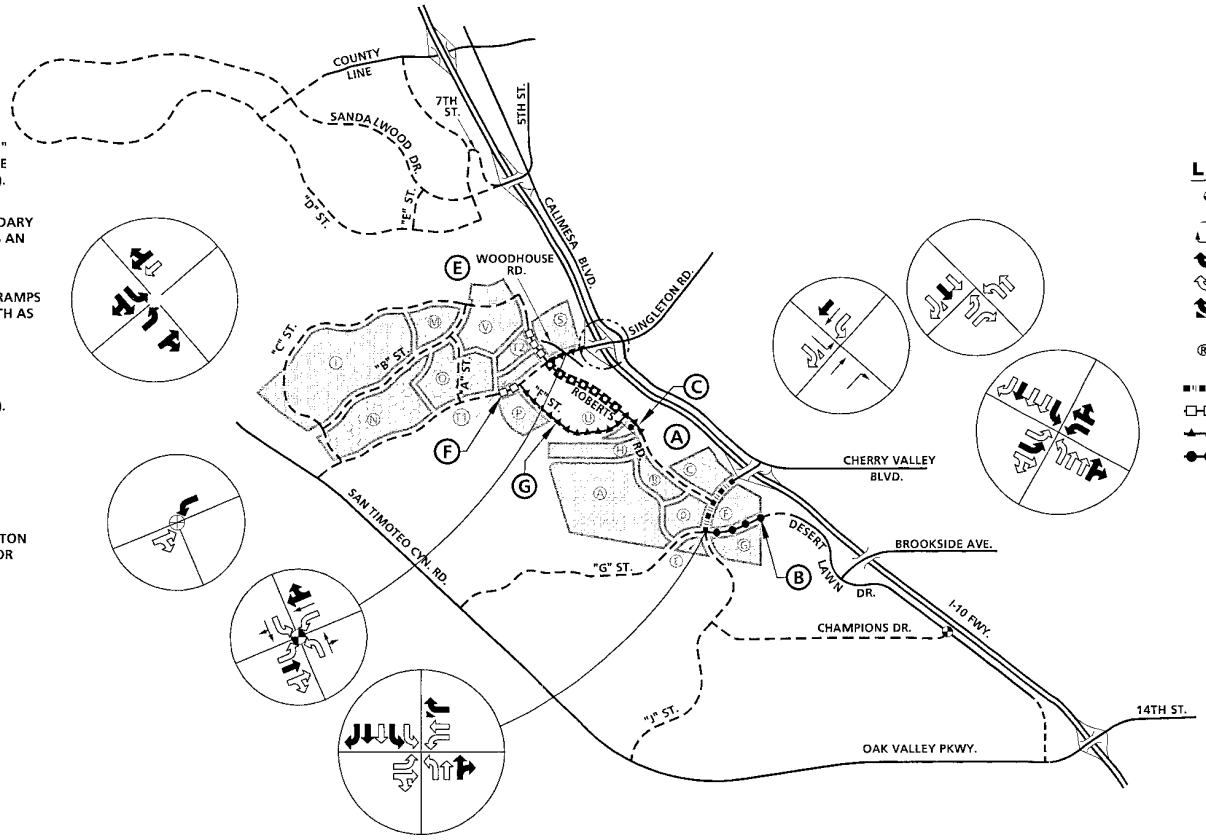
Ⓒ WIDEN ROBERTS ROAD FROM THE TAZ "U" SOUTH BOUNDARY TO "F" STREET AT ITS ULTIMATE HALF-SECTION WIDTH AS AN ARTERIAL (110-FOOT R.O.W.).

Ⓓ WIDEN SINGLETON ROAD FROM THE I-10 SOUTHBOUND RAMPS TO ROBERTS ROAD AT ITS ULTIMATE HALF-SECTION WIDTH AS AN URBAN ARTERIAL (134-FOOT R.O.W.).

Ⓔ CONSTRUCT ROBERTS ROAD FROM SINGLETON ROAD TO THE TAZ "S" NORTH BOUNDARY AT ITS ULTIMATE FULL-SECTION WIDTH AS AN ARTERIAL (110-FOOT R.O.W.).

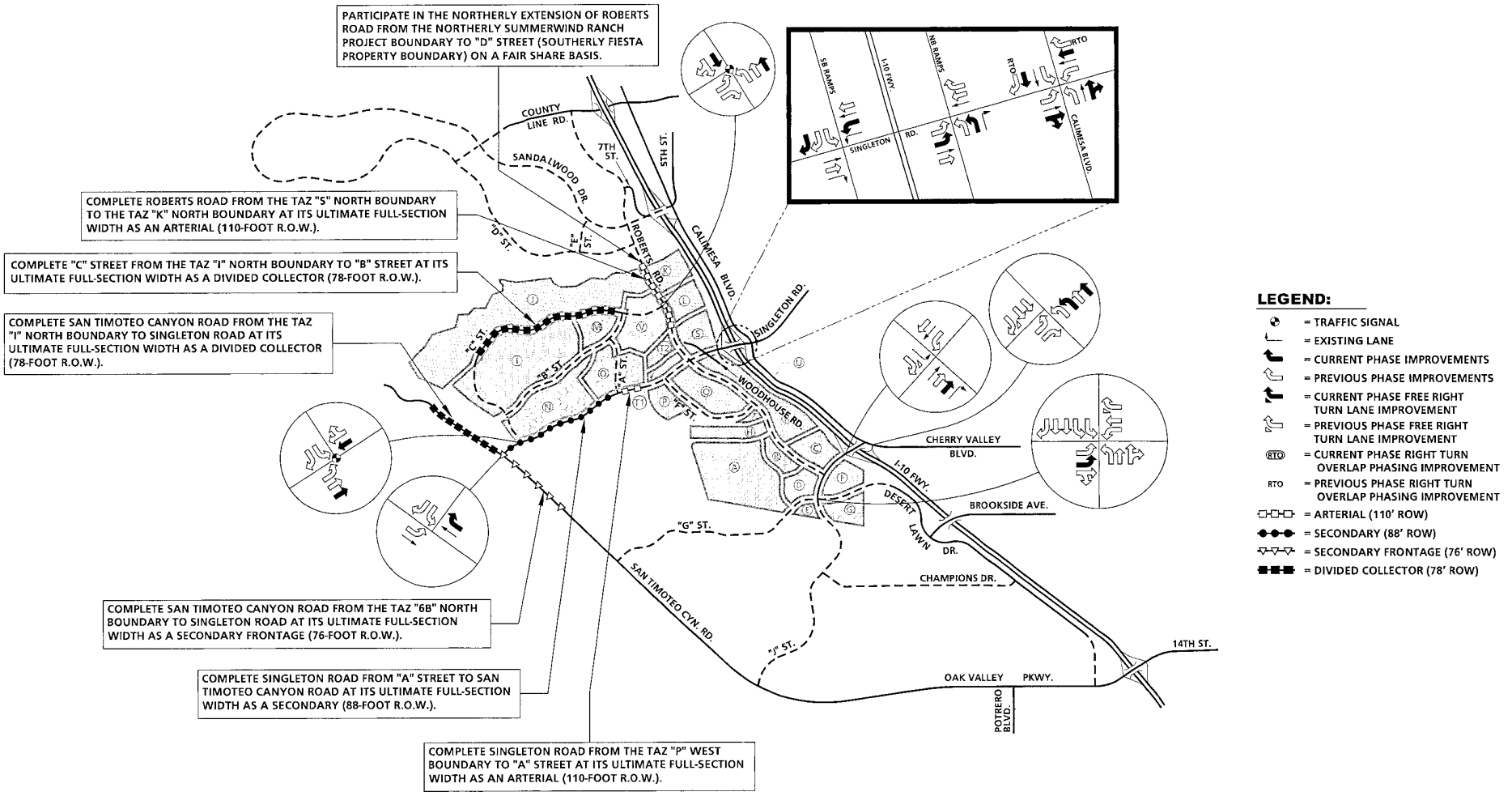
Ⓕ COMPLETE SINGLETON ROAD FROM "F" STREET TO THE TAZ "P" WEST BOUNDARY AT ITS ULTIMATE FULL-SECTION WIDTH AS AN ARTERIAL (110-FOOT R.O.W.).

Ⓖ CONSTRUCT "F" STREET FROM ROBERTS ROAD TO SINGLETON ROAD AT ITS ULTIMATE HALF-SECTION WIDTH AS A MAJOR (100-FOOT R.O.W.).



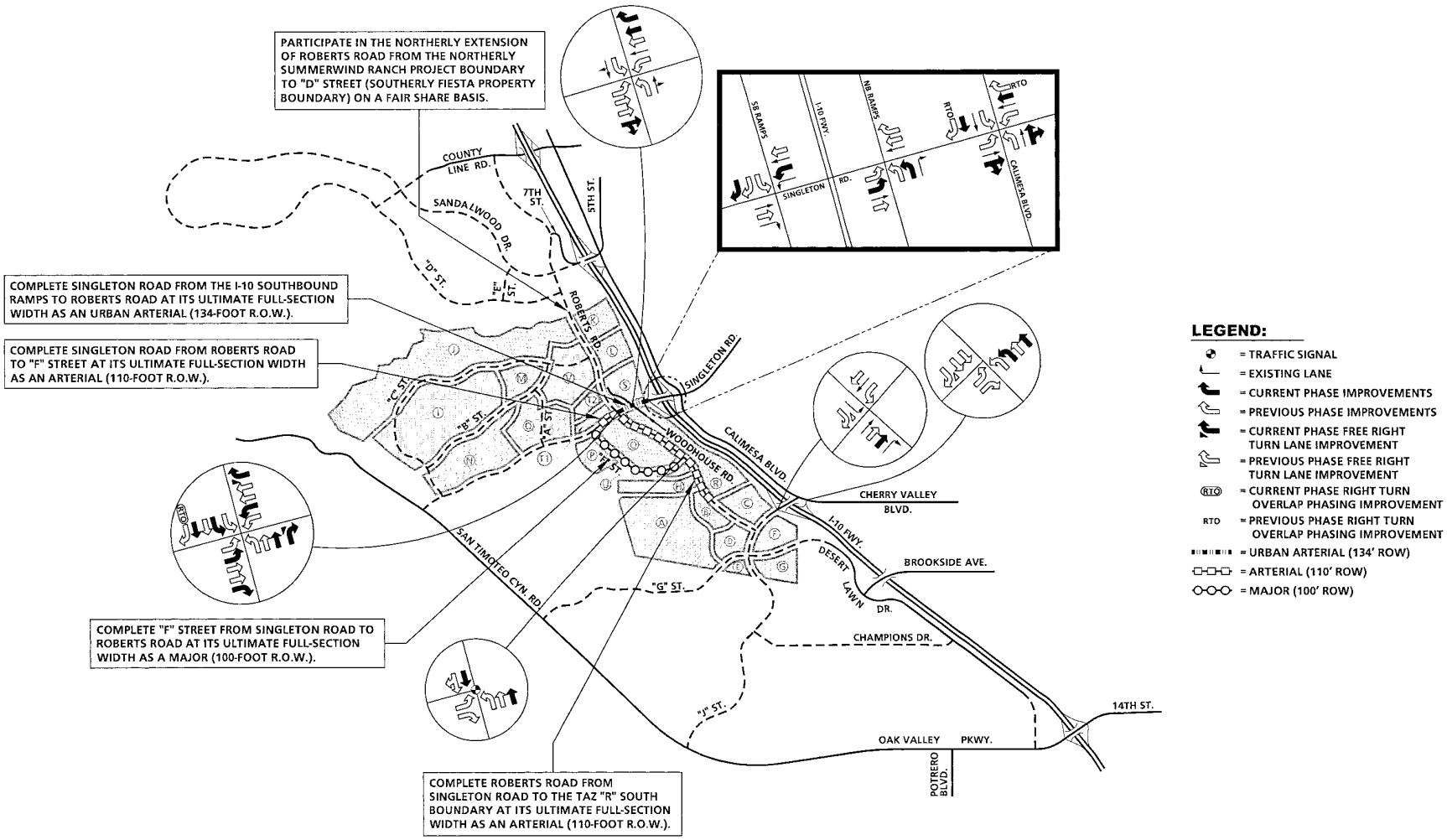
EDAW URBAN CROSSROADS

Figure 3.10-33
Summerwind Ranch - Town Center Phase 3 Circulation Recommendataions



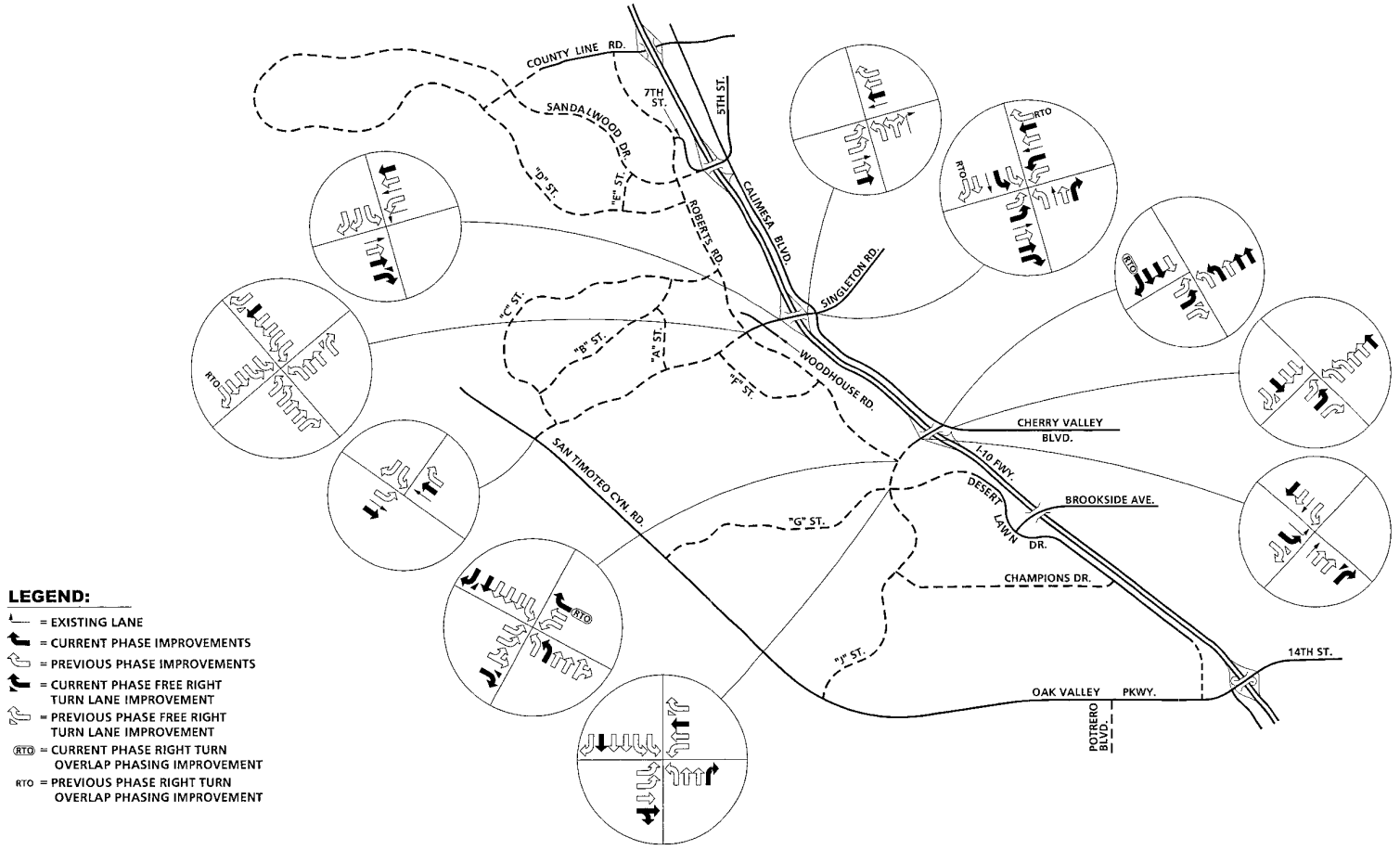
EDAW URBAN CROSSROADS

Figure 3.10-34
Summerwind Ranch - SunCal Residential 2030 Circulation Recommendataions



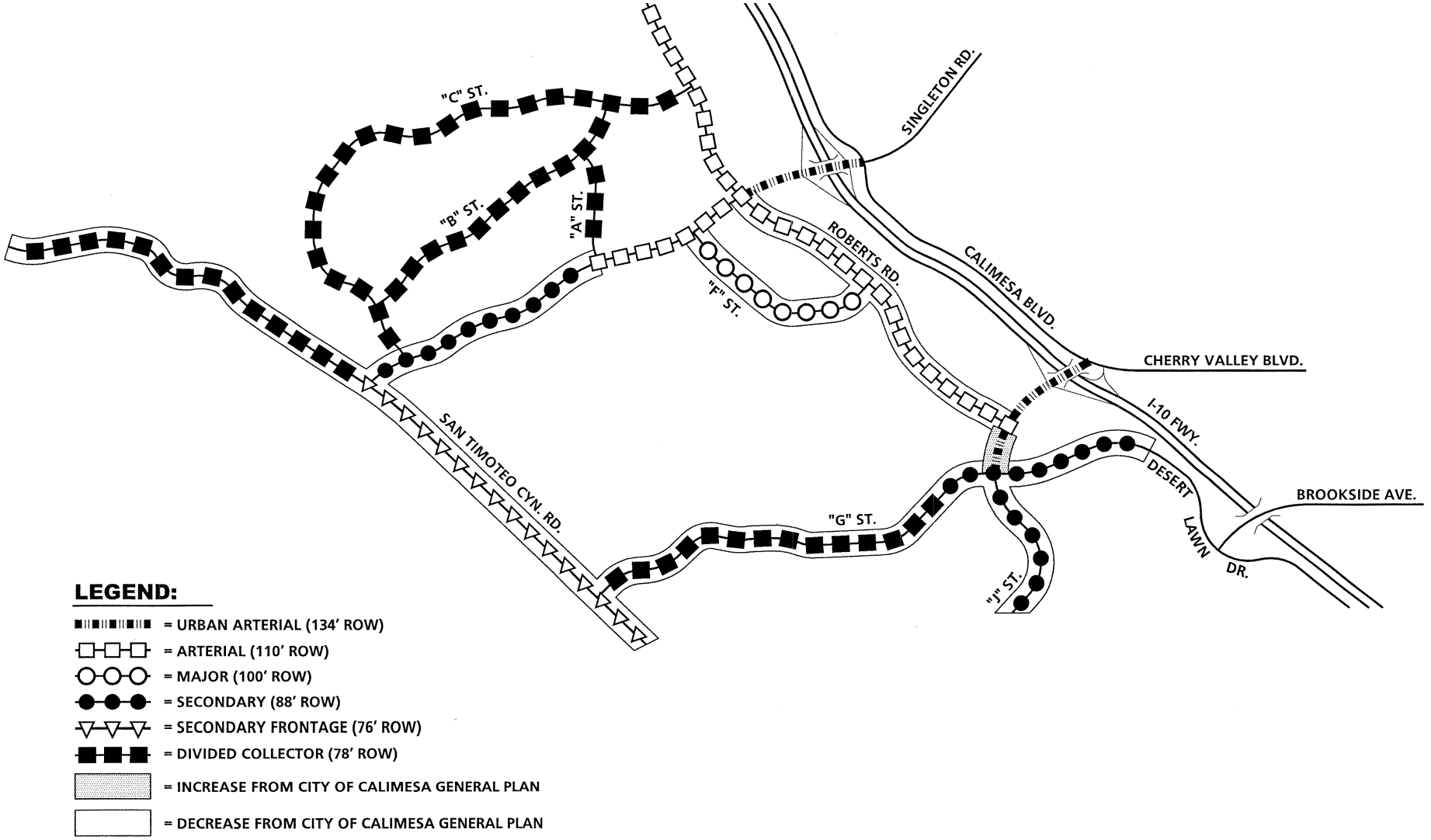
EDAW URBAN CROSSROADS

Figure 3.10-35
Summerwind Ranch - Town Center 2030 Circulation Recommendataions



EDAW URBAN CROSSROADS

Figure 3.10-36
Summerwind Ranch - General Plan Build-Out Circulation Recommendataions



EDAW URBAN CROSSROADS N.T.S.

Figure 3.10-37
Roadway Classification Recommendations

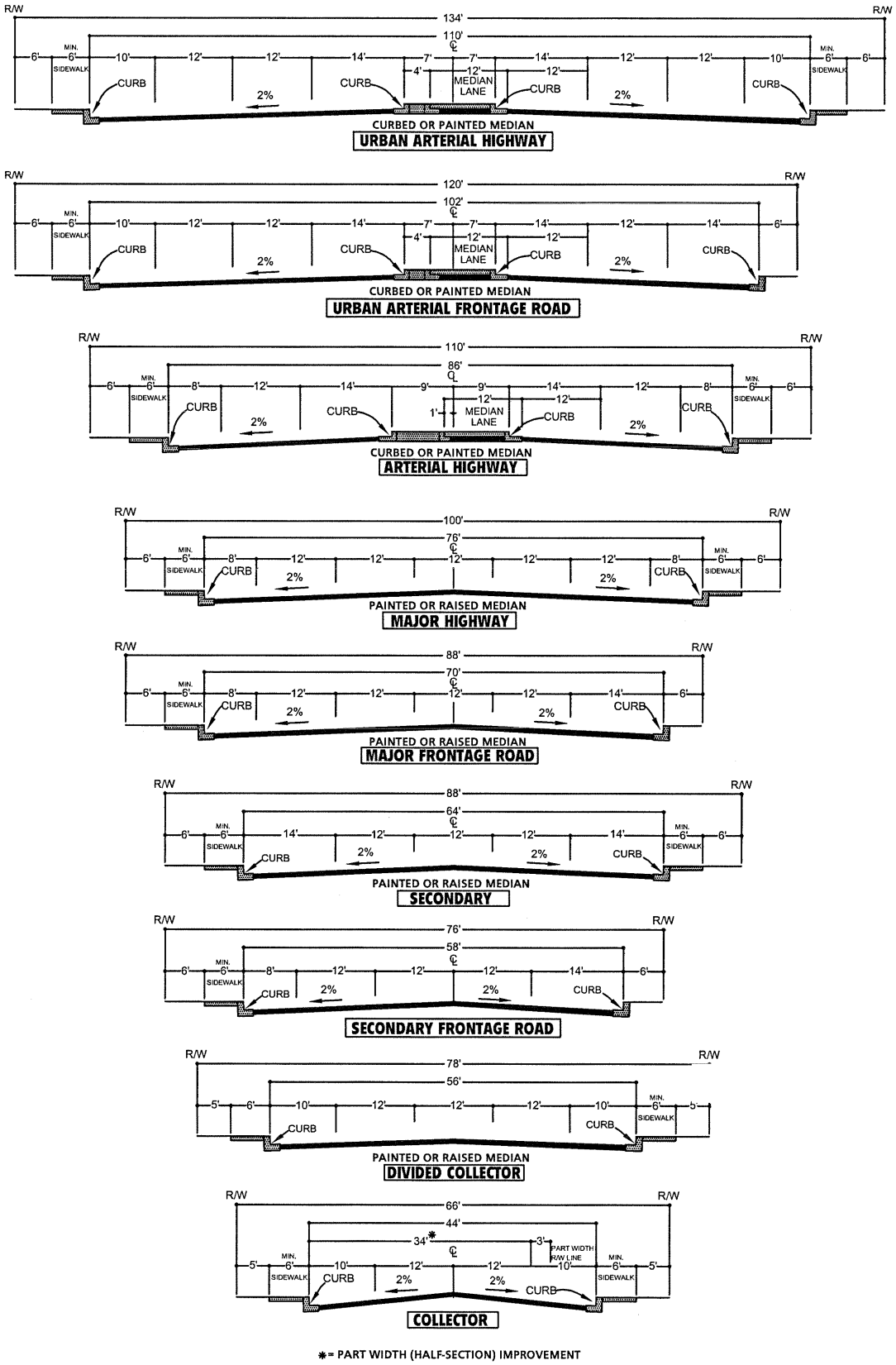


Figure 3.10-38
Roadway Cross-Section Recommendations

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3.11 UTILITIES AND SERVICE SYSTEMS

3.11.1 INTRODUCTION

This section describes the environmental setting, significance criteria, impacts, mitigation measures, and significance after mitigation for utilities and service systems. Specifically, the following issues are discussed: wastewater, water, stormwater drainage, and solid waste disposal.

3.11.2 EXISTING CONDITIONS

WASTEWATER

The Yucaipa Valley Water District (YVWD) provides wastewater treatment service to the City of Calimesa. The wastewater system collects residential, commercial, industrial and municipal sewage through sewer mains located throughout the Cities of Calimesa and Yucaipa and other areas of Riverside and San Bernardino Counties. Wastewater is routed from land uses in Calimesa to the H.N. Wochholz Wastewater Treatment Plant through lift stations and gravity via main lines in Calimesa Boulevard and County Line Road. The H.N. Wochholz Wastewater Treatment Plant, located west of I-10 near the County Line Road terminus, treats approximately 3.5 million gallons of wastewater per day (mgd) and has a capacity of 4.5 mgd (Yucaipa Valley Water District 2003). At the time of this EIR, plans were in process for the expansion of the treatment plant to a design capacity of 8 mgd. The plant employs a tertiary treatment system plus denitrification filtration with effluent discharged into San Timoteo Creek. Sludge is stored in a sealed tank, and some 5,000 to 10,000 pounds are collected weekly by Recyc, Inc. and transported to the Lambs Canyon Landfill or used as composting material. The treatment facility also includes a water reclamation plant and provides reclaimed water to private users in the area.

The Summerwind Ranch at Oak Valley project site is not currently served by YVWD, and no wastewater infrastructure, including septic tanks, are currently in use on the project site.

WATER

YVWD and the South Mesa Water Company provide water service to the City of Calimesa. YVWD provides water service to the southern portions of Calimesa, including the project area. YVWD operates 31 main groundwater wells and 13 supplemental wells. The main groundwater wells have a production capacity of approximately 13,500 gallons per minute (gpm). Water is distributed to YVWD's service area through approximately 150 miles of pipelines. YVWD also maintains a surface water treatment plant, 14 pumping stations, and 22 above ground reservoirs (Yucaipa Valley Water District 2004). According to the YVWD, the increasing demand for water coupled with reliance on the groundwater to meet the demand has resulted in a condition of overdraft for the Yucaipa Groundwater Basin. That is,

more water is removed from the basin than is recharged over a period of time. The overdraft is currently considered relatively small, averaging about seven feet of total decline from 1971 to 2000 (UWMP 2003).

The YVWD prepared an Urban Water Management Plan (UWMP) in 2000, conforming to the California Urban Water Management Planning Act, California Water Code Division 6, Part 2.6 Urban Water Management Planning. The plan, entitled, "2000 Urban Water Management Plan and Water Shortage Contingency Plan", was amended by YVWD in 2003 to adjust the water demand rate as a result of water conservation efforts and metering data, resulting in a reduction in the size of water distribution facilities. The original plan and amendment are included in Appendix F-3 of this EIR. The UWMP, which includes the Oak Valley Specific Plan (including the Beaumont property, Summerwind Ranch, and Fiesta portions), provides for a 20-year water supply capability but the plan relies heavily on reclaimed water and ground water to meet demand. The YVWD encourages the use of non-potable reclaimed water in all possible areas including individual home use where practical by providing metering, connections, and annual inspections without charge. A new YVWD water filtration facility that would enable the YVWD to utilize entitlements of State Project Water is planned to be operable by 2005.

According to the UWMP (2000), the water demand for the year 2000 was about 9,500 acre-feet per year, growing to 14,500 acre-feet per year when areas served by the Western Heights Water Company and the South Mesa Water Company are included. Residential use is by far the large water user district-wide, with single and multi-family uses accounting for 87 percent of the demand in the period 1997-2000. Commercial, industrial, and institutional uses collectively account for about 7 percent of the demand during this period.

In the 2003 amendment to the UWMP, YVWD revised the existing and projected supply and demand factors. The district now has access to imported surface water supplies due to the completion of the East Branch Extension of the State Water Project. The water would be obtained via the San Bernardino Valley Municipal Water District, the local purveyor of State Project Water (which also serves the City of Yucaipa). The pipeline delivering this water also will facilitate use of other surface water sources discussed in the UWMP. Table 3.11-1 illustrates the water production schedule for YVWD, assuming the surface water treatment plant is brought on-line in 2005 to allow use of State Project Water.

Table 3.11-1
YVWD Projected Annual Water Demand and Supply
2000 to 2030

Year	Average Annual Demands	Average Water Supply		
		Surface Supply	Groundwater	Non-Potable
2000	10,160	56	9,633	0
2001	10,417	56	9,857	0
2002	10,686	56	10,081	0
2003	10,955	56	9,857	560
2004	11,224	56	8,737	1,904
2005	11,605	4,929	4,257	2,464
2006	12,109	4,817	4,369	2,912
2007	12,613	4,705	4,593	3,248
2008	13,117	4,593	4,817	3,696
2009	13,632	4,481	5,041	4,033
2010	14,159	4,481	5,265	4,481
2011	14,674	4,481	5,377	4,817
2012	15,189	4,481	5,489	5,265
2013	15,716	4,481	5,601	5,601
2014	16,242	4,481	5,713	6,049
2015	16,769	4,481	5,937	6,385
2016	17,306	4,481	6,049	6,833
2017	17,855	4,481	6,161	7,169
2018	18,404	4,593	6,273	7,617
2019	18,964	4,593	6,385	7,953
2020	19,524	4,593	6,497	8,401
2030	22,885	5,825	7,057	10,081

Source: Yucaipa Valley Water District, 2000 Urban Water Management Plan and Water Shortage Contingency Plan

According to the UWMP (2003 amendment), "… the District will be able to significantly lessen its demands on groundwater once the surface water filtration plant is built and it is able to shift demands to surface water. As the District's recycled and raw water pipeline systems are built out, raw State Project Water and recycled water will serve an increasing portion of the District's demands. The District will also be able to flexibly operate the groundwater basin to manage the variability in surface water availability, relying on the groundwater basin in dry hydrologic sequences and shifting to greater amounts of surface water during wet periods, allowing the groundwater basins to recharge".

The Summerwind Ranch at Oak Valley project site is not currently served by YVWD facilities since no water infrastructure currently exists on the project site.

STORM WATER DRAINAGE

The project site is situated within the largest underground water basin in the watershed of the Santa Ana River and its tributaries, defined as the Santa Ana Region. Several natural streambeds are located throughout the proposed project site. The broad flat alluvial plateaus are divided by steep sides and wide bottom ravines that serve as regional and sub-regional drainage courses. The proposed project site is impacted by several large natural watercourses which originate offsite east of I-10 and traverse the site from east to west. Because the project site is almost entirely undeveloped, stormwater either percolates into the permeable surface on-site or enters one of the naturally-occurring streambeds and/or drainage basins. The hydrological conditions of the project site are fully described in Section 4.6, Hydrology and Water Quality.

SOLID WASTE DISPOSAL

Solid waste within the City of Calimesa is transported and disposed of by C R & R haulers. C R & R owns and operates a waste transfer facility, which accommodates waste and sorts it for recycling or disposal. Generally, C R & R disposes of waste at Lamb Canyon Landfill. Solid waste suitable for disposal can be transferred to one of several region-serving landfills, including Lamb Canyon Landfill in the City of Beaumont, Badlands Landfill in the City of Moreno Valley, and El Sobrante Landfill in Corona. Lamb Canyon Landfill is permitted to accept up to 3,000 tons of solid waste per day, and as of July 2004 had a remaining capacity of approximately 13.1 million tons (Riverside County Waste Management Department 2004). Lamb Canyon Landfill is expected to close in 2023 (California Integrated Waste Management Board 2004). Badlands Landfill in Moreno Valley is permitted to accept up to 4,000 pounds of solid waste per day, and as of June 2004, had a remaining capacity of approximately 10.5 million tons (Riverside County Waste Management Department 2004). Badlands Landfill is expected to close in 2018 (California Integrated Waste Management Board 2004). El Sobrante Landfill is permitted to accept up to 10,000 tons of solid waste per day, and as of January 2004 had a remaining capacity of 40.6 million tons for waste coming from inside Riverside County (Riverside County Waste Management Department 2004). El Sobrante Landfill is expected to close in 2030 (California Integrated Waste Management Board 2004). All of these landfills are managed by the Riverside County Waste Management Department.

3.11.3 THRESHOLD OF SIGNIFICANCE

A significant adverse environmental impact would occur if the project results in any of the following:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- 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;
- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;

- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed;
- Result in a determination by the wastewater treatment provider that 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;
- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; and/or
- Comply with federal, state, and local statutes and regulations related to solid waste.

3.11.4 PROJECT IMPACTS

WASTEWATER

Impact UT1 The proposed project would increase wastewater generation and require additional wastewater infrastructure and treatment facilities.

YVWD proposes to construct a 12-million gallons per day (mgd) water reclamation facility on a 10-acre site within the northwest corner of the project site. The facility will be constructed in four separate units of 3 mgd each to a build out capacity of 12 mgd ultimately designed to receive wastewater from this project and other proposed projects. Until the new treatment facility is constructed and operable (expected within approximately four years of project approval), wastewater would be conveyed to the existing

In order to reduce dependency on the potable water supply, to provide an economical source of landscape irrigation water, and possibly to reduce the size and cost of potable water system infrastructure, YVWD's proposed water reclamation facility would produce reclaimed water in compliance with California DHS Title 22 Regulations. A system of tanks and pumps would be designed to receive treated water from the on-site facility and distribute it throughout the Summerwind Ranch at Oak Valley project site. Parks, parkways, and other public permanently irrigated landscaped areas would be connected to this water source. Treated effluent would be suitable for residential and commercial landscape purposes and would supply the YVWD non-potable system serving planned commercial and industrial users and City common areas.

A Preliminary Master Plan Sewer Study was prepared for the Summerwind Ranch at Oak Valley site and is included in Appendix F-2. The Sewer Master Plan for the site is illustrated in Figure 2-12 in Section 2.0, Project Description. The sewer study analyzed the sewer generation of the proposed project for each of the five build-out phases. Phase 1 is would generate approximately 0.53 mgd at peak demand. Phases 2 through 5 would generate approximately 2.13 mgd. The Town Center would be developed concurrently with Phases 1 through 5, generating a total of approximately 1.78 mgd. Thus, upon build-out, the total peak generation rate from Summerwind Ranch at Oak Valley is expected to be 4.44 mgd project-wide.

The Sewer Master Plan includes the provision of wastewater infrastructure throughout the five development phases. The sewage generation from Phase 1 would be conveyed by gravity to a proposed temporary lift station, Sewer Lift Station No. 1 is located on Singleton Road. From Station No. 1, wastewater would be conveyed through Singelton Road and then through Roberts Road to an existing 30-inch diameter gravity sewer line. The sewage generation from Phases 2 through 5 would be conveyed by gravity to another temporary lift station, Sewer Lift Station No. 2, which would convey wastewater to Sewer Lift Station No. 1, and join the wastewater system at Singleton Road.

Upon build-out of the proposed project, with operation of the proposed wastewater reclamation facility, the proposed project would be adequately served by the project's own wastewater facility. The proposed project is expected to generate approximately 4.4 mgd, which would be accommodated by the proposed wastewater facility's 12 mgd capacity. Upon project build-out, impacts would be less than significant.

WATER

Impact UT2 The proposed project would create a demand for water and would require additional water distribution infrastructure.

The proposed Summerwind Ranch at Oak Valley project includes a Master Water Plan, as illustrated in Figure 2-11 in Section 2.0 of the Project Description, designed to accommodate the proposed project's domestic water demand. A domestic water demand study was conducted based on YVWD's Water Master Plan and Water System Design Criteria for New Development (Resolution No. 32-2002; see also Appendix F-2 of the EIR). The domestic water Average Daily Demand (ADD) for the proposed project is based on the number of residential dwelling units and acreage factors for all other types of development. The ADD for the proposed project considering all land uses but excluding fire flow is about 3.3 mgd. Additionally, YVWD's design criteria were used to design the water system. The Master Water facilities planned for the proposed project will have the capacity to store approximately 9.2 million gallons of water (including a 2-hour, 1,500 gpm fire flow storage of 180,000 gallons). Onsite storage tanks will have the capacity to store 1.4 and 4.7 million gallons, respectively (including fire flow storage for each tank).

The service elevation for the proposed development ranges from 2,037 to 2,377 feet resulting in a total differential elevation of 340 feet. To service the project effectively, the YVWD has identified three operating pressure zones. The lower portion of the site would be serviced by an on-site YVWD tank to be constructed within Phase 2 of the development with a High Water Level (HWL) of 2,340 feet and an ideal service elevation range from 2,037 to 2,210 feet. The second pressure zone, designated as YVWD Zone R11 with a HWL of 2,463, would service the development located within an elevation range of 2,160 to 2,333 feet. The third pressure zone, designated as YVWD Zone R12, with a HWL of 2,600 feet, would service the development located within an elevation range of 2,300 to 2,470 feet.

The first phase of the project would be serviced by YVWD Zone R11 (Planning Areas A-7 and A-8) and by YVWD Zone R12 (remaining first phase Planning Areas). Approximately 66.3 acres of Phase 5 and

26.1 acres of the Town Center would be served by extending the YVWD facilities from Zone 12. YVWD has recently purchased an off-site location for an additional Zone 11 storage tank on Singleton Road, which will be located approximately one mile north of I-10. The proposed tank and associated pipeline will be connected to the existing upstream water system and would be used to provide water to the Summerwind Ranch at Oak Valley development. The Master Water facilities planned for Summerwind Ranch at Oak Valley would have the capacity to store approximately 9.8 million gallons of water (7.1 potable and 2.7 million gallons non-potable), including a 2-hour, 1,500 gpm fire flow storage of 180,000 gallons.

The YVWD is preparing a detailed water supply assessment for the proposed project pursuant to SB 610 (Chapter 643, Statutes of 2001). YVWD has reviewed the UWMP and the water demand projections for the proposed project, and has determined that the provision of water (both potable and recycled) to serve the project is consistent with the development assumptions of the UWMP and is feasible (see District's letter in Appendix F-3). Conditions relating to the provision of potable water have been established and are included in MM-UT2. The availability of water supply, the specific plan's water master plan for distribution of supply to the development, and the conditions included in MM-UT2 reduce the water of water demand to less than significant.

STORM WATER DRAINAGE

Impact UT3 The proposed project would result in an alteration to the existing storm water drainage patterns.

The Summerwind Ranch at Oak Valley project includes a drainage plan that would use and incorporate the natural drainage courses within the site. The proposed project would result in ___ percent more impermeable surface area on the project site, requiring a built-storm water conveyance system. The proposed project would include on-site storm drains that would outlet into the natural streambed areas and grading design of the project site, minimizing necessary grading within the major streambed areas. Additionally, the vehicle circulation plan has been designed to minimize road and utility crossings and arched culverts with natural bottoms would be used to cross natural drainage courses, wherever possible. A complete drainage study and storm drain plan is included in Appendix F-1.

Garden Air Wash would not be impacted by the proposed project. Two major natural drainage courses are located within the central portion of the project site. Drainage in the northern section originates completely within the project area and is carried in a natural streambed toward San Timoteo Creek. Short reaches of small-diameter storm drains would be designed within this area to redirect storm flow into the natural stream. One of two detention basins is proposed for this area in order to mitigate the majority of first flush flows. The basin would be developed within the natural streambed area near the lower end of the natural area and would mitigate developed flows prior to release into San Timoteo Creek.

Existing culverts under I-10 currently contribute storm water drainage into the project area. Developed flows would be picked up within a series of short reach storm drain systems. To mitigate first-flush drainage prior to discharge into the open space area, a second detention basin is proposed within a portion of a natural streambed area. The size and depth of the basin would be designed to be compatible with the natural drainage course.

The natural drainage flows from within the project area confluence with upstream drainage flowing westerly parallel to and just east of the existing San Timoteo Canyon Road. These combined flows join prior to discharging into San Timoteo Creek. "Soft bottom" arched culverts will be used to cross the natural streambed areas so as to minimize disturbance and impact to the area. The two upstream detention areas will serve to mitigate "first-flush" drainage prior to entering San Timoteo Creek.

An NPDES permit from the Regional Water Quality Control Board (RWQCB) will be required prior to the commencement of construction and post-development activities. The permits will require the applicant to implement source control and structural BMPs during and after construction activities. The City will be responsible for enforcing implementation of the BMPs.

SOLID WASTE DISPOSAL

Impact UT4 The proposed project would increase solid waste disposal.

The proposed project would increase the amount of solid waste generated at the project site. During project construction, construction debris would be recycled and disposed of at available facilities in the region, as discussed above. As project construction would take place over 15 years, the amount of construction-related debris for any one day would not be expected to create a significant impact on county landfill facilities. Additionally, C R & R, the City's waste hauler, would use its transfer facility before disposing of any waste. This would allow C R & R to dispose of debris in the most effective landfill. Construction-related debris would not result in a significant solid waste impact.

Upon project operation, new developments would require solid waste services. As discussed, C R & R would haul the proposed project's solid waste. Based on C R & R's data, residences in Calimesa generate an average of 5.78 pounds per unit per day (C R & R 2004). Using this rate, the residential uses of the proposed project would be expected to generate approximately 21,288 to 22,201 pounds of solid waste per day (10.64 to 11.1 tons per day). This waste would be hauled by C R & R to its transfer station and consequently recycled or disposed of at a regional landfill. At the time of this EIR, estimations for the solid waste generation of the business and commercial uses of the proposed project were unavailable, as C R & R does not maintain such generation rates, and as the Summerwind Ranch at Oak Valley project does not specify types of commercial and business uses to be developed. Riverside County Waste Management Department has stated that the proposed project would not require a landfill expansion or the development of a new landfill (Riverside County Waste Management Department 2004). Riverside County has 15 years of available landfill capacity at its regional landfills.

3.11.5 CUMULATIVE IMPACTS

WASTEWATER

YVWD is planning to expand the H.N. Wochholz Wastewater Treatment Plant to provide a total capacity of 8 mgd. A subsequent expansion project will increase the total capacity to 10 mgd. This facility will serve existing and proposed development (2,000 units) north of I-10 and a portion of Summerwind Ranch at Oak Valley. However, it will not have sufficient capacity to handle ultimate build out of the cumulative projects of the area. Consequently, wastewater from the first phases of Summerwind Ranch at Oak Valley would be pumped northward via a combination of gravity lines and force mains to the existing facility until the proposed wastewater reclamation facility on the Summerwind Ranch site is operable.

During project construction, generated wastewater would be conveyed to the existing H.N. Wochholz Wastewater Treatment Plant operated by YVWD. Another wastewater facility would be required to accommodate the wastewater generated by the proposed project and related cumulative projects. This would result in a temporarily significant cumulative impact to wastewater services. Upon build-out of the proposed project, impacts would be less than significant, as the proposed wastewater reclamation facility would adequately accommodate the proposed project's wastewater generation.

WATER

Cumulative projects will increase the demand for water supplies in the City of Calimesa and within the YVMD service area. The requirement for water supply assessment for specific projects will ensure that growth does not out strip the capacity of available water supplies.

STORM WATER DRAINAGE

The proposed project includes a comprehensive drainage plan for the build-out of the project site. As the proposed project would increase the amount of impermeable surface area on the project site, the amount of stormwater draining in the area would also increase. Project impacts, as discussed above, would be less than significant. Each related project would also analyze individual impacts, including stormwater drainage impacts. As the proposed project's stormwater drainage plan would result in all stormwater being drained on-site, other projects would not be expected to be impacted by the proposed project. Additionally, none of the related projects are known to drain onto the proposed Summerwind Ranch at Oak Valley project site. Cumulative impacts would be less than significant.

SOLID WASTE DISPOSAL

The proposed project along with related projects would increase the amount of solid waste generated in the region and disposed of at regional landfills. The California Integrated Waste Management Act of

1989 (AB 939) was enacted to reduce, recycle, and reuse solid waste generated in California. The Act requires cities and counties to implement plans to divert 50 percent of the total waste stream from landfill disposal by the year 2000 and 70 percent by the year 2020. Under AB 939, cities are required to conduct a Solid Waste Generation Study and prepare a Source Reduction and Recycling Element (SRRE) to describe how each city would meet the goals established under the Act. Each individual project would be subject to the jurisdictional city's requirements for waste diversion, which would decrease the amount of solid waste disposed of at regional landfills. According to the Riverside County Waste Management Department, the existing landfills in Riverside County provide over 15 years of solid waste capacity. Also, additional capacity to accommodate the cumulative disposal needs of future projects may become available as the County continues to update and implement solid waste disposal plans for the growing region. As Riverside County can provide 15 years of solid waste capacity for the region, cumulative solid waste impacts would be less than significant.

3.11.6 MITIGATION MEASURES

WASTEWATER

The YVWD stipulates that the following domestic wastewater conditions apply to the proposed project:

MM-UT1-1 The applicant shall be responsible for payment of all wastewater related development impact fees and related charges, as determined by the water supply assessment at the time a building permit is issued for this project. Said fees include, but are not limited to, sewer treatment expansion fees and necessary permit fees.

MM-UT1-2 Wastewater service will be denied if any of the terms and conditions are not satisfied.

MM-UT1-3 The Applicant shall be responsible for complying with the Regional Water Quality Control Board 2004 Basin Plan and Maximum Benefit demonstration as adopted by the Regional Board.

MM-UT1-4 This project will be required to construct and/or participate in the Oak Valley Regional Water Reclamation Facility. This facility is a wastewater treatment plant that will utilize a membrane bioreactor and denitrification facilities to both comply with the Regional Water Quality Control Board 2004 Basin Plan and provide a high quality recycled water source for a significant portion of the irrigation uses within the development.

WATER

The YVWD requires the following conditions for water supply service at Summerwind Ranch.

MM-UT2-1 Adequate source water is available for domestic water supplies and recycled water supplies for both potable use and fire protection. The applicant shall be responsible for the construction or supplemental production, transmission and storage facilities to serve the project in accordance with the water supply assessment. These facilities include, but are not limited to, the construction and/or participation in the construction of reservoirs in Pressure Zones 10, 11 and 12.

MM-UT2-2 The applicant shall be responsible for all costs associated with the preparation, recommendations and decisions resulting from the completion of a water supply assessment, if required for this project.

MM-UT2-3 The applicant shall be responsible for the water related development impact fees and water related charges in effect at the time building permit is issued for this project.

MM-UT2-4 The District reserves the right to deny water service to the project if any of the District's required conditions is not satisfied.

MM-UT2-5 The applicant shall be responsible for installing the necessary infrastructure to achieve fire protection and minimum/maximum water pressure service standards as provided for by the District.

MM-UT2-6 This project will be required to install both potable water and recycled water to each residential and commercial lot within the proposed development in order to provide sufficient water for compliance with SB 221 and SB 610. Connection to the existing recycled (non-potable) water system will be the responsibility of the applicant.

STORM WATER DRAINAGE

MM-UT3 An NPDES permit from the Regional Water Quality Control Board (RWQCB) will be required prior to the commencement of construction and post-development activities.

SOLID WASTE DISPOSAL

Environmental impacts associated with solid waste would be less than significant; therefore, no mitigation measures are required.

3.11.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of the mitigation measures proposed above, the significant impacts on wastewater facilities, water supply and facilities, and storm water would be reduced to be less than significant.

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4.0 ALTERNATIVES

4.1 INTRODUCTION

The State CEQA Guidelines, Section 15126.6(a) requires that an EIR, "describe a range of reasonable alternatives to the project, or to the location of the project, which would reasonably attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." Section 15126.6(b) states, "the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly."

Section 15126.6(c) of CEQA provides that an EIR should focus on alternatives capable of: feasibly accomplishing the objectives of the proposed project; avoiding any significant adverse environmental effects of a proposed project; or eliminating or reducing potential adverse effects to less than significant. For each alternative, the analysis:

- Briefly describes the alternative;
- Discusses the impacts of the alternative and evaluates the significance of those impacts; and
- Evaluates the alternative relative to the proposed project, specially addressing project objectives, feasibility, and impacts.

As stated in Section 15126.6(f), "the range of alternatives required in an EIR is governed by the "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice." The key issue is whether the selection and discussion of alternatives fosters informed decision making and meaningful public participation. Factors that may be considered when addressing the feasibility of alternatives (CEQA Guidelines Section 15126.6[f][1]) are environmental impacts, site suitability, economic viability, social and political acceptability, technological capacity, availability of infrastructure, general plan consistency, regulatory limitations, jurisdictional boundaries, and whether the applicant could reasonably acquire, control, or otherwise have access to the alternative site.

4.2 ALTERNATIVES CONSIDERED

This chapter reviews the range of alternatives that were considered in developing this EIR. The alternatives included herein have been developed as a result of the land planning process as well as through discussion and input from the City of Calimesa. The alternatives list does not include an alternative site location, as the proposed Summerwind Ranch at Oak Valley site is designated for development in the Calimesa General Plan and development of the site is authorized under the adopted Oak Valley Specific Plan. The proposed specific plan amendment applies to the regulatory framework of this particular site, not any other site within the City of Calimesa. Additionally, an alternative site location would not meet key project objectives related to integration of the MSHCP provisions with the existing

Oak Valley Specific Plan (and other objectives related to implementation of the Oak Valley Specific Plan). For these reasons, an alternative location for the proposed project is not assessed further in this document.

The alternatives considered herein are as follows:

- No Project, No Development Alternative
- No Project, Development under Existing General Plan (adopted Specific Plan) Alternative
- Reduced Footprint/Increased Open Space Alternative
- Revised Project Components/Reduced Environmental Impact Alternative
  - More Commercial, Less Residential
  - Less Hillside Grading
  - Preserving more Oak Trees
  - Noise Site Design Alternatives
  - Circulation System and Wetlands Alternatives

These City-approved alternatives seek to address the significant impacts resulting from the proposed project. Specifically, the Reduced Environmental Impact Alternative is proposed to avoid site specific environmental impacts of the project such as preserving more open space, the hillsides, and more oak trees, and avoiding the wetlands.

The Alternative Project Summary Matrix, Table 4-1, at the end of this section provides a comparison of alternative projects under consideration. The table includes information pertaining to the three relevant criteria for the evaluation of alternatives under CEQA. These criteria are as follows:

1. Ability to meet most of the project objectives;
2. Feasibility; and
3. Ability to avoid significant environmental impacts.

The discussion that follows provides an evaluation of the alternatives, and compares the effects with those of the proposed project. Additionally, the alternatives considered environmentally superior to the proposed project are identified.

4.2.1 NO PROJECT ALTERNATIVE

An evaluation of a "No Project" alternative is required by CEQA Guidelines Section 15126.6(e). This alternative evaluates what would reasonably be expected to occur in the foreseeable future if the project were not approved. According to Section 15126.6(e)(3)(B) of the State CEQA Guidelines:

> "If the project is … a development project on an identifiable property, the "no project" alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state

> against environmental effects that would occur if the project were approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this "no project" consequence should be discussed. In certain instances, the "no project" alternative means "no build," wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment."

In this instance, the City of Calimesa could decide not to approve the project. The result would be continuation of the status quo (nothing built) on the property for the foreseeable future. It is also possible that the applicant could propose some level of development of the property consistent with the adopted specific plan. Though it may not be feasible to develop the entire site consistent with the existing specific plan, the analysis serves to highlight the principal differences between the existing plan and the proposed amendment. Thus, both possibilities for the No Project Alternative are discussed consistent with the guidance in Section 15126.6(e)(3)(B) of the State CEQA Guidelines.

The No Project Alternative is neither required, nor expected, to meet the project's objectives or to avoid or reduce any of the significant impacts associated with the project. Rather, consideration of the No Project Alternative meets a statutory requirement of the CEQA.

NO PROJECT, NO DEVELOPMENT ALTERNATIVE

This alternative assumes that the City takes no action on the proposed specific plan amendment and the site remains in an undeveloped condition for the foreseeable future. Though it is possible that development could be proposed under the existing specific plan, it would be difficult without a plan for infrastructure necessary to support the development and without a comprehensive approach to considering conservation lands that are identified in the MSHCP. Consequently, this alternative contains the specific assumption that no development would occur in the foreseeable future. The following presents an environmental assessment of this alternative:

- This alternative would avoid the potential aesthetics/light and glare impacts associated with the proposed project, although the aesthetic impacts under the project are mitigable to less than significant levels. Under this alternative the visual character of the site would not change at all, and the site would remain in its current undeveloped condition. Therefore, no aesthetic impacts would occur as a result of this alternative.

- This alternative would avoid the air quality impacts associated with the proposed development. No short-term and long-term increases in air emissions would result from this alternative, as the project site would remain in its existing, undeveloped condition. Therefore, no air quality impacts would occur as a result of this alternative.

- This alternative would allow the current undeveloped state of the project site to remain and would avoid any potential impacts to plant and animal resources currently on the site.

- This alternative would avoid any impacts to cultural resources on the site, as the site would remain undisturbed and in its current undeveloped condition.

- As no development would occur, this alternative would avoid the potential impacts associated with grading and soils related issues. No impacts related to potential seismicity and ground shaking would result with this alternative.

- This alternative would avoid the potential project impacts related to increased surface water runoff. This alternative would not result in the covering of surface soils with impermeable structures and surfaces. Additionally, this alternative would not result in the addition of pollutants typical of urban runoff. Water quality and the amount of surface water runoff would remain the same as in the existing conditions.

- This alternative would avoid the potential consistency impacts with the City policy documents. The General Plan amendment and zone change proposed under the project would not occur with this alternative and no potential impacts to the surrounding land uses would occur as a result of this alternative.

- This alternative would avoid all noise impacts associated with the proposed development. As the project site would remain in its current state, short-term construction noise to adjacent uses would not occur. Because this alternative would not generate additional vehicular traffic, long-term traffic related noise impacts to land uses on the site and off-site would not occur.

- This alternative would not result in impacts to public services as identified with implementation of the proposed specific plan amendment. The No Project, No Development alternative would not result in increases in current demand on existing public services. Therefore, demands on public services such as fire protection, police protection, schools, parks, and libraries would remain minimal.

- This alternative would avoid all project specific impacts related to increased project traffic generation. This alternative would not contribute to short-term construction related impacts due to the addition of trucks and construction vehicle traffic. However, traffic/roadway improvements proposed for the specific plan area would not be implemented. Under this alternative, the City's long-term circulation goals and needs would not be met; therefore, this alternative would result in greater long-term city wide circulation impacts by impairing the development of a road network.

- This alternative would not result in impacts to utilities such as water, wastewater treatment, storm water drainage, and solid waste disposal as identified with implementation of the proposed specific plan amendment. The No Project, No Development alternative would not result in any increase in

current demand on utilities. Therefore, demands on water, wastewater treatment, storm water drainage, and solid waste disposal would not increase relative to existing conditions.

Status of the Alternative

The environmental impacts associated with the proposed development would not occur with this alternative. The project site would remain in its current condition for the foreseeable future. Although this alternative may be environmentally superior to the proposed project, it does not meet the objectives of the City of Calimesa and the project applicant.

NO PROJECT, DEVELOPMENT UNDER EXISTING GENERAL PLAN (ADOPTED SPECIFIC PLAN) ALTERNATIVE

Under this version of No Project, the Oak Valley Specific Plan would not be amended and development would go forward based on the existing adopted specific plan. The adopted land use plan proposes 2,252 more dwelling units, a higher density (2.3 versus 1.5 overall project density and 5.6 versus 5.4 residential density), and 446.3 less acres of open space. This alternative would include residential (including low, medium, medium high, high, and very high), commercial, business park, golf courses, public and semi-public uses (seven elementary school site, two junior high school sites, and a high school). Please refer to Table 2-1, Section 2 Project Description, for a comparison of the adopted land use plan and the proposed project land use plan. Additionally, three fire station sites, and sheriff's and library facilities would be located within the project site. A total of 1,545 acres would be preserved as natural open space and another 860 acres would be planned for four golf courses. The project would be phases over a 30-year period. The following presents an environmental assessment of this alternative:

- This alternative would convert more undeveloped open space to development compared to the proposed project. The total open space in this alternative would be 1,046.8 acres, while the proposed project includes 1,493.1 acres as open space. View sheds are impacted more, as the development footprint will be larger with this alternative.

  However, hillside areas, especially portions adjacent to the golf courses would be preserved as natural open space, and similar to the proposed project, the project design would be responsive to major natural features, retaining them within open space areas, or enhancing them wherever possible into parks, trails, or other recreation amenities. Despite considerations for aesthetic quality of the site and open space, this alternative would result in more development within the project site, converting more undeveloped land to development.

- This alternative would have similar short-term construction related impacts (maximum daily construction emissions) compared to the proposed project. However, construction-related dust and equipment exhaust emission would occur over a longer period of time due to the larger area of disturbance. With this alternative, construction related impacts would be significant and unavoidable.

Due to the greater number of dwelling units provided compared to the proposed project, this alternative would generate more emissions of criteria pollutants on a daily and annual basis than the proposed project. These long-term air quality impacts would be significant and unavoidable under this alternative.

- This alternative could result in a larger development footprint and fewer acres of open space compared to the proposed project. A potential impact would be the loss of important biological habitats that include wildlife movement corridors, riparian/wetlands, grassland, sage scrub, and oak woodland. The existing site plan (i.e., this alternative) is not responsive to recent biological resources planning efforts include the Western Riverside MSHCP and the City's oak tree ordinance. Conflicts with these regulations would make this alternative less feasible to implement. Loss of important biological resources could occur through efforts to seek individual regulatory permits to construct elements of the plan within wetlands, wildlife corridors, and other sensitive habitats. In conclusion, this alternative would have greater impact on biological resources than the proposed project, and these impacts could be significant and unmitigable.

- Development of this alternative could result in encountering archaeological and/or paleontological resources. Similar to the proposed project, existing ranch houses would be impacted with this alternative, but the structures would be incorporated into the project where feasible.

- This alternative would result in more extensive grading due to the larger development footprint. Similar to the proposed project, much of the area of steep slopes (i.e., in excess of 25 percent) would be maintained as open space. This alternative would increase the potential for liquefaction impacts, as development will cover a larger area of the project site. The potential impact related to seismic activity would remain the same. Overall, the potential impacts related to geology and soils would be similar to the proposed project.

- Development of a larger portion of the site would result in increased storm water runoff volumes and the alteration of existing drainage features and facilities within the project area. Grading required under this alternative would be greater compared to the proposed development; therefore, this alternative would result in more alteration to existing landforms. Thus, this alternative would result in increased erosion potential, especially during construction operations.

- Compared to the proposed project, this alternative would include an additional 2,252 dwelling units resulting in 446.3 less acres of open space within the project site. This alternative would also result in a higher density development compared to the proposed project (2.3 versus 1.5 overall project density and 5.6 versus 5.4 residential density). This may create more compatibility issues with the existing rural/natural setting of the area.

- This alternative would result in higher noise impacts due to more extensive grading/construction activities and higher number of vehicular trips. The increase in ambient noise levels in and around

the project would be higher, and more noise sensitive land uses would be exposed to noise along I-10 and train noise adjacent to San Timoteo Canyon Road.

- Additional number of dwelling units and resultant population would require provision of additional fire, police, and other public services, facilities, equipment, and staffing to serve the increased demand.

  Development of this alternative could generate approximately 7,800-8,000 new students, compared to the proposed project that would generate between 1,632 and 1,702 students upon project build-out[1]. Therefore, this alternative would require additional facilities, equipment, and staffing within the Beaumont Unified School District (BUSD). Additionally, this alternative would require provision of additional parkland and library facilities to adequately serve a larger population.

- This alternative would result in higher number of daily trips related to both short-term construction and long-term traffic. Project build-out traffic combined with future areawide increases in traffic would create a significant impact to the surrounding roadway network, requiring major improvements to the system. Build-out of this alternative development could generate approximately 315,300 daily trips, compared to 94,592 daily trips for the proposed project (35,414 daily trips for the residential development and 59,178 daily trips for the Town Center). Circulation facilities most impacted by the development would include I-10 Freeway and interchanges/overpasses near the project site.

- Additional number of dwelling units and resultant population would require extension and expansion of water and sewer services beyond the proposed project needs. The Yucaipa Valley Water District would be responsible for providing water and sewer services to the site and has included water demand from the original Oak Valley Specific Plan in its Urban Water Management Plan. Phase I of the development would reply on local groundwater for a source of water, but the project would include several options for importing water to the local area as a long-term source of water. Sewer service to Phase I would be provided by a combination of expanding the existing YVWD treatment plant and a package treatment plant. A new 5.81 mgd on-site treatment plant would be proposed for long-term wastewater treatment.

STATUS OF ALTERNATIVE

This alternative assumes implementation of the adopted specific plan for the site, which would result in a larger development footprint. As this alternative presents a more intense development, it would result in additional environmental impacts compared to the proposed project, while not mitigating the unavoidable significant air quality impacts of the proposed project. Therefore, it is not considered environmentally superior to the proposed project.

[1] If the three school sites are acquired by BUSD, 3,683 dwelling units would be developed. If the school sites are not acquired, up to 3,841 dwelling units would be developed.

4.2.3 REDUCED FOOTPRINT/INCREASED OPEN SPACE ALTERNATIVE

This alternative involves a revised land use configuration presenting a high density, cluster development concept for the residential and commercial components and reduced road footprint, which would leave additional areas of the site in open space. It is assumed that the number of dwelling units (i.e., 3,841) would remain the same with this alternative, but the proposed residential density of 5.4 would be increased.

Although this alternative would result in fewer/lesser impacts to natural systems within the project site (i.e., biologically sensitive areas and habitats), it may result in higher housing costs. Additionally, this alternative would diminish public access to a variety of housing opportunities. Furthermore, this alternative introduces a higher density development, which would not be compatible with the overall character of the surrounding area and the City of Calimesa in general. Higher density may result in residential and commercial building height that could exceed the City's permitted height for this type of development. The following presents an environmental assessment of this alternative:

- Although this alternative could result in fewer impacts to the natural resources and natural systems within the project area, it introduces a development that may not be visually compatible with the surrounding areas. The additional open space could retain more viewsheds un-obstructed; however, the increased height of the development would create additional aesthetic/visual impacts.

- The air quality impacts related to this alternative would be similar to the proposed project, although the development footprint would be reduced. Both short-term construction related impacts and long-term air emissions would remain the same, as this alternative introduces the same number of dwelling units with a higher density.

- This alternative would create fewer impacts to biological resources and natural systems, as it would result in preservation of more open space. Therefore few impacts related to landform alteration and vegetation/habitat removal would occur with this alternative.

- This alternative would create fewer impacts to cultural resources and natural systems, as it would result in preservation of more open space and less disturbance to the undeveloped land. Therefore few impacts related to landform alteration would occur with this alternative.

- As the development footprint is reduced with this alternative, the impact related to landform alteration and grading would be reduced as well. However, the overall impacts related geology and soils would be similar to the proposed project.

- This alternative would result in few impacts related to surface runoff and potential natural slope erosion. As the development footprint is reduced, the impact to natural drainage and water systems would also be reduced. Therefore, this alternative would be superior to the proposed project.

- This alternative would still require amendments to the General Plan Land Use and Circulation Elements. The distribution and orientation of the land uses within the proposed project reflect the existing land use characteristics of the surrounding area and the general character of the City of Calimesa. However, intensification of the land uses would not be compatible with the overall character of the City and the surrounding development. This development may result in increased building height with increased density; therefore, resulting in inconsistency with the General Plan and the existing development in the surrounding area and the City of Calimesa in general.

- The noise impacts related to this alternative would be similar to the proposed project, although the development footprint would be reduced. Both short-term construction related noise and long-term vehicular noise impacts would remain the same, as this alternative introduces the same number of dwelling units with a higher density.

- The impacts related to public services would be similar with this alternative, as it would propose the same number of dwelling units.

- The traffic impacts related to this alternative would be similar to the proposed project, although the development footprint would be reduced. Both short-term construction related traffic and long-term trip generation would remain the same, as this alternative introduces the same number of dwelling units with a higher density.

- The impacts related to utilities and service systems would be similar with this alternative, as it would propose the same number of dwelling units.

STATUS OF ALTERNATIVE

This may be a feasible alternative given that the number of units would not change. Overall it avoids and reduces impacts to alteration of the existing natural systems, such as landform, vegetation/habitat, and natural drainage within the project site. However, this alternative would not be consistent with the General Plan for its increased density and height. Additionally, the increased density and height would not be compatible with the existing surrounding development and the general character of the City of Calimesa.

4.2.4 REVISED PROJECT COMPONENTS/REDUCED ENVIRONMENTAL IMPACT ALTERNATIVES

As the purpose of an alternative is to alleviate identified environmental impacts associated with the proposed project, the following alternatives propose potential project design changes or modifications that would result in reduced environmental impact for specific issues. The following alternatives focus on one or more impacts of the proposed project and introduce design concepts that would mitigate those impacts:

MORE COMMERCIAL, LESS RESIDENTIAL

This alternative proposes more commercial/business park development and a decrease in residential uses allowed, creating more jobs and reducing off-site travel, and therefore, less traffic and air quality impacts. This alternative has the potential to reduce regional traffic trips, due to greater local employment opportunities. This alternative would reduce potential impacts on public services, in particular schools.

However, other impacts would potentially be the same as for the proposed project. This alternative would limit the opportunities to provide a wide variety of housing types and densities. This alternative would not meet the objectives of the City of Calimesa and the proposed project applicant. In addition, the proposed project includes a commercial component that provides for reasonable land absorption over the build-out of the site, consistent with sales, marketing, and growth parameters. Providing additional commercial acreage in the project could weaken the absorption and phasing of the commercial component and extend the build-out time frame. This could have negative visual, air quality, and infrastructure phasing implications.

LESS HILLSIDE GRADING

This alternative would modify the project configuration to avoid grading on steep slopes to accommodate the level of development proposed by the project. Although this may reduce impacts to the existing natural slopes and impacts related to slope stability, it would overall extend the footprint of the development over the areas currently proposed to remain in natural open space. Therefore, this alternative would not be environmentally superior to the proposed project.

PRESERVING MORE OAK TREES

This alternative proposes protecting most of the oak trees within the current development footprint. The project proposes to save a total of 2,917 oak trees out of the overall total of 3,153 trees currently on the site. This alternative recommends saving all of the oak trees that are in good health and can be sustained.

The main premise of this alternative is based on recognition that oak trees are valuable environmental resources that should be preserved. Native oak trees are important in preventing the erosion of hillsides and stream banks; moderating water temperatures in streams through shading; contributing nutrients to streams; and supporting a wide variety of wildlife species through the provision of food, nesting, and roosting cover. Additionally, oak trees contribute to the scenic quality of the community. This alternative would recommend a more detailed oak tree preservation and avoidance plan that can be enforced throughout the proposed development.

Therefore, the oak trees currently proposed for removal within the development area would be protected by further altering the development footprint to avoid impacts to the trees. However, by proposing to save all the existing oak trees within the project site, the development overall would lose approximately

300 dwelling units from the total of 3,841 dwelling units, in addition to major reconfigurations of the proposed circulation network within the development. This would not meet the objectives of the project applicant. Additionally, the 236 trees proposed to be removed are mostly isolated trees and not thick stands, and the project's proposed mitigation measures would mitigate the loss of these trees.

NOISE SITE DESIGN ALTERNATIVES

Ideally, all noise sensitive residential areas would be located in quiet rural areas. However, due to a variety of constraints, this is not always realistic or feasible. In areas that are highly exposed to noise, the best practice is to select land uses that are less sensitive to noise, such as commercial and industrial uses.

The locations that experience the most noise exposure may also be the best locations for commercial and industrial development. To maximize the business potential, commercial centers are generally located in areas that experience the highest vehicle traffic. The site plan for proposed development recognizes that areas located near the Union Pacific Railroad and the I-10 Freeway will experience the most noise exposure. The noise exposure will diminish somewhat with the proposed multi-family residential, commercial and business park developments located adjacent to the I-10 Freeway and the single-family uses located a distance from the railroad. These residential land uses are the most sensitive to community noise.

To minimize the noise exposure to the noise sensitive residential areas, several alternative configurations have been considered as part of the site planning process. These alternatives include providing additional open space setbacks, landscaping, noise barriers (berms and masonry walls) and building design.

Land Use Selection

The obvious solution is to locate the least sensitive land uses nearest the I-10 Freeway and Union Pacific Railroad. These land uses are normally acceptable with high levels of noise exposures and include golf courses, commercial, and industrial land uses.

The placement of commercial and industrial uses between the freeway and the residential areas provide shielding and increase the distance from the residential uses to the sources of noise. An alternative, but less effective, option is to locate multi-family residential buildings facing the sources of noise to shield the exterior living areas from traffic noise.

Open Space

Increasing the distance between the noise source and the receiver dissipates the noise before it reaches the residential areas. Doubling the distance from the noise source can reduce its intensity by approximately 4.5 dBA. This is more effective when combined with landscaping with rolling hills and vegetation to reduce the visual impact and marginally absorb some of the noise before it reaches the homes. There is evidence of the psychological effect of vegetation on noise because people perceive less traffic noise impact if sight to the

traffic is obstructed, even if physically it doesn't lessen the noise levels. According to Caltrans Technical Noise Supplement, vegetation must be dense and wide to provide a noticeable noise reduction. The trees should extend at least 16 feet above the line of sight between the noise source and receiver and must be at least 100 feet wide and dense enough to obstruct a visual path to attenuate traffic noise by 5 dBA.

Examples of open space uses include walking trails, bike paths, gardens and other leisure options. Trees can provide shade for recreational activities and give a park appearance. The cost associated with this option is high since it results in fewer homes to develop open space.

Orientation of Buildings

The buildings can be oriented in such a way to minimize the noise impacts to the living exterior areas. Several approaches can be considered such as placing the homes' front yards to the areas most exposed to noise and having exterior living areas in the backyard shielded by the building.

Extra attenuation can be achieved by clustering the first row of houses. For houses covering about 65-90% of the area, the first row of houses provides about 5 dBA reduction to the second and successive rows of houses.

For multi-family homes the parking areas can be placed between the freeway and the buildings providing additional distance to the noise sources. The buildings should be located so the exterior living areas are shielded by the building.

Room arrangement can also reduce the noise impacts by locating the more noise sensitive rooms to the part of the building further away from the areas most exposed to noise.

Building Insulation

Building insulation will provide interior noise reduction only. Sealing is crucial to prevent sound leaks to the interior. Homes near the freeway will require mechanical ventilation so the interior ambient can be isolated from exterior noise. Additional noise reduction can be achieved with reducing the size of the windows facing the freeway and providing upgraded windows, walls and doors with low sound transmission properties.

Noise Barriers

Noise barriers are a method to control the transmission path of sound, built to obstruct the path of sound between the source of noise and the receptor. Effective noise barriers can reduce noise levels by 10 to 15 decibels, cutting the loudness of traffic noise in half. The most common types of barriers can be built from earth mounds or "berms" and from masonry walls. Noise barriers not only reduce the noise levels but provide safety and privacy. Negative reactions to barriers include a feeling of confinement, loss of air circulation and restriction of view.

For the purposes of the Oak Valley project, noise barriers along the I-10 Freeway can be avoided by locating the least sensitive commercial and business parks uses near the freeway. To reduce the impacts from the internal roads to the single family homes, a 6-foot sound wall will likely mitigate the exterior noise levels to below the City of Calimesa 65 dBA CNEL.

Some of these noise site design configurations (i.e., noise barriers and building insulations) have already been considered and incorporated in the proposed project design, to the extent feasible. However, meeting land use standards for noise exposure is required by regulation, and this project alternative does not alter this requirement. In virtually all development projects in urban or urbanizing areas, it is not feasible to eliminate the use of noise barrier walls for noise attenuation. Use of building insulation and forced air ventilation are common as well, particularly in the climate of Calimesa. Implementing setbacks to attenuate noise naturally would place an undue burden on the development and significantly reduce the number and density of units on the site. This may not be financially feasible and would not meet the objectives of the project applicant.

CIRCULATION SYSTEM AND WETLANDS ALTERNATIVES

This alternative involves consideration of two possible changes in the project's traffic roadway system that could avoid potential environmental impacts to wetlands. These alternatives do not necessarily reduce impacts due to traffic generation and could require amendments to the General Plan Circulation Element.

Roberts Road Extension

The northerly extension of Roberts Road between the proposed project and the Fiesta portion of Oak Valley is included in the Oak Valley Specific Plan and Calimesa General Plan, Circulation Element, as an Arterial Highway. The Summerwind Ranch site plan designates Garden Air Wash as an important open space element and the MSHCP includes the Garden Air Wash as a critical regional wildlife linkage. The proposed specific plan amendment shows the extension of Roberts Road across Garden Air Wash into the Fiesta development site as a future option. Its designation as an option in the proposed specific plan was done to acknowledge that it would be difficult to obtain approval from regulatory agencies such as the Army Corps of Engineers, U.S. Fish and Wildlife Service, and California Department of Fish and Game to construct a bridge over Garden Air Wash for the roadway connection, especially in light of the legal agreements made to preserve this important habitat linkage in the MSHCP.

With the northerly extension of Roberts Road between "D" Street (southerly Fiesta boundary) and the proposed project site, Garden Air Wash would be directly impacted from construction of footings to support a bridge structure and from required grading on the banks of wash. The bridge construction would have impact on both waters of the U.S. and wetlands, but since the bridge has not been designed, it is not possible to determine the acres of waters and wetland impacts. The bridge span would also shade a portion of the wash equal to and greater than the area of the bridge pavement surface. According to the

proposed project traffic study, the completion of the roadway would be consistent with the Oak Valley Specific Plan, and hence the Calimesa General Plan Circulation Element.

By not implementing the northerly extension of Roberts Road over the Garden Air Wash, the project's impacts to the waters of the U.S. and existing wetlands within the Garden Air Wash would be avoided. However, the Circulation Element of the City of Calimesa would not be fulfilled and would require an amendment. As noted in the traffic analysis for the Summerwind Ranch at Oak Valley Project, the proposed residential component of the project would contribute approximately 30% of the total new traffic along Roberts Road in 2030, and the Town Center would contribute 20% of the total new traffic. Thus, the overall project contribution to new traffic would be approximately 50% of the 35,000 ADT projected for this roadway at general plan build-out (the Fiesta project would contribute the other 50%; other through traffic contribution is considered minimal). The proposed project functions at acceptable levels of service, with stipulated improvements, up to year 2030 (Phases 1, 2, 3, and 4), when the traffic analysis assumed that Robert's Road would be completed northward to the Fiesta property. However, whether the projected 35,000 ADT could be redistributed at General Plan build-out requires further analysis. But this alternative is worthy of further consideration in light of the anticipated difficulties with regulatory approval of a wash bridge crossing.

Singleton Road

Somewhat similar to the Robert's Road issue, Singleton Road is proposed to extend through the project site and connect with San Timoteo Canyon Road. This extension would require construction through the fresh water wetlands area that is designated as open space and which are RLC Option Lands. The extension of Singleton Road is shown on the General Plan Circulation Element. If this extension through the open space area could be avoided, impacts on wetlands could also be avoided. This option would be environmentally preferable to the proposed extension and could possibly be accommodated within the General Plan context by connecting with San Timoteo Canyon Road via an alternate location that minimizes impact on wetlands and/or utilizes the proposed utility corridor area. The feasibility of such rerouting would be examined in the process of complying with Section 404 (specifically, the 404 (b)(1) alternatives analysis, under Section 404 of the Clean Water Act.

4.3 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Four alternatives to the Proposed Project have been evaluated in this EIR. The "No Project, No Development" alternative was determined the environmentally superior alternative, though it would not attain any of the objectives of the proposed project. The objectives of the City of Calimesa and the applicant are realized through implementation of the land use development strategy and plan presented in Specific Plan. The proposed project provides a realistic balance of land uses for this parcel and is far superior in layout, density, and open space preservation to the existing Oak Valley Specific Plan, which it proposes to amend. It incorporates an extensive oak tree avoidance and mitigation plan and incorporates a very high degree of consistency with the MSHCP, yet achieves important site development and

community development objectives first envisioned with the approval of the original Oak Valley Specific Plan. Consequently, the proposed project is the environmentally superior alternative when the No Project, No Development Alternative is eliminated.

With the proposed project, further impact avoidance could be achieved by working with the City to address the circulation system impacts that would result from completing Singleton Road (through the RLC Option property) in a different (less impacting) location, and from deferring or not completing Robert's Road extension across Garden Air Wash.

TABLE 4-1
ALTERNATIVE PROJECT COMPARISON MATRIX

Alternative Determination Criteria	Meet Project Objectives	Reduce/Avoid Significant Environmental Impacts
No Project, No Development	This alternative does not meet the City's objectives #2 through #8 and any of the project applicant's, as outlined in Section ES. 1.1 of the EIR.	This alternative is considered environmentally superior to the proposed project, and it would avoid the environmental impacts of the proposed project, as the site will remain undeveloped for the foreseeable future.
Development under the Existing General Plan	This alternative does not meet the City's objectives #1, #3, and #5 and objectives #1 and #2 of the project applicant, as outlined in Section ES. 1.1 of the EIR.	The development under the existing General Plan alternative is not environmentally superior to the proposed project. The alternative would not reduce or avoid the environmental impacts associated with the proposed project and will create more impacts, as the adopted specific plan would result in a larger development footprint.
Reduced Footprint/Increased Open Space	This alternative would not meet the City's objective #9 and may not be compatible with the City's General Plan because of increased density and building height. It would not meet objectives #4 and #8 of the project applicant, as outlined in Section ES. 1.1 of the EIR.	This may be a feasible alternative given that the number of units would not change. This alternative seeks to cluster development and reduce project footprint, leaving additional areas of the site in open space. It would also result in fewer impacts to natural systems within the site (i.e., biologically sensitive areas and habitats). However, the project's higher density and increased residential and commercial building height would not be compatible with the City's General Plan and the overall character of the surrounding area.
Revised Project Components/Reduced Environmental Impact ▪ More Commercial, Less Residential	This alternative would not meet the City's objectives #4 and #9 and objectives #4 and #8 of	This alternative would result in less impact related to public services (i.e., schools) and regional traffic and more employment opportunities.

Alternative Determination Criteria	Meet Project Objectives	Reduce/Avoid Significant Environmental Impacts
	the project applicant, as outlines in Section ES. 1.1 of the EIR.	However, providing additional commercial acreage in the project could weaken the absorption and phasing of the commercial component and extend the build-out time frame. This could have negative visual, air quality, and infrastructure phasing implications.
▪ Less Hillside Grading	This alternative would not meet the City's objective #3 and objectives #1 and #2 of the project applicant, as outlined in Section ES. 1.1 of the EIR.	This alternative would result in less impact to the existing natural slopes and impacts related to slope stability. However, it would extend development footprint over the natural open space area.
▪ Preserving more Oak Trees	This alternative would not meet the City's objective #9 and objective #8 of the project applicant, as outlined in Section ES. 1.1 of the EIR.	This alternative would result in preservation of all oak trees within the project site. However, saving all existing oak trees would result in loss of approximately 300 dwelling units, in addition to major reconfiguration of the proposed circulation network within the development.
▪ Noise Site Design Alternatives	This alternative would not meet the City's objective #9 and objective #8 of the project applicant, as outlined in Section ES. 1.1 of the EIR.	This alternative would result in avoiding impacts to noise sensitive receptors. However, implementation of all the noise site design elements would place a burden on the development and significantly reduce the number of units on the site.
▪ Circulation System and Wetlands Alternatives o Roberts Road Extension o Singleton Road	These alternatives would not be consistent with the General Plan Circulation Element.	This alternative would avoid impacts to the waters of the U.S. and existing wetlands within the Garden Air Wash and RLC Option Lands. Both alternatives are included in the Circulation Element of the City of Calimesa General Plan. Both alternatives merit further consideration.

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5.0 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE INVOLVED IN THE PROPOSED ACTION SHOULD IT BE IMPLEMENTED

CEQA Guidelines indicate that this section should discuss all significant irreversible environmental changes, which would be involved in the proposed action, including such aspects as use of nonrenewable resources or large commitments of resources.

Under the currently proposed project and the analysis contained in this EIR, short-term construction air quality impacts and long-term operational air quality impacts are considered significant and unavoidable.

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6.0 GROWTH INDUCING IMPACTS

According to the CEQA Guidelines, this section is concerned with "…the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." It should not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

Development of Summerwind Ranch at Oak Valley may induce various types of growth to occur in the City of Calimesa, such as new construction of residential, commercial, and retail structures, and increased employment opportunities in the City and the region. However, the majority of the project is residential with supporting park and recreational facilities, which tend to be more growth-accommodating rather than growth-inducing. The increase in residential uses will in turn have the potential to cause an increase in demand for utilities, community services, fire protection facilities and personnel, and increased police personnel.

The proposed project include an approximately 260-acre Town Center area comprised of commercial, business park, and recreation uses. The Town Center provides an employment base for the residents of the Summerwind Ranch, as well as the residents of the City of Calimesa in general. Additionally, no major extension of overall infrastructure (i.e., roads, sewer mains, utility lines, etc) outside of the specific plan boundaries would occur that would induce additional growth. Implementation of the specific plan project would be growth-inducing in terms of a localized employment increase. However, the increase in local employment is a major goal of the City's General Plan.

The specific plan project site, located within the City limits, represents an area containing undeveloped land, surrounded by existing or entitled development. As such, it can be viewed as a logical extension of the development that currently exists. It can also be viewed as an opportunity to provide a complementary, cohesive, and environmentally sensitive land use to surrounding areas.

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7.0 ENVIRONMENTAL SUMMARIES

The following summarizes the project's relationship to impacts found not to be significant, impacts mitigated to a level less than significant, unavoidable adverse impacts, and mitigation measures contained in the Initial Study and EIR documents.

7.1 EFFECTS FOUND NOT TO BE SIGNIFICANT

7.1.1 INITIAL STUDY

EFFECTS FOUND NOT TO BE SIGNIFICANT AND FOCUSED OUT OF THE SEIR

An Initial Study was prepared to identify the potential significance of the effects due to the proposed project. During the Initial Study/NOP process, the following categories of environmental impacts were determined not to be significant, and therefore required no further environmental analysis in the EIR. This determination was made by the City of Calimesa and their review of the Initial Study (Appendix A-1).

- Aesthetics
- Agricultural Resources
- Geology and Soils
- Hydrology and Water Quality
- Land Use and Planning
- Population and Housing
- Recreation

However, based on additional information received and careful consideration, the following environmental topics were deemed significant to be re-evaluated and included in the EIR:

- Aesthetics
- Geology and Soils
- Hydrology and Water Quality
- Land Use and Planning

The topic of population and housing is covered under Growth Inducing Impacts, in Section 6.0 of this EIR.

7.1.2 DRAFT EIR

EFFECTS FOUND TO BE LESS THAN SIGNIFICANT – NO MITIGATION MEASURES REQUIRED BY EIR

Based on the environmental analyses in this document and studies prepared, it is determined that the impacts related to the following would be less than significant.

EFFECTS FOUND TO BE LESS THAN SIGNIFICANT WITH MITIGATION MEASURES

Based on the environmental analyses in this document and studies prepared, it is determined that with implementation of applicable mitigation measures impacts related to the following would be less than significant:

- Aesthetics
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Public Services
- Transportation/Traffic
- Utilities and Service Systems

7.2 UNAVOIDABLE ADVERSE IMPACTS

Although most of the potential impacts emanating from proposed project implementation would be reduced to a level less than significant, the proposed project would result in unavoidable significant adverse impacts to short-term construction and operational air quality impacts.

7.3 LISTING OF MITIGATION MEASURES

The following is a listing of mitigation measures as they appear in each of the impact sections within this document.

7.3.1 AESTHETICS

MM- A1 All proposed development shall comply with development standards and design guidelines (i.e., building siting, height, setbacks, architecture, landscaping, perimeter walls, fences, lighting, etc.), established in the Specific Plan document.

MM-A2 Mitigation Measure MM-A1 is applicable to the impact on visual quality of the site.

MM-A3 Mitigation Measure MM-A1 is applicable to the light and glare impact.

MM-A4 Mitigation Measure MM-A1 is applicable to the cumulative impacts.

7.3.2 AIR QUALITY

CONSTRUCTION

Measures for Control of Fugitive Dust

MM AQ1 The project proponent will implement Rule 403 as applicable, which would include but not be limited to the following:

- Portions of the site under active construction shall be watered as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction (locations where grading is to occur will be thoroughly watered prior to earthmoving).
- Soils shall be watered/stabilized prior to, during, and following cut and fill activities.
- A minimum soil moisture content of 12% shall be maintained during earth-moving activities using the ASTM method D-2216.
- All trucks hauling dirt, sand, soil, or other loose materials shall be covered, or maintain at least two feet of freeboard in accordance with the requirements of Section 23114 of the California Vehicle Code (CVC).
- Construction access roads shall be paved at least 100 feet onto the site from main roads.
- Traffic speeds on all unpaved roads shall be reduced to 15 mph or less. Roads shall be watered every two hours during active construction operations, and/or a chemical stabilizer shall be applied to all unpaved surfaces.
- Disturbed areas shall be revegetated as quickly as possible consistent with approved erosion control plans.
- A Traffic Control Plan shall be provided for each major phase of construction by the Applicant and approved by the City Engineer addressing construction site access and egress, temporary road detours, construction traffic parking and staging, and haul routes.

- All streets used for construction site access or egress shall be swept once daily during active construction if visible soil materials are carried to adjacent streets.

Measures for Construction Equipment and Vehicles Exhaust Emissions:

MM AQ2-1 Construction equipment with low emission factors and high energy efficiency shall be used where possible and when available.

MM AQ2-2 To minimize equipment emissions, engine maintenance shall be performed regularly.

MM AQ2-3 Alternative fuels such as ultra-low sulfur diesel for off-road construction vehicles/equipment shall be used where possible.

Measures for VOC Emissions

MM AQ3 Application of architectural coatings (i.e., paint, etc.) shall be limited to an average of no more than 225 gallons per week and/or "Zero-VOC" paint shall be used.

OPERATIONS

The following mitigation measures are recommended to help reduce operational air quality impacts for mobile and stationary sources:

MM AQ4-1 On-site bicycle trails linking the facility to designated bicycle commuting routes shall be provided.

MM AQ4-2 Site improvements such as street lighting, street furniture, route signs, bus turnouts, and sidewalks or pedestrian paths shall be provided.

MM AQ4-3 The proposed dwelling units shall exceed minimum statewide energy construction requirements, as follows:

- Use of low emission water heaters
- Use of energy efficient appliances
- Use of light colored/earth tone roof tiles
- Increase insulation in excess of Title 24 requirements

MM AQ4-4 Park and ride lots shall be provided near freeway access, as follows:

- Development of approximately 50-60 parking spaces within the residential component of the project.

- Development of approximately 100 parking spaces within the commercial component of the project.

MM AQ4-5 According to Ride Guide provided by the RTA (Riverside Transit Agency), bus route 36 shall serve the proposed project site. The project will provide bus turnout facilities to serve this route as recommended by RTA.

MM AQ9 Cumulative impacts are reduced by implementation of mitigation measures for construction and operations. But the impacts remain significant.

7.3.3 BIOLOGICAL RESOURCES

Vegetation Communities

MM-BR1 Permanent direct impacts to 99.3 acres of coastal sage scrub will be offset by compliance with the mitigation requirements listed under the MSHCP. These requirements include on-site preservation of coastal sage scrub habitat. The proposed plan preserves all of the coastal sage scrub habitat on the project site that is within Criteria Cells, which includes approximately 135.4 acres of costal sage scrub habitat.

MM-BR2 Mitigation requirements to minimize permanent direct impacts to 20.8 acres of oak woodlands would include on-site preservation in compliance with MSHCP standards for Criteria Area Cells and implementation of an oak tree planting and restoration plan. Approximately 129.6 acres of oak woodland habitat would be preserved on-site. Additionally, oak trees would be planted from container stock as well as from acorns collected on the site to ensure that the regenerated oak seedlings will have the best genetic adaptation for the Summerwind Ranch development. The Applicant will plant 976 oak trees using a combination of 50 percent acorns and 50 percent deep one-gallon containers as mitigation for the removal of up to 236 oak trees, as shown in Table 3.3-5. The planting program reduces the impact of loss of oak woodland and oak trees to less than significant.

MM-BR3 Mitigation requirements to offset permanent direct impacts to 0.3 acres of riparian woodlands would include on-site or off-site habitat creation or enhancement. Regulatory agencies will establish appropriate mitigation ratios in accordance with their policy of no net loss of riparian and wetland values.

MM-BR4 Mitigation recommendations for potential permanent indirect impacts to vegetation communities could be satisfied by applying an approved native seed mix in the bare areas after construction is complete to minimize the potential for exotic species introductions. The native seed mix should be approved by the CDFG and should be dispersed in the fall, prior to winter rains.

Wetlands and Waters

MM-BR5 Mitigation requirements to offset permanent direct impacts to jurisdictional wetlands will be met by a combination of wetland creation, restoration, or enhancement. The mitigation site should be preserved at a suitable area near the impact area. Mitigation requirements for permanent impacts to jurisdictional wetlands resulting from project-related construction would be determined during the regulatory agency permit process at mitigation ratios consistent with the policy of no net loss of wetland values.

MM-BR6 Mitigation Measure MM-BR5 is applicable to the wetlands impacts.

MM-BR7 Mitigation requirements for permanent direct impacts to ephemeral and intermittent drainages would require habitat creation, enhancement or restoration, and preservation at a location approved by the resource agencies through the permitting process.

MM-BR8 Mitigation recommendations for potential permanent indirect impacts to wetland habitats could be satisfied by applying an approved native seed mix in the bare areas after construction is complete to minimize the potential for exotic species introductions. The native seed mix should be approved by the CDFG and MSHCP and should be dispersed in the fall, prior to winter rains.

Sensitive Wildlife Species

MM-BR9-1 Mitigation requirements for permanent direct impacts to the least Bell's vireo and southwestern willow flycatcher habitat will be met through on-site preservation in Criteria Area Cells (Quadrant 479) outlined in Table 3.3-4. This habitat preservation is coincident to the riparian habitat preservation listed in MM-BR3.

MM-BR9-2 Preconstruction surveys for least Bell's vireo and southwestern willow flycatcher will be conducted prior to construction in or adjacent to habitat areas in accordance with the applicable protocol. Based on the protocol survey results, appropriate avoidance measures would be determined through consultation with regulatory agencies.

MM-BR10 To avoid or minimize impacts to birds covered under the MBTA and/or BEPA the following will be implemented:

- Clearing and grubbing of vegetation within areas identified as habitat should be conducted outside the March 15 through August 15 nesting season.

- In the event that least Bell's vireo or southwestern willow flycatcher is found on-site during future surveys, ensure that noise from construction activities does not exceed 60 dBA L_{eq} within the habitat of the species during the nesting season.

- Position, direct, and shield lights (streetlights, parking lot lighting, and other project-related illumination sources) so as to avoid "light spill" into the proposed on-site conservation areas or into habitat adjacent to the proposed project site. Night lighting will not be used during the course of construction.

- Provide contractor education and erect fencing or barriers to ensure that contractors do no enter areas of open space or conserved habitat for any purpose.

- If construction must occur within or adjacent to these habitats during the breeding season, preconstruction nest surveys no more than 1 week prior to construction initiation should be conducted by a qualified biologist. During the breeding season, additional nest surveys would be required in areas where a week or more has elapsed between the nest survey and the initiation of construction activities.

- Preconstruction surveys shall be performed in appropriate habitat areas consistent with requirements of the MSHCP, for the western yellow-billed cuckoo and burrowing owl. Mitigation consistent with MSHCP requirements will be implemented if warranted by survey results.

MM-BR11 Indirect impacts to least Bell's vireo and southwestern willow flycatcher habitat will be addressed through on-site preservation coincident to the riparian habitat preservation listed in MM-BR3. This measure will decrease the level of habitat fragmentation and reduce the impact to less than significant.

MM-BR12 Mitigation measures for indirect impacts to the 16 sensitive and covered species present on-site will be met through the extensive in-kind preservation outlined in Table 3.3-4 and through compliance with other requirements of the MSHCP. For instance, Yucaipa onion and many-stemmed dudleya are not expected to occur on the site; however, focused surveys will be conducted in appropriate habitat during proper time of year. If these species are found on-site, appropriate mitigation will be implemented upon concurrence by regulatory agencies.

Wildlife Corridors

MM-BR13 Mitigation requirements to offset project impacts to wildlife corridors, listed under the MSHCP, includes the proposed habitat preservation of open space along Proposed Linkage 12 and Proposed Constrained Linkage 23 within the project Criteria Area Cells. The dedication of land for wildlife conservation, including the Garden Air Wash and other lands, partially achieves this objective. Further enhancement of the corridors and habitat linkages will require installing properly-sized passageways under new on-site roads.

MM-BR14 Indirect impacts are mitigated with implementation of MM-BR13.

7.3.4 CULTURAL RESOURCES

MM-CR2-1 Preconstruction salvage of known exposed paleontological resources shall be conducted.

MM-CR2-2 Preconstruction field examination of fossil soil horizons with high potential for paleontological resources, and salvage of fossils as necessary shall be conducted.

MM-CR2-3 A project specific sampling plan that will recover standard samples of fossiliferous paleosols in stratigraphic succession within the affected areas shall be developed. The sampling program will include 12 samples from the San Timoteo Formation and three from younger sediments. These samples will be prepared by water-washing through 20 and 30 mesh screens.

MM-CR2-4 Excavation in sediments with undetermined potential shall be monitored 50 percent of the time; and if paleontological resources are identified, monitoring shall be changed to full time. Monitors shall be empowered to temporarily redirect earthmoving equipment while fossils are examined and removed. If multiple pieces of earthmoving equipment are working simultaneously or if excavation is conducted in widely separated areas, additional monitors shall be provided as necessary.

MM-CR2-5 Fossils collected during the project shall be prepared to a reasonable point of identification. The samples shall be cleaned of excess sediment or matrix and housed in an accredited museum repository. A written fossil specimen repository agreement shall be arranged in advance of excavation monitoring.

MM-CR2-6 A report documenting the results of the monitoring and salvage shall be prepared.

7.3.5 GEOLOGY AND SOILS

FAULTING AND SEISMICITY

MM-GS1-1 The removal of all topsoil, partially saturated alluvium, colluvium, and highly weathered older alluvium and San Timoteo Formation shall be required under all structural fill areas from an estimated range of 1 to 40 feet.

MM-GS1-2 Unsuitable soils shall be excavated and compacted using conventional grading techniques.

MM-GS1-3 Post-Tensioned slab/foundation systems shall be used for all structures to be constructed over areas of shallow groundwater and left-in-place alluvium.

SOILS AND STABILITY

MM-GS2-1 Proper grading in accordance with the State of California Special Publication 117 shall be required of all sloped terrain.

MM-GS2-2 Conventional shallow foundations and slab-on-grade or post-tensioned slab/foundations shall be utilized for single-family residential structures.

MM-GS2-3 Project mass grading and rough grading for individual development projects shall be done in conformance with a detailed Geotechnical and Soils Engineering Study. The study shall be approved by the City Engineer prior to issuance of grading permits and shall address potential hazards associated with groundshaking, secondary seismic hazards, slope stability, and public safety. Such studies shall:

- Conform to code requirements, standards and guidelines of the City of Calimesa;
- Fully and accurately reflect site conditions and hazards; and
- Include all mitigation measures necessary for reducing risks posed by geologic hazards on the project site.

MM-GS2-4 All site grading shall be accomplished under the supervision of certified engineering geologist.

7.3.6 HYDROLOGY AND WATER QUALITY

MM HW1-1 Construction and development of all phases shall comply with the National Pollutant Discharge Elimination System (NPDES) regulations. Prior to the issuance of a grading permit, applicants shall demonstrate compliance with NPDES Storm water Permit requirements to the satisfaction of the City of Calimesa. Applicable BMP provisions as developed through the specific plan drainage concept and City requirements shall be incorporated into the NPDES Permit.

MM HW1-2 Individual projects within the specific plan area shall be reviewed by the City of Calimesa for the inclusion of appropriate structural and non-structural Best Management Practices (BMPs) to control storm water discharges and protect water quality. Structural controls may include, but are not limited to filtration, common area efficient irrigation, common area runoff-minimizing landscape design, velocity dissipation devices, oil/grease separators, inlet trash racks, and catch basin stenciling. Non-structural BMPs can include education for property owners, tenants and occupants, activity restrictions, common area

landscape management, litter control, and catch basin inspection, BMP maintenance; and street sweeping.

The following are examples of BMPs that may be included within NPDES permit requirements for individual projects:

- Use of sand bags and temporary desilting basins during project grading and construction during the rainy season (October through April) to prevent discharge of sediment-laden runoff into storm water facilities.

- Installation of landscaping as soon as practicable after completion of grading to reduce sediment transport during storms. Or application of approved soil binders on graded building pads if they are not built upon before the onset of the rainy season.

- Incorporation of structural BMPs (e.g., grease traps, debris screens, continuous deflection separators, oil/water separators, drain inlet inserts) into the project design to provide detention and filtering of contaminants in urban runoff from the developed site prior to discharge to storm water facilities.

The City shall review subsequent development projects within the specific plan area for the application of Best Management Practices (BMPs) to reduce water pollution from urban runoff. The specific measures to be applied shall be determined in conjunction with review of required project hydrology and hydraulic studies, and shall conform to City standards and any Drainage Area Management Plan under the NPDES program.

7.3.7 LAND USE AND PLANNING

Environmental impacts related to land use would be less than significant; therefore, no mitigation measures are required.

7.3.8 NOISE

MM-N1-1 During all project site excavation and grading, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site.

MM-N1-2 The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction related noise sources and noise sensitive receptors nearest the project site during all project construction.

MM-N1-3 The construction contractor shall limit all construction related activities that would result in high noise levels according to the construction hours to be determined by City staff.

MM-N1-4 The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment. To the extent feasible, haul routes shall not pass sensitive land uses or residential dwellings.

7.3.9 PUBLIC SERVICES

FIRE PROTECTION

MM-PS1-1 Developer impact fees shall be paid to contribute to the cost of new fire facilities, and equipment to offset the increase in fire services demand.

MM-PS1-2 The City shall coordinate with the Fire District to evaluate potential new station sites within the area of the proposed project to provide adequate response times for emergency services.

MM-PS1-3 Prior to construction, the developer shall contact the Fire District for verification of current fire protection development requirements. All new construction shall comply with all applicable statutes, codes, ordinances, and/or Fire District standards.

MM-PS1-4 Water lines within the project site shall be designed to meet the fire requirements.

MM-PS1-5 Fire hydrants shall be designed and placement specified by the Fire District at the time water lines to the project area are built or as a condition of development project approval.

POLICE PROTECTION

MM-PS2 Police impact fees shall be paid to cover capital costs associated with the creation of additional facilities and improvements to service at the Summerwind at Oak Valley project site.

SCHOOLS

MM-PS3-1 Developers/builders within the plan area shall work with Beaumont Unified School District (BUSD) to plan school service for the proposed development.

MM-PS3-2 Prior to issuance of a building permit, project developers shall pay statutory developer fees to the BUSD and/or provide land and improvements pursuant to the requirements established in SB 50. The amount of fees or special taxes to be paid or land and improvements to be provided will be determined based on the established state formula for determining construction costs.

PARKS

Environmental impacts associated with the provision of parkland would be beneficial and less than significant; therefore, no mitigation measures are required.

LIBRARIES

MM-PS5 Project developers should contribute impact fees either toward expansion of existing library facilities or construction of new facilities.

7.3.10 TRANSPORTATION AND TRAFFIC

PHASE 1 – RESIDENTIAL DEVELOPMENT (FIGURE 3.10-29)

MM-T1-1 Traffic signals and left turn lane striping at the I-10 Freeway/Cherry Valley Interchange ramp intersections shall be installed.

MM-T1-2 Traffic signals and turn lane improvements shall be installed at the following intersections (Figure 3.10-33):

- Roberts Roads at Cherry Valley Boulevard
- Realigned Desert Lawn Drive ("G" Street) at Cherry Valley Boulevard

MM-T1-3 The extension of "J" Street (Cherry Valley Boulevard) shall be constructed from the I-10 Southbound Ramps to Roberts Road as an interim two-lane 32-foot pavement section.

MM-T1-4 "J" Street shall be constructed from Roberts Road to the realigned Desert Lawn Drive ("G" Street) at its ultimate half-section width as an Urban Arterial roadway (134-foot ROW) adjacent to the project.

MM-T1-5 "J" Street shall be constructed from the realigned Desert Lawn Drive ("G" Street) to the TAZ "G" south boundary at its ultimate full-section width as a Secondary roadway (88-foot ROW).

MM-T1-6 "J" Street shall be constructed from the TAZ "G" south boundary to Champions Drive as an interim two-lane 32-foot pavement section.

MM-T1-7 Champions Drive shall be constructed from its terminus to "J" Street as an interim two-lane 32-foot pavement section.

MM-T1-8 The realignment of Desert Lawn Drive shall be constructed from "J" Street to the TAZ "G" east boundary at its ultimate half-section width as a Secondary roadway (88-foot ROW) adjacent to the project.

MM-T1-9 The realignment of Desert Lawn Drive shall be constructed from the TAZ "G" east boundary to its existing alignment adjacent to I-10 Freeway as an interim two-lane 32-foot pavement section.

MM-T1-10 "G" Street shall be constructed from "J" Street to the TAZ "A" south boundary at its ultimate full-section width as a Secondary roadway (88-foot ROW).

MM-T1-11 Roberts Road shall be constructed from "J" Street to the TAZ "D" west boundary at its ultimate half-section width as an Arterial roadway (110-foot ROW) adjacent to the project.

MM-T1-12 Roberts Road shall be constructed from the TAZ "D" west boundary to the TAZ "H" south boundary as an interim two-lane 32-foot pavement section.

MM-T1-13 Roberts Road shall be constructed from the TAZ "H" south boundary to the existing Roberts Road/Woodhouse Road alignment at its ultimate half-section width as an Arterial roadway (110-foot ROW) adjacent to the project.

PHASE 2 - RESIDENTIAL DEVELOPMENT (FIGURE 3.10-30)

The Developer shall participate in the I-10 Freeway/Cherry Valley Interchange improvement project.

MM-T2-1 The Developer shall participate in the installation of a traffic signal and turn lane improvements at the intersection of Calimesa Boulevard and Singleton Road.

MM-T2-2 A traffic signal and turn lane improvements shall be installed at the intersection of Roberts Road/Woodhouse Road and Singleton Road.

MM-T2-3 The extension of Singleton Road from Roberts Road/Woodhouse Road to the TAZ "T" west boundary shall be constructed as an interim two-lane 32-foot pavement section.

MM-T2-4 Singleton Road from the TAZ "T" west boundary to TAZ "N" Access Driveway shall be constructed at its ultimate half-section width as a Secondary roadway (88-foot ROW).

MM-T2-5 "A" Street from Singleton Road to the TAZ "O" north boundary shall be constructed at its ultimate full-section width as a Divided Collector roadway (78-foot ROW).

MM-T2-6 "A" Street from the TAZ "O" north boundary to "B" Street shall be constructed at its ultimate half-section width as a Divided Collector roadway (78-foot ROW).

MM-T2-7 "B" Street from the TAZ "M" north boundary to "A" Street shall be constructed at its ultimate half-section width as a Divided Collector roadway (78-foot ROW).

MM-T2-8 "B" Street from "A" Street to the TAZ "M" west boundary shall be constructed at its ultimate full-section width as a Divided Collector roadway (78-foot ROW).

MM-T2-9 "B" Street east of the TAZ "M" west boundary along the TAZ "N" north boundary shall be constructed at its ultimate half-section width as a Divided Collector roadway (78-foot ROW).

PHASE 2 - TOWN CENTER (FIGURE 3.10-31)

MM-T2-10 The Developer shall participate in the I-10 Freeway/Cherry Valley Interchange improvement project.

MM-T2-11 The Developer shall participate in the installation of a traffic signal and turn lane improvements at the intersection of Calimesa Boulevard and Singleton Road.

MM-T2-12 Turn lane improvements shall be provided at the intersection of Roberts Road and "J" Street (Cherry Valley Boulevard).

MM-T2-13 "J" Street shall be widened from the I-10 Southbound ramps to Roberts Road at its ultimate half-section width as an Urban Arterial roadway (134-foot ROW).

MM-T2-14 Roberts Road from "J" Street to the TAZ "D" west boundary shall be completed at its ultimate full-section width as an Arterial roadway (110-foot ROW).

MM-T2-15 Roberts Road shall be widened from the TAZ "D" west boundary to the TAZ "C" north boundary at its ultimate half-section width as an Arterial roadway (110-foot ROW).

MM-T2-16 Singleton Road from Roberts Road to the TAZ "T" shall be constructed at its ultimate half-section width as an Arterial roadway (110-foot ROW).

PHASE 3 - RESIDENTIAL DEVELOPMENT (FIGURE 3.10-32)

MM-T3-1 The Developer shall participate in the I-10 Freeway/Singleton Interchange improvement project.

MM-T3-2 The Developer shall participate in providing turn lane improvements at the I-10 Freeway/Cherry Valley Interchange.

MM-T3-3 Traffic signals and turn lane improvements shall be installed at the following intersections:

- "C" Street at Singleton Road
- "A" Street at Singleton Road

MM-T3-4 Roberts Road from the TAZ "B" south boundary to the TAZ "C" north boundary shall be completed at its ultimate full-section width as an Arterial roadway (110-foot ROW).

MM-T3-5 Roberts Road shall be widened from the TAZ "C" north boundary to the TAZ "B" north boundary at its ultimate half-section width as an Arterial roadway (110-foot ROW).

MM-T3-6 Singleton Road from its Phase 2 terminus (See Exhibit 1-D) to "C" Street shall be constructed at its ultimate half-section width as a Secondary roadway (88-foot ROW).

MM-T3-7 Singleton Road from "C" Street to San Timoteo Canyon Road shall be constructed as an interim two-lane 32-foot pavement section.

MM-T3-8 "C" Street from Singleton Road to the TAZ "I" north boundary shall be constructed at its ultimate full-section width as a Divided Collector roadway (78-foot ROW).

MM-T3-9 "C" Street from the TAZ "I" north boundary to "B" Street shall be constructed at its ultimate half-section width as a Divided Collector roadway (78-foot ROW).

MM-T3-10 "C" Street from "B" Street to Roberts Road shall be constructed at its ultimate full-section width as a Divided Collector roadway (78-foot ROW).

MM-T2-11 Roberts Road from "C" Street to the TAZ "S" north boundary shall be constructed at its ultimate half-section width as an Arterial roadway (110-foot ROW).

MM-T3-12 Complete "B" Street from "C" Street to the TAZ "I" east boundary at its ultimate full-section width as a Divided Collector roadway (78-foot R.O.W.).

MM-T3-13 "B" Street from "A" Street to "C" Street shall be completed at its ultimate full-section width as a Divided Collector roadway (78-foot ROW).

MM-T3-14 "A" Street from "B" Street to the TAZ "V" south boundary shall be completed at its ultimate full-section width as a Divided Collector roadway (78-foot ROW).

PHASE 3 - TOWN CENTER (FIGURE 3.10-33)

MM-T3-15 The Developer shall participate in the I-10 Freeway/Singleton Interchange improvement project.

MM-T3-16 The Developer shall participate in providing turn lane improvements at the I-10 Freeway/Cherry Valley Interchange.

MM-T3-17 Traffic signals and turn lane improvements shall be installed at the following intersections:

- "F" Street at Singleton Road
- Roberts Road at Singleton Road
- Roberts Road at Singleton Road

MM-T3-18 Turn lane improvements shall be provided at the following intersections:

- Roberts Road at "J" Street (Cherry Valley Boulevard)
- Realigned Desert Lawn Drive ("G" Street) at "J" Street (Cherry Valley Boulevard)

MM-T3-19 "J" Street from the I-10 Southbound Ramps to the realigned Desert Lawn Drive shall be completed at its ultimate full-section width as an Urban Arterial roadway (134-foot ROW).

MM-T3-20 The realigned Desert Lawn Drive from "J" Street to the TAZ "F" east boundary shall be completed at its ultimate full-section width as a Secondary roadway (88-foot ROW).

MM-T3-21 Roberts Road shall be widened from the TAZ "U" south boundary to "F" Street at its ultimate half-section width as an Arterial roadway (110-foot ROW).

MM-T3-22 Singleton Road shall be widened from the I-10 Southbound Ramps to Roberts Road at its ultimate half-section width as an Urban Arterial roadway (134-foot ROW).

MM-T3-23 Roberts Road from Singleton Road to the TAZ "S" north boundary shall be constructed at its ultimate full-section width as an Arterial roadway (110-foot ROW).

MM-T3-24 Singleton Road from "F" Street to the TAZ "P" west boundary shall be completed at its ultimate full-section width as an Arterial roadway (110-foot ROW).

MM-T3-25 "F" Street from Roberts Road to Singleton Road shall be constructed at its ultimate half-section width as a Major roadway (100-foot ROW).

MM-T3-26 The realignment of Roberts Road south of Singleton Road shall be constructed as an interim 32-foot pavement section.

2030 - RESIDENTIAL DEVELOPMENT (FIGURE 3.10-34)

MM-T4-1 The Developer shall participate in the northerly extension of Roberts Road from the northerly Summerwind Ranch project boundary to "D" Street (southerly Fiesta Property boundary) on a fair share basis.

MM-T4-2 The Developer shall participate in providing turn lane improvements at the following locations:

- I-10 Freeway/Cherry Valley Interchange
- I-10 Freeway/Singleton Interchange

MM-T4-3 Traffic signals and turn lane improvements shall be installed at the following intersections:

- "C" Street at Singleton Road
- Roberts Road at "C" Street

MM-T4-4 Turn lane improvements shall be provided at the following intersections:

- Singleton Road at San Timoteo Canyon Road
- Realigned Desert Lawn Drive ("G" Street) at "J" Street (Cherry Valley Boulevard)

MM-T4-5 Singleton Road from the TAZ "P" west boundary to "A" Street shall be completed at its ultimate full-section width as an Arterial roadway (110-foot ROW).

MM-T4-6 Singleton Road from "A" Street to San Timoteo Canyon Road shall be completed at its ultimate full-section width as a Secondary roadway (88-foot ROW).

MM-T4-7 Roberts Road from the TAZ "S" north boundary to the TAZ "K" north boundary shall be completed at its ultimate full-section width as an Arterial roadway (110-foot ROW).

MM-T4-8 "C" Street from the TAZ "I" north boundary to "B" Street shall be completed at its ultimate full-section width as a Divided Collector roadway (78-foot ROW).

MM-T4-9 San Timoteo Canyon Road from the TAZ "I" north boundary to Singleton Road shall be completed at its ultimate full-section width as a Divided Collector roadway (78-foot ROW).

MM-T4-10 San Timoteo Canyon Road from the TAZ "6b" north boundary to Singleton Road shall be completed at its ultimate full-section width as a Secondary Frontage roadway (76-foot ROW).

2030 - TOWN CENTER (FIGURE 3.10-35)

MM-T4-11 The Developer shall participate in the northerly extension of Roberts Road from the northerly Summerwind Ranch project boundary to "D" Street (southerly Fiesta Property boundary) on a fair share basis.

MM-T4-12 The Developer shall participate in providing turn lane improvements at the following locations:

- I-10 Freeway/Cherry Valley Interchange
- I-10 Freeway/Singleton Interchange

MM-T4-13 A traffic signal and turn lane improvements shall be installed at the intersection of Roberts Road and "F" Street.

MM-T4-14 Turn lane improvements shall be provided at the following intersections:

- "F" Street at Singleton Road
- Woodhouse Road at Singleton Road

MM-T4-15 Singleton Road from the I-10 Southbound Ramps to Roberts Road shall be completed at its ultimate full-section width as an Urban Arterial roadway (134-foot ROW).

MM-T4-16 Singleton Road from Roberts Road to "F" Street shall be completed at its ultimate full-section width as an Arterial roadway (110-foot ROW).

MM-T4-17 Roberts Road from Singleton Road to the TAZ "R" south boundary shall be completed at its ultimate full-section width as an Arterial roadway (110-foot ROW).

MM-T4-18 "F" Street from Singleton Road to Roberts Road shall be completed at its ultimate full-section width as a Major roadway (100-foot ROW).

GENERAL PLAN BUILD-OUT (FIGURES 3.10-36, 3.10-37, AND 3.10-38)

MM-T5-1 "J" Street shall be increased between Roberts Road and "G" Street, from the Enhanced Secondary roadway (104-foot ROW) designation in the Oak Valley Specific Plan to the recommended Urban Arterial roadway (134-foot ROW).

MM-T5-2 San Timoteo Canyon Road shall be decreased west of Singleton Road, from the Arterial roadway (114-foot ROW) designation in the Oak Valley Specific Plan to the recommended Divided Collector roadway (78-foot ROW).

MM-T5-3 San Timoteo Canyon Road shall be decreased between Singleton Road and "J" Street, from the Major Frontage roadway (90-foot ROW) designation in the Oak Valley Specific Plan to the recommended Secondary Frontage roadway (76-foot ROW).

MM-T5-4 Singleton Road shall be decreased between San Timoteo Canyon Road and "A" Street, from the Arterial roadway (114-foot ROW) designation in the Oak Valley Specific Plan to the recommended Secondary roadway (88-foot ROW).

MM-T5-5 "G" Street shall be decreased between San Timoteo Canyon Road and the TAZ "7b" north boundary, from the Secondary roadway (88-foot ROW) designation in the Oak Valley Specific Plan to the recommended Divided Collector roadway (78-foot ROW).

MM-T5-6 F" Street shall be decreased between Singleton Road and Roberts Road, from the Arterial roadway (114-foot ROW) designation in the Oak Valley Specific Plan to the recommended Major roadway (100-foot ROW).

MM-T5-7 Roberts Road shall be decreased between Singleton Road and "J" Street, from the Urban Arterial roadway (134-foot ROW) designation in the Oak Valley Specific Plan to the recommended Arterial roadway (110-foot ROW).

MM-T5-8 "J" Street shall be decreased between "G" Street and Champions Drive, from the Enhanced Secondary roadway (104-foot ROW) designation in the Oak Valley Specific Plan to the recommended Secondary roadway (88-foot ROW).

MM-T5-9 The realigned Desert Lawn Drive shall be decreased between "J" Street and the I-10 Freeway, from the Enhanced Secondary roadway (104-foot ROW) designation in the Oak Valley Specific Plan to the recommended Secondary roadway (88-foot ROW).

MM-T6-1 Cumulative impacts from traffic growth can be mitigated by implementing the traffic improvements designated herein on a fair-share basis.

MM-T6-2 A traffic study shall be prepared at the initiation of each new phase of the Summerwind Ranch Specific Plan, or other frequency specified by the City Engineer, as a means of monitoring traffic conditions in the study area. The study will be used to determine the effectiveness of constructed improvements, the nature of traffic growth, and whether phased improvements are sufficient. Recommendations for timing of proposed mitigation measures or new measures will be made.

7.3.11 UTILITIES AND SERVICE SYSTEMS

WASTEWATER

The YVWD stipulates that the following domestic wastewater conditions apply to the proposed project:

MM-UT1-1 The applicant shall be responsible for payment of all wastewater related development impact fees and related charges, as determined by the water supply assessment at the time a building permit is issued for this project. Said fees include, but are not limited to, sewer treatment expansion fees and necessary permit fees.

MM-UT1-2 Wastewater service will be denied if any of the terms and conditions are not satisfied.

MM-UT1-3 The Applicant shall be responsible for complying with the Regional Water Quality Control Board 2004 Basin Plan and Maximum Benefit demonstration as adopted by the Regional Board.

MM-UT1-4 This project will be required to construct and/or participate in the Oak Valley Regional Water Reclamation Facility. This facility is a wastewater treatment plant that will utilize a membrane bioreactor and denitrification facilities to both comply with the Regional Water Quality Control Board 2004 Basin Plan and provide a high quality recycled water source for a significant portion of the irrigation uses within the development.

WATER

The YVWD requires the following conditions for water supply service at Summerwind Ranch.

MM-UT2-1 Adequate source water is available for domestic water supplies and recycled water supplies for both potable use and fire protection. The applicant shall be responsible for the construction or supplemental production, transmission and storage facilities to serve the project in accordance with the water supply assessment. These facilities include, but are not limited to, the construction and/or participation in the construction of reservoirs in Pressure Zones 10, 11 and 12.

MM-UT2-2 The applicant shall be responsible for all costs associated with the preparation, recommendations and decisions resulting from the completion of a water supply assessment, if required for this project.

MM-UT2-3 The applicant shall be responsible for the water related development impact fees and water related charges in effect at the time building permit is issued for this project.

MM-UT2-4 The District reserves the right to deny water service to the project if any of the District's required conditions is not satisfied.

MM-UT2-5 The applicant shall be responsible for installing the necessary infrastructure to achieve fire protection and minimum/maximum water pressure service standards as provided for by the District.

MM-UT2-6 This project will be required to install both potable water and recycled water to each residential and commercial lot within the proposed development in order to provide sufficient water for compliance with SB 221 and SB 610. Connection to the existing recycled (non-potable) water system will be the responsibility of the applicant.

STORMWATER DRAINAGE

MM-UT3 An NPDES permit from the Regional Water Quality Control Board (RWQCB) will be required prior to the commencement of construction and post-development activities.

SOLID WASTE DISPOSAL

Environmental impacts associated with solid waste would be less than significant; therefore, no mitigation measures are required.

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8.0 REPORT PREPARATION RESOURCES

8.1 ORGANIZATIONS AND PERSONS CONSULTED

CITY OF CALIMESA - LEAD AGENCY

In conformance with Sections 15050 & 15367 of the State CEQA Guidelines, the City of Calimesa is the Lead Agency for the project. The Lead Agency is defined as the "public agency, which has the principal responsibility for carrying out or approving the project." The material contained in this EIR is intended to serve as an informational document for decision-making by the City and responsible agencies regarding the proposed project.

City of Calimesa Planning Department — Gabriel Elliott, Christina Ciampa

City of Calimesa Department of Public Works

OTHER AGENCIES

County of Riverside, Fire Department

County of Riverside, Sheriff Department

California Integrated Waste Management

South Coast Air Quality Management District

California Regional Water Quality Control Board

California Air Resources Board

Southern California Association of Government

The Gas Company

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